

THE PERMANENT PEOPLES' TRIBUNAL

PLENARY SESSION

ON

HUMAN RIGHTS, FRACKING AND CLIMATE CHANGE

MAY 14-18, 2018

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OPENING CEREMONY

MAY 14, 2018 9:00-10:00

DR. THOMAS KERNS: Hello. And welcome to the Permanent Peoples' Tribunal Plenary Session on Human Rights, Fracking and Climate Change. I'm Tom Kerns, Emeritus Professor of Philosophy at North Seattle College and Director of Environment and Human Rights Advisory.

In early 2014 three organizations petitioned the Permanent Peoples' Tribunal to hear this case; Environment and Humans Rights Advisory here in the US; the Global Network For The Study Of Humans Rights And The Environment, founded and directed by Anna Grear, professor of law at Cardiff University in Wales and founder and editor-in-chief of the Journal Of Human Rights and the Environment; and third, the Human Rights Consortium at the University of London directed by Damian Short.

This week is called the Plenary Session because four preliminary tribunals in preparation for this session were convened last year and early this year in Athens, Ohio, Youngstown, Ohio, Charolettesville, Virginia and Australia, hearing testimony from well over 200 witnesses who came to tell their stories, recount
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1 their experiences or share their expertise.

2 Statements from all these witnesses were
3 recorded, transcribed, summarized in final reports, with
4 links to their testimony, and submitted to this
5 Tribunal.

6 Results and testimony from those tribunals
7 will be presented orally this week and made publicly
8 available for use by attorneys and judges in future
9 court actions.

10 In addition 17 Amicus Curiae Briefs have been
11 submitted by 14 attorneys and 12 directors of 20 NGOs in
12 seven different countries on five different continents,
13 all of whom are also scheduled to present orally before
14 the PPT judges this week along with our two lead
15 attorneys, Dr. Evan Hamman and Revel Pointon.

16 Ten judges selected by the Permanent Peoples'
17 Tribunal are hearing this case. Their names and areas
18 of expertise are available at Tribunalonfracking.org.

19 They are being asked to render an advisory
20 opinion on these four fundamental questions.

21 No. 1. Under what circumstances do fracking
22 and other unconventional oil and gas extraction
23 techniques breach substantive and procedural human
24 rights that are protected by international law as a
25 matter of treaty or custom?

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1 Second. Under what circumstances do fracking
2 and other unconventional extraction techniques warrant
3 the issuance of either provisional measures, a judgment
4 enjoining further activity, remediation relief or
5 damages for causing environmental harm?

6 Third. What is the extent of responsibility
7 and liability of states and non-state actors for
8 violations of human rights and for climate and other
9 environmental harm caused by these techniques?

10 Fourth. What is the extent of responsibility
11 and liability of states and non-state actors, both legal
12 and moral, for violations of rights of nature related to
13 environmental and climate harm caused by these
14 techniques?

15 These four questions are also available at
16 Tribunalonfracking.org.

17 It is not possible to name and publicly thank
18 all of you whose work has been so essential to bringing
19 this tribunal session into being. You know who you are.
20 But the long, hard, persistent work of five or six
21 people needs to be acknowledged, if only by speaking
22 their names publicly.

23 Anna Grear, Simona Perry, Kathleen Dean Moore,
24 Carly Lettero, Shelley Stonebrook and Emily Grubby.

25 Thank you.

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1 And now to Carly Lettero without whose
2 excessively long hours and extensive commitment this
3 tribunal situation would not be happening.

4 MS. CARLY LETTERO: Hi, I'm Carly Lettero
5 with the Spring Creek Project for Ideas, Nature And The
6 Written Word at Oregon State University.

7 It's an honor to co-organize the Tribunal
8 because it closely aligns with Spring Creek Project's
9 commitment to working on the most daunting and urgent
10 environmental issues of our time.

11 The Tribunal offers people from around the
12 world whose human rights are threatened by fracking and
13 climate change an opportunity to tell their stories.
14 It's courageous story telling and the Spring Creek
15 Project is proud to support it.

16 I want to thank the graduate students in the
17 Master Of Arts in Environmental Arts and Humanity
18 Program at Oregon State University who have spent the
19 last year helping to imagine and organize this Tribunal.

20 Thanks also to Zoom Video Communications who
21 donated the software that we are using for every session
22 of the Tribunal.

23 And special thanks to Tom Kerns for his
24 unwaivering dedication to making this Tribunal happen
25 for the last four years. Thank you.

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1 There will be ten judges presiding over this
2 session of the Tribunal and we want to thank them for
3 sharing their expertise, time and dedication to human
4 rights.

5 The panel includes Alberto Acosta Espinosa, in
6 Ecuador. Lilia America Albert Palacios in Mexico.
7 Andres Barreda in Mexico. Upendra Baxi in India. Gil H.
8 Beohringer in Australia. Maria Fernanda Campa in Mexico.
9 Louis Kotze' in South Africa. Larry Lohmann in the
10 United Kingdom. Francesesco Martone in Italy. And
11 Antoni Pigrau Sole' in Spain.

12 If you would like to learn more about the
13 judges you can read short biographies on the Tribunal
14 web site, Tribunalonfracking.org.

15 This session of the Tribunal is historic for a
16 number of reasons. The Tribunal has had sessions on
17 environmental issues in the past, including Chernobyl
18 and Bhopal but for the first time in its nearly 40-year
19 history the Tribunal is holding a session on an
20 international environmental issue that can affect
21 everyone regardless of where they live.

22 This session is also historic because it will
23 expand the scope of the Permanent Peoples' Tribunal to
24 include arguments about the rights of nature in addition
25 to the rights of people.

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1 And, for the first time, this Tribunal will be
2 hosted completely on-line, which is an inclusive format
3 that will allow people from around the world to
4 participate and to follow along as the proceedings
5 happen.

6 So thanks to all of you who are joining on-
7 line. The video recordings of each tribunal session
8 will be available on the Spring Creek Project's Facebook
9 and youtube pages. And we'll be posting the recordings
10 about a half hour after each session concludes.

11 And now on to the Opening Ceremony. We'll
12 begin with a short video featuring Human Rights that was
13 created by graduate students in the Environmental Arts
14 And Humanities program at Oregon State University. Then
15 we'll hear opening remarks from Gianni Tognoni, Robin
16 Kimmerer and John Knox.

17 Gianni Tognoni is the Secretary General of the
18 Permanent Peoples' Tribunal in Italy. Robin Kimmerer is
19 a distinguished teaching professor at the SUNY College
20 of Environmental Science And Forestry in Syracuse, New
21 York. She is also the founding director of the Center
22 for Native Peoples and the Environment. And John Knox
23 is the United Nations Special Rapporteur on the Issue of
24 Human Rights and the Environment. He's also the Henry
25 C. Lauerman, professor of International Law at Wake
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1 Forest University School of Law in North Carolina.

2 And finally we'll conclude the opening
3 ceremony with a short piece by environmental scientist
4 and writer Mary Heather Noble who will read her lyrical
5 poem Seduction, which was published in the anthology
6 Fracture: Essays, Poems and Stories on Fracking in
7 America.

8 Thank you for joining us.

9 VOICES: From the United Nations Universal
10 Declaration of Human Rights.

11 Article 8. Everyone has the right to an
12 effective remedy by the competent national tribunals for
13 acts violating the fundamental rights granted here by
14 the constitution or by law.

15 Article 3. Everyone has the right to life,
16 liberty and security of person.

17 Article 17 (1). Everyone has the right to own
18 property alone as well as in association with others.

19 (2) No one shall be arbitrarily deprived of
20 their property.

21 Article 25 (1). Everyone has the right to a
22 standard of living adequate for the health and
23 well-being of herself and of her family, including food,
24 clothing, housing and medical care and necessary social
25 services. And the right to security in the event of
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1 unemployment, sickness, disability, widowhood, old age
2 or other lack of livelihood and circumstances beyond her
3 control.

4 (2). Motherhood and childhood are entitled to
5 special care and assistance. All children, whether born
6 in or out of wedlock, shall enjoy the same social
7 protection.

8 Article 23(1). Everyone has the right to
9 work, to free choice of employment, to just and
10 favorable conditions of work and to protection against
11 unemployment.

12 Article 12. No one shall be subjected to
13 arbitrary interference with his or her privacy, family
14 home or correspondence nor to attacks upon his or her
15 honor and reputation. Everyone has the right to the
16 protection of the law against such interference or
17 attacks.

18 Article 10. Everyone is entitled in full
19 equality to a fair and public hearing by an independent
20 and impartial tribunal in the determination of his or
21 her rights and obligations.

22 According to United Nations Declaration on the
23 Rights Of Indigenous People:

24 Article 1. Indigenous peoples have the right
25 to the full enjoyment, as a collective or as
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1 individuals, of all human rights and fundamental
2 freedoms as recognized in the charter of the United
3 Nations, the Universal Declaration of Human Rights and
4 International Human Rights Law.

5 Article 26 (2). Indigenous peoples have the
6 right to own, use, develop and control the lands,
7 territories and resources that they possess by reason of
8 traditional ownership or other traditional occupation or
9 use, as well as those which they have otherwise
10 acquired.

11 Article 11. Indigenous peoples have the right
12 to maintain, protect and develop the past, present and
13 future manifestations of their cultures, such as
14 archeological and historical sites.

15 Article 29. Indigenous peoples have the right
16 to the conservation and protection of the environment
17 and the productive capacity of their lands or
18 territories and resources.

19 As stated in the Universal Declaration of the
20 Rights of Mother Earth.

21 Article 2. Mother Earth and all beings of
22 which she is composed have the following inherent
23 rights:

24 The right to life and to exist;

25 The right to be respected;

1 The right to continue their vital cycles and
2 processes free from human disruptions;

3 The right to maintain its identify and
4 integrity as a distinct, self-regulating and
5 interrelated being;

6 The right to water as a source of life;

7 The right to clean air;

8 The right to integral health;

9 The right to be free from contamination,
10 pollution and toxic or radioactive waste.

11 DR. GIANNI TOGNONI: Good morning to
12 everybody and welcome to this opening session of the
13 Permanent Peoples' Tribunal On Fracking, Climate Changes
14 And Environmental Issues which has being organized over
15 the last several months through an important
16 collaboration with an academic group from the States,
17 not only, and which has been accepted as a very critical
18 issue by the Permanent Peoples' Tribunal because it
19 represents, really, today one of the most hot issues
20 which are to be faced by, on one side, the real life of
21 community who are exposed to exploitation of their
22 resources and exposed to the violation of their right to
23 make decision on their destiny.

24 And on the other side, which is facing
25 international law itself, because it is one of the
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1 problem which, on one side, is considered to be under
2 the responsibility of the states and the states are
3 those who are supposed to be the guarantors of the
4 rights of people.

5 On the other side should be part of the joint
6 responsibility of the international community and,
7 therefore, of the international law. Because of the
8 outcome or what happens in the exploitation of the
9 resources could be somehow considered to be a common
10 good of the humanity where everybody should be
11 responsible for respecting it. On the other side should
12 be considered to be accountable for that.

13 So this issue, which is so critically
14 important for the future of mankind, not only for the
15 present state of the respect of rights has been
16 considered by the Permanent Peoples' Tribunal as one of
17 the area which perfectly represent its competencies in
18 the areas of international law. Because the Tribunal
19 has been established now more or less 40-years ago in
20 '79, the documentation of the Tribunal is perfectly
21 available on the site of the promoters of this Tribunal
22 so I won't insist on that.

23 But just to recall that the main purpose of
24 the tribunal was to, first, make visible something which
25 is not specifically recognized as a critical issue in
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1 the mainstream communication. And that is certainly the
2 case of the role of fracking which is very much
3 discussed and very well-known in the area of energy and
4 resource exploitation but is rather marginally
5 considered in the area of international environmental
6 law and everything else which has to do with mining.
7 And all this exploitation of resources for marginalized
8 population or population which are becoming marginalized
9 because they are simply considered a land of novelty
10 where everybody in the states or international or
11 multi-national corporations who do work on it.

12 The second point besides visibility of the
13 Tribunal was to be really the principle role in the
14 presentation of the problems that are related to
15 resource exploitation, mining, people's participation,
16 to give really the reward to the community themselves.
17 And in this sense the preparatory phase of this session
18 has been involvement of many communities who are the
19 true actors in this Tribunal.

20 The Tribunal becomes yet, again, a tribune
21 where people are speaking by themselves and they are
22 trying to make their point clear with their own words
23 without complying directly or principally to the
24 determinants of international language.

25 The third objective for the Tribunal has been
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1 to give the opportunity of transforming, as far as
2 possible, the cases of violations of peoples' right into
3 a laboratory of research of new category of rights, new
4 category of participation, in order to re-establish the
5 principles of law, not simply as the guarantors of those
6 who are in power or those would be interpreting
7 officially the principle law, but the principle law
8 should really be transformed in what is the guarantor of
9 the right of many marginalized or exploited people.

10 In that sense the Tribunal had, as a principle
11 document and real statute, the Universal Declaration of
12 Peoples' Rights, which is called the Algiers
13 Declaration, where in fact the principle of self-
14 determination of people was established.

15 And in fact we have here, in a not usually
16 considered case of self-determination of people because
17 usually the political interpretation is given only to
18 colonial people or people who are oppressed, here we are
19 people which is diffused across the world in different
20 areas. But in fact all that population which is
21 exploited is, in fact, considered to be a people where,
22 when in fact the violation of their rights are common
23 outside the different mechanism.

24 So the self-determination of all those
25 fragmented peoples being in developing or developed
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1 world, those who can't make the decision for their own
2 fate must be really considered in the needs of a self-
3 determination. And certainly those claims are not
4 usually available nor in national nor in international
5 law.

6 Over the many years of work we have done
7 almost 40 sessions of the Tribunal. We just
8 specifically consider this issue and without mentioning,
9 obviously, all or even a sample of them I think it is
10 important to record some principal steps which document
11 how some problems, which are obviously very important,
12 are left aside by international law.

13 At the end of the 80's in Berlin we had a
14 tribunal on the IMF, International Monetary Fund and
15 World Bank, because they were in fact imposing their own
16 rules above the rules of Universal Declaration of Human
17 Rights.

18 The rights of economy were becoming principal
19 with respect to the respect of the rights of real
20 people. Later on this issue was going back doctrinally
21 also to explore the sources of international law back in
22 the conquest of America when in fact it was the same.
23 They were the conquerors who, in order to justify what
24 they were achieving by colonizing and in fact destroying
25 people, was in fact declared international law.

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1 Then we had the sessions on Bhopal, on
2 Chernobyl, on pesticides, different areas where, in
3 fact, the market law, law which is regulating in fact
4 industrial rights are, in fact, separated from
5 international law.

6 Economic law is, in fact, a separate chapter.
7 The international criminal court does not recognize
8 formally economic crimes and even international law is
9 not recognized crimes which are not simply committed by
10 individuals but they are the products of a system which
11 is producing in full impunity or was, in fact, in
12 violation of the right of the people.

13 So I am not going on in this opening welcome.
14 And the best wishes for the work of the Tribunal I am
15 representing here on one side of the secretariat of the
16 Tribunal which has well-documented all the effort which
17 has been put into the preparation of documents.

18 We are also very glad, though some curious, to
19 see how this experiment of having a virtual session
20 which certainly allow a participation of people from far
21 away and which could be really a very important
22 instrument to be used by dispersed community and which
23 could favor, in fact, an interaction also of language
24 besides communication with those community which do not
25 have access to the right source of information.
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1 So I simply thank all those who have been
2 working for the preparation of this tribunal. For us it
3 is clearly a great experience.

4 The president of the Tribunal is very happy,
5 Professor Phillippe Texier from France, who cannot
6 attend the director's meeting but who is also very, very
7 interested and will follow closely. And in that sense,
8 from the point of the Tribunal, we take our role of
9 being the listener of the cases.

10 And thanks especially to the communities who
11 have been, in fact, the real protagonist and will be
12 even more now the real protagonists of the tribunal.

13 MS. ROBIN WALL KIMMERER: Greetings this
14 morning to all who gather to deliberate, contribute to
15 and to witness the Permanent Peoples' Tribunal on Human
16 Rights, Fracking and Climate Change. I honor your
17 commitments to devote precious time and energy to engage
18 with these questions that are of fundamental importance
19 to the well-being of life on our beautiful planet. And
20 I'm honored to join you as we exercise our
21 responsibilities to deliberate on behalf of the seven
22 generations.

23 My English name is Robin Wall Kimmerer. I'm
24 a professor of Environmental and Forest Biology at SUNY
25 College of Environmental Science and Forestry and I'm
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1 Director of the Center for Native Peoples in the
2 Environment.

3 I am a member of the citizens Potawatomi
4 Nation. And as is the custom in my culture and in many
5 others let us begin with gratitude for we are showered
6 daily with the gifts of mother earth, food to eat, sweet
7 air to breathe and the preciousness of water.

8 Gratitude for each other as people for the
9 privilege of our shared work and especially for the
10 original peoples in whose homelands each of us stands
11 today. Although we come from many different places to
12 convene here can we acknowledge that together we stand
13 upon mother earth?

14 That no matter what language we speak we are
15 grateful for the bird song that greets the day. That we
16 breathe the same air, cherish a cool drink of water,
17 enjoy the shade of a leafy tree, the companionship of
18 animals and that we are all fed from the soil and
19 nourished by the plants.

20 Can we agree that our lives are made possible
21 and made sweeter by the other lives which surround us,
22 both the human and the more than human beings with whom
23 we share the earth?

24 Let me also give a customary greeting in my
25 native language. [Potawatomi greeting].

1 In my ancestral language I greet you all and
2 introduce myself as a Potawatomi woman, a member of the
3 Anishinaabe peoples of the eagle clan and the bear.

4 And I am happy to be here. Grateful for all
5 that has been given to us and that together we can care
6 for mother earth.

7 It is right and proper, I think, that
8 indigenous language opens our gathering for our language
9 is bold in their structure and their vocabulary of
10 grammar of animacy, which embodies the concept of the
11 rights the nature, the personhood of all beings.

12 Many native languages, my own included, speak
13 of the earth and of all species as persons in contrast
14 to English which renders all living beings, except for
15 ourselves, of course, as it, as objects.

16 Our languages challenges the dominant paradigm
17 that humans alone are possessed of rights and that the
18 rest of the living words exists primarily for human use.

19 What the English language refers to as natural
20 resources in my language we refer to as our relatives.
21 And through our participation here the Rights Of Nature
22 Movement is actively creating a new system of
23 jurisprudence with roots in this ancient indigenous
24 paradigm which acknowledges the personhood of all
25 beings.

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1 And we are gathered here to consider this most
2 timely question. Do the harms caused by fracking and
3 climate change constitute a breach of rights of nature
4 and human rights?

5 This question cannot be more urgent as we find
6 ourselves on the cusp of human caused climate chaos and
7 in what biologists have designated as the age of the
8 Sixth Extinction.

9 But more broadly we are gathered to bring our
10 minds together around the idea that justice should
11 reflect our human values.

12 As we deliberate let us remember that human
13 made law is constantly evolving. Over the course of
14 human history our understanding of legal rights has been
15 continually expanded to become more and more inclusive
16 to broaden the scope of justice and we acknowledge that
17 there was a time when human rights meant only the rights
18 of white men.

19 But thankfully, as a species, we have learned
20 and grown and era by era we have come to embrace human
21 rights regardless of gender, ethnicity, race, religion
22 and sexual orientation.

23 We know that we still have a lot of work to do
24 in realizing rights in all those realms but today we
25 continue that expansion of rights to the rights of
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1 mother earth, the rights of nature, with a perspective
2 that expands beyond a single species, homosapiens, to
3 embrace the intrinsic rights to be of the more than
4 human world in whose embrace of kinship we live.

5 In this gathering of good minds let us also
6 celebrate the fact that human conscience can become a
7 recognized source of law. That new systems of
8 jurisprudence allow us to clarify our obligations to the
9 living world and together proclaim the rights of nature
10 as fundamental to our deliberations on fracking and
11 climate change.

12 Now since this is an emerging new legal system
13 that not every one will be familiar with my work this
14 morning is to try and create a common understanding of
15 what is the rights of nature framework and why it's
16 important to the deliberations here this week.

17 The rights of nature constitute a powerful
18 framework for evaluating these potential harms caused by
19 fossil fuel extraction and climate change.

20 Simply stated the rights of nature is a
21 declaration that nature, in all its life forms, has the
22 right to exist, persist, maintain and regenerate its
23 vital cycles.

24 Let's hear that again and let its gravity sink
25 in. Nature, in all its life forms, has the right to
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1 exist, to persist, to maintain and regenerate its vital
2 cycles.

3 To quote from the Indigenous Environmental
4 Network statement on the Rights Of Nature And Mother
5 Earth. Rights of nature legal systems acknowledge that
6 all rights, including humans, depend on the health and
7 vitality of earth's living systems. All other rights are
8 derivative of these rights. For without a liveable
9 planet our capacity to enjoy any human rights is
10 impossible.

11 The rights of nature necessarily have primacy
12 and this requires an essential paradigm shift from a
13 legal system designed to protect the power of certain
14 members of one species to a legal system designed to
15 serve all of the living earth community. And herein
16 lies its power.

17 The rights of nature framework can recognize
18 the legal personhood of non-human beings like rivers and
19 redwoods and sea turtles.

20 The rights of nature reject the faulty
21 assumptions of human exceptionalism; this world view
22 which places humans apart from and above nature; that
23 perpetuates this fiction that we are somehow more
24 deserving, more entitled to the riches of the earth than
25 any other species and not that those other species are
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1 our property.

2 I would offer these words from the Steelheart
3 Declaration of 2013 which questioned the viability of a
4 global economy whose jurisprudence places property
5 rights above all; that recognizes corporate rights as
6 the most sacred of property rights; subordinated human
7 rights to corporate rights and where nature is not
8 recognized as having any intrinsic rights at all.

9 Our current legal system gives the rights of
10 personhood to corporations and none at all to forests or
11 coral reefs or spotted salamanders.

12 What is it we mean by personhood exactly?
13 We're not being anthropomorphic. This is not a
14 caricature. We mean that all beings have their own
15 roles and their own gifts and responsibilities. Their
16 own intentions.

17 We recognize that every other living being is
18 not our property but that they are sovereign entities
19 with their own intrinsic rights to their own lives and
20 homelands.

21 Importantly a legal person is also defined as
22 an entity who has standing to sue for damages in a court
23 of law. Thus the declaration of personhood for all
24 beings is not only a philosophical, ethical, world view
25 stance, it opens the courts. It opens the courts to
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1 hear suits for harms done to those persons, which brings
2 us to the questions to be deliberated in today's
3 tribunal.

4 Granting personhood to all beings is an
5 economic and political construct as well as an ethical
6 stance. Recognition for personhood of all beings opens
7 the door to ecological justice.

8 Our laws today are all about governing our
9 rights to the land. The shift rights of nature provides
10 is to include the rights of the land. The rights to be
11 whole and healthy. The simple right to exist.

12 What if the landscape of the Bears Ears
13 National Monument belonged to itself or the Missouri
14 River had the inherent right not to be filled with oil.
15 Or imagine if the Bristol Bay salmon had a right to
16 their own homelands for spawning grounds.

17 And what if sugar maples were recognized with
18 the rights to exist and not to become climate refugees
19 as their homelands shrink due to climate change.

20 We also recognize that there are laws more
21 fundamental than any human made laws. The laws of
22 nature revealed by all the sciences, the laws of
23 thermodynamics, the laws of reciprocity, the laws which
24 govern ecosystems in the globe.

25 Shouldn't we be questioning an economic system
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1 which demands growth, consumption and profit without
2 considering the carrying capacity of natural systems?

3 We have to understand that we, like every
4 other successful organism, must play by the rules that
5 govern ecosystem function.

6 Laws of thermodynamics have not been suspended
7 on our behalf. Unlimited growth isn't possible. And in
8 a finite world you cannot relentlessly take without
9 replenishment.

10 There are decades of science to support
11 fundamental interdependence and eons of traditional
12 ecological knowledge that we can not have human
13 sustainability without the flourishing of a natural
14 world. On this all life depends.

15 And so we gather to consider what does it mean
16 to respect natural law and seek to use a new rights of
17 nature legal framework to align human law with the
18 unbreakable laws of nature.

19 And this movement requires a paradigm shift
20 expanding our thinking from human law to natural law;
21 from an economy of endless expansion to a regenerative
22 economy of sufficiency and abundance; from exploitation
23 to reciprocity; from human well-being alone to the
24 well-being of all.

25 And it's really important to recognize
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1 precedents for using rights of nature to consider
2 questions of environmental harm. That this has already
3 been done and employed all around the world.

4 New frameworks of jurisprudence are being
5 developed and implemented in many different arenas.
6 Think of the constitutions of Ecuador and Bolivia that
7 enshrine the rights of mother nature in the
8 constitutions.

9 The Maori people who negotiated legal person-
10 hood for the Whanganu River. Likewise for the Ganges in
11 India. Sovereign indigenous nations in the US, the Ho
12 Chonk and the Ponca have used rights of nature frame-
13 works to protect their homelands from the impacts of
14 fossil fuel extraction.

15 Through tribunals convened in Paris and
16 elsewhere this movement is growing and the work that we
17 do together here in this Tribunal contributes to the
18 growth and expansion of law on behalf of life.

19 Why is this so important? The Rights of
20 Nature Movement is an invitation to acknowledge our
21 place as just one member of the democracy of species,
22 not the sole owner of the gifts of the earth.

23 It's an invitation to leave behind our
24 dishonorable past and our really self-imposed exile from
25 kinship with the living world to live again in
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1 reciprocity and respect and equitable relationship with
2 nature.

3 I do believe that we are living in a transient
4 period of profoundly painful error and correction on our
5 way to a humbler consideration of ourselves.

6 In the geologic scope of things the
7 colonialism that fueled the industrial worldview was
8 only an eye blink ago. For eons before that there was a
9 long time on this planet when humans lived well in
10 relative balance with biotic processes embodying this
11 world view of reciprocity that was simultaneously
12 material and spiritual.

13 There was a time when we considered ourselves
14 the younger brothers of creation, not the masters of the
15 universe. Our current adversarial relationships with
16 the rest of the living world isn't all that we are as a
17 species. We are a species that can learn from the
18 mistakes we've made. We have stories to help us
19 remember a different past and imaginations to help us
20 find a new past.

21 The earth asks us to change as everything
22 changes and evolves. For if we don't change we will,
23 like all if it does not change, perish. We are a species
24 who can change and our consideration of the rights of
25 nature as fundamental to law is a profound change that
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1 can lead us to cultural shifts that might save us from
2 the destructive path we are on.

3 The earth herself is changing by our hands and
4 the responses from our government leaders to the clear
5 and present danger of climate disruption have been
6 wholly inadequate, in scale, in urgency and in
7 imagination.

8 While we race around asking how we might
9 change technology or tax structures the changes that
10 might save us goes unspoken. What we need to change is
11 ourselves. We need a change in heart, a change in
12 ethics and in the laws that embody those ethics.

13 A shift away from an anthropocentric world
14 view that considers the earth our property to a
15 biocentric life-centered world view in which an ethic of
16 respect and reciprocity can grow. The rights of nature
17 frameworks embody this biocentric world view.

18 I'm reminded that the philosopher Joanna Macy
19 has called this time the great turning. The essential
20 adventure of our time shifting from the age of
21 industrial growth to the age of life sustaining
22 civilization.

23 Her work and the work of countless others
24 describes this accelerating momentum of a transition
25 already in progress and acts large and small as we
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1 humans reclaim this acient way of knowing in which human
2 life is aligned with ecological processes.

3 The question is, will that circle turn in time
4 to save us? And that's up to us.

5 Why do rights of nature need to be protected?

6 The rights of nature need to be protected for
7 reasons both pragmatic and ethical.

8 First the pragmatic. Human destruction of
9 ecological systems which sustain our lives are
10 unsustainable. But what a slippery word sustainable.
11 It sounds so mild. Let's tell the truth. The unbridled
12 destruction of eco-systems threatens the continued
13 existence of every living being on the planet and limits
14 our options for future regeneration and resilience.

15 We protect rights of nature out of enlightened
16 self-interest. The world can survive without us but we
17 can not survive without an intact living community of
18 life. As our ancestors remind us when the rivers dry up
19 and the food is all gone then we'll remember that we
20 can't eat money.

21 The second reason comes not from the belly but
22 from the spirit. The rights of nature framework
23 provides a legal voice for those who cannot speak for
24 themselves. As I wrote these words there was a chorus
25 of bird song outside my window. Robins and finches and
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1 juncoes, doves, flickers all delirious with spring time
2 and they're flying back and forth with tufts of dry
3 grass for their nests while I give voice to my thoughts
4 on paper.

5 What about their voices? What are they
6 saying? Shouldn't their voices be heard in the debate on
7 the future of the planet? Do they not have the right
8 to be, to sing, to raise their children, feed their
9 families, pass on their complex and sophisticated
10 culture, to be secure in their own homelands? The
11 right to live and not join the legions of extinct
12 beauty. The same right that I have who does not even
13 sing. I know they do.

14 And when we gather as human nations should we
15 not also counsel on behalf of the tree nations, the bird
16 nations, the fish nations, on behalf of soil and seeds
17 and our precious water.

18 What is the danger if we fail to protect the
19 rights of nature? What is the reward if we do? And
20 the rights of nature framework is obviously based on the
21 language of rights consistent with western legal
22 thinking. And there is great power in that argument to
23 work within a rights-based system of law.

24 But let me say that in indigenous thinking we
25 tend to frame this a bit differently. In terms of
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1 responsibility we don't define land as property for
2 which we have rights but as a community for which we
3 have responsibility. And that land, in turn, has a
4 responsibility for us.

5 The rights of nature framework at its heart
6 embraces this sense of responsibility that people have
7 to use their gifts on behalf of the more than the human
8 world. It is up to us.

9 In my culture it is said that each being was
10 given a gift. The birds were given the gift of music
11 that lightens our spirit and sings up the sun but we are
12 also taught that every gift is coupled to a
13 responsibility to use that gift. That in fact the gifts
14 and responsibilities are two sides of the same coin.

15 Along with their musical gift the birds were
16 given the responsibility to lighten our hearts and sing
17 up the sun.

18 The stars were given the gift of twinkle and
19 the responsibility to guide us at night.

20 What are our gifts? We human people carry
21 gifts of our own. We are scientists and artists and
22 farmers and story tellers. In return for the gifts of
23 the earth we are called to give our own in return.

24 The capacity to engage the questions of our
25 Tribunal is a gift. It is a gift to be a lawmaker and
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1 if we make the laws we can change the laws. And we have
2 the responsibility to do so when they no longer
3 reflected our values.

4 We began with gratitude and there I will end
5 my opening words with gratitude for each of us giving
6 our own gifts.

7 In the course of these deliberations we
8 reciprocate the gifts of the earth with our attention,
9 our compassion, using our good minds and good judgment
10 on behalf of the living world. Together we move
11 forward to mutual thriving.

12 In the words of my honored teacher, the late
13 Onondaga clan mother Audrey Shenandoah, we seek justice.
14 Justice not only for ourselves but justice for all
15 creation.

16 Thank you.

17 DR. JOHN KNOX: My name is John Knox. I'm
18 the United Nations Special Rapportuer on Human Rights
19 and the Environment and it's my pleasure to be with you
20 here today.

21 So when we talk about human rights we often
22 starts with the Universal Declaration of Human Rights
23 which was adopted in 1948. Eleanor Roosevelt was the
24 chair of the Human Rights Commission of the United

25 Nations body that drafted it. And the General Assembly
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1 adopted it in 1948 went on to draft human rights
2 treaties based on the Universal Declaration. So in that
3 way it's the seminal document in all of international
4 human rights law.

5 The Universal Declaration includes civil and
6 political rights, such as rights to life, liberty,
7 security of person, freedom of expression, freedom of
8 religion and so forth. It also includes economic,
9 social and cultural rights such as the right to an
10 adequate standard of living and the right to the highest
11 attainable standard of health. What it doesn't refer to
12 is the environment.

13 If you look at the Universal Declaration
14 nowhere will you find any reference to the environment
15 or environmental concerns. That is not because the
16 drafters of the declaration considered the environment
17 and decided not to include it. It's because the modern
18 environmental movement really didn't arise until the
19 late 1960, 20-years after the Universal Declaration was
20 adopted.

21 After the modern environmental movement did
22 arise there was a movement in many countries around the
23 world, which continues to this day, to recognize the
24 importance of environmental protection by incorporating
25 a constitutional right to a healthy environment in their
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1 national constitutions.

2 In fact more than 100 countries around the
3 world now recognize that right in their national
4 constitution. But at the international level, at the
5 United Nations level, there wasn't this kind of
6 recognition of a human right to a healthy environment.

7 Instead what happened beginning in the 1990s
8 was that advocates such as Kumi Naidoo, then the
9 Executive Director of Greenpeace International, and many
10 other human rights and environmental bodies brought
11 human rights issues and environmental issues together.
12 They applied human rights law to environmental
13 protection and they brought environmental claims to
14 human rights tribunals.

15 For example the Inter-American Court of Human
16 Rights in San Jose, Costa Rica, which has jurisdiction
17 to hear and decide on human rights claims throughout
18 Latin America and the Caribbean began to decide
19 environmental cases. So did the European Court of Human
20 Rights and many other regional tribunals as well as the
21 United Nations independent expert bodies such as special
22 rapporteurs reporting to the Human Rights Commission and
23 Council and treaty bodies appointed to oversee
24 compliance with human rights treaties, they all began to
25 hear more and more environmental cases.

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1 What these cases had in common is that they
2 were based on existing human rights, not on the stand
3 alone human right to a healthy environment. But instead
4 rights like the rights to life and health and an
5 adequate standard of living, food, water, housing and so
6 forth.

7 And so, over time, these human rights bodies
8 began to green human rights and create a body of
9 environmental human rights law.

10 In 2012 the Human Rights Council which had
11 taken the place of the Human Rights Commission and
12 become the main United Nations human rights body, the
13 Human Rights Council decided to appoint a new
14 independent expert to examine this relationship of human
15 rights and the environment.

16 I had the honor of being appointed to be the
17 first independent expert in 2012, six years ago. The
18 resolution creating the mandate specifically asked me to
19 study the human rights obligations relating to the
20 enjoyment of a safe, clean, healthy and sustainable
21 environment.

22 And to that end I undertook consultations all
23 over the world. I did that with a great deal of help
24 from lawyers and academics. I did research to pull
25 together what human rights bodies had said about
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1 environmental protection and I came to some basic
2 conclusions. Despite the range of the different rights
3 that we're interpreting they reached very similar
4 conclusions.

5 First, they all agreed that environmental harm
6 interferes with a vast range of human rights.

7 Second, they agreed that human rights laws set
8 out certain basic procedural requirements that have to
9 be followed in environmental decision making and more
10 generally in decision making that has environmental
11 effects.

12 Third they said that human rights law sets out
13 minimum substantive standards. Now while states have
14 more discretion with respect to substantive standards
15 than they do with procedural obligations. That
16 discretion is not unlimited.

17 Fourth, states have to take additional steps
18 to protect those who are most vulnerable.

19 So how does that apply to climate change?
20 Mary Robinson, the former president of Ireland and the
21 former High Commissioner For Human Rights at the United
22 Nations has said that climate change is the greatest
23 threat to human rights in the 21st Century. What does
24 she mean by that?

25 Well, as William Gibson, the science fiction
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1 author said, the future is already here. It's just
2 unevenly distributed.

3 That is, the effects that, in many countries,
4 we're still waiting to see from climate change or we're
5 just beginning to see as a result of climate change, in
6 other countries they're already here. They're already
7 affecting life in those countries.

8 This maps shows the vulnerability index, as of
9 a couple of years ago although it hasn't changed
10 significantly since then, and what you see there is that
11 the countries that are the most vulnerable to climate
12 change effects are those in sub-Saharan Africa, in South
13 Asia and Southeast Asia and other hot spots around the
14 world.

15 What you also see is that those countries are
16 also countries that have done the least to contribute to
17 climate change. They're the most vulnerable despite the
18 fact that they're the least to blame.

19 They're the most vulnerable for many reasons,
20 including that they may be more subject to droughts and
21 extreme weather events. But one of the major reasons is
22 that the climate change is going to cause rising sea
23 levels. There is really no doubt about this. It's just
24 a matter of physics. As the climate warms so does the
25 ocean and as the ocean warms it expands. And, of
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1 course, as frozen water in Greenland and Antarctica
2 melts it joins the ocean waters further causing it to
3 expand.

4 So while predictions still vary quite a bit it
5 seems clear that we're looking at least a rise of a
6 meter by 2100.

7 Well, rise of a meter will have really severe
8 effects for many countries around the world. And,
9 again, it's already starting to have those effects.

10 This is a map showing how much one meter rise
11 in sea level, what effect that would have in the country
12 of Bangladesh, which has extremely low lying coastal
13 area.

14 This is a picture of Male', the island that is
15 the capital of the Maldives one of the lowest countries
16 in the world. As you can see there there is simply
17 nowhere for the people of that country to go. There is
18 no higher ground. A rise in sea level of one meter
19 would make many of the islands of the Maldives
20 effectively uninhabitable.

21 So one effect of thinking about climate change
22 through a human rights lens is to realize and put a
23 human face on the effects of climate change so that
24 we're no longer thinking about just future generations
25 or polar bears on ice flows but we are thinking about
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1 the effects on people today, such as the Maldivian
2 children who may well have to evacuate their home
3 country during their own lifetime. And not that far
4 away in their own lifetime.

5 So how do these major human rights obligations
6 apply in the context of climate change?

7 In my most recent report to the United Nations
8 Human Rights Council I presented 16 framework principles
9 on human rights to the environment to try to summarize
10 the main human rights obligations that are relevant to
11 environmental protection.

12 Perhaps the key insight I've come to in my
13 work as the United Nations special rapportuer is that
14 human rights and the environment are really
15 interdependent. States have to ensure a safe, clean,
16 healthy and sustainable environment in order to respect,
17 protect and fulfill human rights, and vice versa.

18 It's necessary to be able to exercise human
19 rights in order to be able to protect the environment.
20 More specifically it's necessary to be able to exercise
21 procedural rights, for example, such as rights to have
22 states assess environmental impacts. Rights to have
23 states make environmental information public, to
24 facilitate participation in environmental decision
25 making. Absolutely the rights of freedom of expression
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1 and association are of fundamental importance in
2 ensuring that environmental policies reflect the views
3 of those who are most directly affected.

4 And states have obligations under human rights
5 law to provide effective remedies for violations of all
6 of these rights.

7 As I said, states also have substantive
8 obligations. While states have somewhat more discretion
9 here no one expects Ghana, say, to have exactly the same
10 level of environmental protection as Denmark, for
11 example.

12 Nevertheless, human rights bodies have made
13 clear that states do have obligations to protect against
14 or at least take steps to do their best to protect
15 against foreseeable environmental harm.

16 While they have some discretion to strike a
17 balance between environmental protection and economic
18 development that balance can't be unreasonable or result
19 in unjustified foreseeable infringements of human
20 rights.

21 In particular, states should take into account
22 international standards such as those promulgated by the
23 World Health Organization.

24 They should never take retrogressive
25 measures. They should never go backwards in their level
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1 of protection. They must never discriminate between
2 groups. It's no excuse to say, well, we are in a state
3 of economic development here. That's not an excuse for
4 saying that it's OK to discriminate against a minority
5 within that country.

6 And once the balance is struck states have to
7 enforce it. They have to make sure it's actually
8 implemented.

9 In addition states have obligations to protect
10 against threats to the most vulnerable. Those who are
11 most vulnerable from environmental harm and climate
12 include, for example, women, children, the disabled,
13 older persons, persons living in poverty, indigenous
14 peoples and other communities that are particularly
15 closely reliant on the natural ecosystems which support
16 all human life.

17 So how do these general norms apply to climate
18 change? Let me just highlight three levels; the
19 international level, the national level and the project
20 level.

21 At the international level states have to
22 cooperate with one another to reduce total greenhouse
23 gas emissions.

24 At the national level every state has
25 obligations to take effective adaptation measures. That
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1 is to take measures to ensure that their people within
2 their jurisdiction that are their responsibility have
3 the best chance they can to adapt successfully to the
4 unavoidable and unavowed effects of climate change.

5 And at the project level even projects that
6 are designed to mitigate or adapt to climate change they
7 themselves have to be sure to comply with human rights
8 obligations.

9 So let's say a word or two more about each of
10 those levels of obligation.

11 At the international level states have to
12 cooperative to adopt mitigation necessary to reduce
13 global emissions so as to hold the increase in global
14 average temperatures below levels that would cause
15 widespread harm to the enjoyment of human rights.

16 In practice what we know from scientists that
17 study this is that that means that it's necessary to
18 keep the increase in global average temperature to well
19 below 2 degrees Celsius.

20 That means that states have a duty to
21 cooperate to face this global shared threat. This duty
22 to cooperate is recognized by the United Nations
23 Framework Commission On Climate Change itself, which
24 recognizes that the global nature of climate change
25 calls for the widest possible cooperation by all
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1 countries and their participation in an effective and
2 appropriate international response.

3 It's also a principle of international human
4 rights law recognized in the charter of the United
5 Nations and in the International Covenant On Economic
6 Social And Cultural Rights.

7 So how are states doing in fulfilling this
8 duty to cooperate?

9 Well it's a mixed bag. On the one hand they
10 have agreed to the Paris Agreement in December of 2015,
11 Article 2 of which says that the agreement aims to
12 strengthen the global response to the threat of climate
13 change including by holding the increase in the global
14 average temperature to well below 2 degrees Celsius
15 above pre-industrial levels and to pursue efforts to
16 limit the temperatures increase to 1.5 degrees Celsius.

17 Well, that's good. However, the United
18 Nations Environmental Program has pointed out in its
19 Emmissions Gap Report that even if fully implemented the
20 unconditional intended nationally determined
21 contributions, that is, the contributions that states so
22 far have made to fulfill their commitments under the
23 Paris Agreement, those contributions are only consistent
24 with staying below an increase in temperature of about 3
25 degrees Celsius by 2100.

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1 So even if those commitments are implemented
2 we're only about half way to the level that human rights
3 standards and states themselves have recognized are
4 necessary to avoid massive harm to human well-being.

5 In my reports to the Human Rights Council in
6 March 2016, two years ago, I focused on human rights and
7 climate change. And I evaluated the Paris Agreement and
8 I said that even if they meet their current commitments
9 states won't satisfy their human rights obligations.

10 From a human rights perspective I said it's
11 necessary not only to implement the current intended
12 contributions but also to strengthen those contributions
13 in order to meet the target as set out in Article 2 of
14 the Paris Agreement.

15 Now what about the adaptation requirements?
16 Even a 1.5 or 2 degree increase will result and is
17 already resulting in harm to the human rights of
18 communities that are most vulnerable to climate change.

19 States also have obligations to adopt
20 effective adaptation measures to protect against this
21 harm and to provide for remedies to it.

22 I want to make clear that these adaptation
23 measures apply to all states. Obviously states that
24 contribute more to the problem have greater
25 responsibility to do something about it. There is no
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1 doubt about that. But adaptation places an obligation
2 on all states to do what they can.

3 So to go back to the Maldives here, Maldives
4 contributes virtually nothing to climate change. This
5 is not a problem that the Maldives or other small island
6 states or other particularly vulnerable states did
7 anything to create. However, even the Maldives
8 recognizes that it has to do what it can to protect its
9 own people from climate changes effects.

10 So, in this picture, you can see the Maldives
11 has already started to build or has already built a sea
12 wall around Male', its main capital, and is taking
13 additional steps to try and protect its people from the
14 effects of climate change. That's completely
15 appropriate and in line with their obligations under
16 human rights law.

17 Other states, though, in a position to help
18 need to do so. The states in particular that have
19 contributed most to the problem also need to live up to
20 their commitments to help countries that are most at
21 risk and most threatened by climate change.

22 What about actions taken in response to
23 climate change? As I said even actions taken to respond
24 to climate change need to make sure that they take into
25 account human rights obligations.

1 So the preamble of the Paris Agreement
2 actually recognizes this. It says that parties should,
3 when taking action to address climate change, respect,
4 promote and consider their respective obligations on
5 human rights, including these specific human rights.

6 That is particularly important, for example,
7 in projects that are designed to promulgate renewable
8 energy. There have been some very strong criticism of
9 projects that were presented as addressing climate
10 change by, for example, increasing hydro-electric power
11 but some of these projects have also been accused of
12 massive human rights violations by running roughshod
13 over the rights of people who already live in those
14 areas and are being displaced without consultation or
15 consent, in many cases.

16 It's no excuse to say that, well, this is an
17 important project we're working on, therefore, we can
18 ignore the human rights of those who are most
19 affected. That's not how human rights law works,
20 obviously.

21 Climate finance mechanisms need to include
22 safeguards to make sure that the hundreds of millions of
23 dollars that are expected to flow through these
24 mechanisms in coming years actually do protect human
25 rights of those who are most affected.

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1 The Adaptation Fund, to mention one of these
2 mechanisms, actually does include fairly good safeguards
3 to protect human rights and environmental concerns.

4 The Clean Development Mechanism created by the
5 Kyoto Protocol does not. It includes almost no
6 safeguards like this.

7 As we move forward with the Green Climate Fund
8 and the Sustainable Development Mechanism it's very
9 important to ensure that those mechanisms do include
10 solid protective safeguards.

11 I actually wrote a letter to a climate
12 commission, the SBSTA, two years ago setting out what
13 the Sustainable Development Mechanism, the replacement
14 for the Clean Development Mechanism should include. It
15 should include environmental and social assessment for
16 every proposed project and program.

17 It should provide for effective public
18 participation in all decision making.

19 It should provide a grievance mechanism so
20 those that claim that their rights have been violated
21 can take those grievances to a body that has the
22 authority to receive them. And, of course, it should
23 protect the most vulnerable, including indigenous
24 peoples.

25 Finally I just want to mention that
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1 increasingly there are climate cases that are being
2 brought on the basis of human rights. I won't go
3 through all of them but some of the most important ones
4 in recent years include the Ashgar Leghari case in
5 Pakistan. The Urgenda Foundation case in the
6 Netherlands. The Earth Justice Petition to the
7 Philippines National Human Rights Institution. And in
8 the United States the Our Children's Trust Litigation.

9 The Philippines Human Rights Commission case
10 involves a human rights complaint brought against
11 several dozen so called carbon majors, large businesses
12 that have, over the years, contributed an immense amount
13 of carbon pollution. It's actually, on the day I am
14 recording this, March 28th, it's on the second day of
15 hearings, in the process of hearing this complaint, and
16 hopefully issuing a decision on it later this year.

17 The Our Children's Trust lawsuit brought in
18 the United States is also expected to go to trial later
19 this year. And just two weeks ago a new lawsuit brought
20 on behalf of children against another government, the
21 government of Columbia, was filed. It also accuses its
22 government of not doing enough to safeguard human rights
23 by not doing enough to protect against the effects of
24 climate change.

25 For more information about this I encourage
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1 you to go to my web site. It has an impossibly long
2 name but if you Google OHCHR for the Office of the High
3 Commission For Human Rights, Knox, then it will take you
4 to a web site that has many more reports, including my
5 report on climate change and human rights and I hope
6 that you find that useful.

7 Thank you very much.

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9 [youtube.com/watch?v=tsolzqk_CDU]
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1 OVERVIEW AND OPENING ARGUMENTS

2 MAY 14, 2018 10:00-11:00

3
4 MS. REVEL POINTON: Good morning. It's a
5 pleasure to present to you today for the first day of
6 the Permanent Peoples' Tribunal on Human Rights Issues
7 Around Fracking and Climate Change.

8 My name is Revel Pointon and I'm a solicitor
9 here in Australia specializing in environmental law. I
10 work for the Australian Legal Center Environmental the
11 Defenders' Office who provides legal assistance to
12 community to help them understand and use their rights
13 effectively to protect their lands, their well-being and
14 the environment that they care about.

15 And I'm joined here today by co-lead attorney
16 Dr. Evan Hamman.

17 DR. EVAN HAMMAN: Thanks Revel.

18 So my name is Evan Hamman. I'm an
19 environmental lawyer and law academic here located in
20 Queensland, Australia. I write about environmental law
21 including coal seam gas and land use activities in
22 Australia. And Revel and I have worked in the past for
23 NGOs and communities that are seeking to protect rights
24 in relation to the environment.

25 So this week you're going to hear a lot about
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1 human rights, both procedural and substantive human
2 rights and whether the extraction of gas and the
3 practices of fracking are impacting upon those human
4 rights.

5 We'd like you to consider the words of the
6 Universal Declaration Of Human Rights, Article 1, which
7 said almost 70-years ago today, all human beings are
8 born free and equal in dignity and rights. They're
9 endowed with reason and conscience and should act
10 towards one another in the spirit of brotherhood.

11 So we'd like you and the participants in this
12 Tribunal to keep these words in mind as you progress
13 through the week. By virtue of the fact that we have
14 both reason and conscience we should be able to make
15 decisions as human beings that respect each other as
16 well as the environment that we live in.

17 In addition to human rights the other
18 important factor this week which will be considered is
19 the rights to nature.

20 So several years ago the late Thomas Berry,
21 who is one of the founding fathers of the Rights Of
22 Nature Movement said as follows. "We see quite clearly
23 that what happens to the non-human also happens to the
24 human. What happens to the outer world happens to the
25 inner world. And if the outer world is diminished in
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1 its grandeur then the emotional, imaginative and
2 intellectual, spiritual life of a human is also
3 diminished or extinguished.

4 'Without the soaring birds, the great forest,
5 the sounds and coloration of the insects, the free
6 flowing springs, the flowering fields and the sight of
7 clouds by day and stars at night we become impoverished
8 in all that makes us human.".

9 So there is a deep connection between human
10 rights and rights of nature. We would like you to
11 remember this also throughout the week.

12 Finally many indigenous communities have
13 always understood this connection between human rights
14 and the operation of the natural world. Their rights
15 need particular consideration and the extraction of
16 fracking or the extraction of gas and the practices of
17 fracking can have severe impacts on their cultural ties.

18 MS. REVEL POINTON: In our opening
19 statement today we'll be going through some of the key
20 concepts and terms that the Tribunal should be aware of
21 when listening to the testimonials put before them.

22 We'll also be looking at some background
23 documents around each of the key issues to help you in
24 your deliberations and an overview of what you should
25 expect to hear this week.

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1 We urge the Tribunal to keep in mind the words
2 that we commence with, that by virtue of humans having
3 reasons and conscience we have an obligation to better
4 our humanity as well as the earth we rely on. And that
5 includes the making decisions about where and how the
6 extractive industry should be allowed to be undetected
7 on our earth.

8 The Tribunal's purpose is to create a forum
9 for reasoned moral debate around issues of importance to
10 our society and our environment today. We are here to
11 provide a space for those members of civil society and
12 those members of our planet that don't often have the
13 ability to have their voices and issues heard in the
14 decisions that most affect them.

15 So we look forward to the input of civil
16 society and the expertise of the various stakeholders we
17 have in this Tribunal this week and look forward to the
18 recommendations of the Tribunal.

19 Thanks very much.

20 DR. EVAN HAMMAN: Thank you.

21 [This is the opening statement from Dr. Evan
22 Hamman and Ms. Revel Pointon. They are lawyers in
23 Australia who have been asked to be co-lead
24 attorneys for the Permanent Peoples' Tribunal on
25 Human Rights and Fracking and Climate Change.]
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1 DR. EVAN HAMMAN: In recent years fracking
2 and the extraction of unconventional gas and oil from
3 beneath the ground, including beneath the ocean, has
4 caused considerable angst for communities across the
5 globe.

6 The science on which fracking is based is
7 shaky at best. The industry, governments and
8 communities are often left in the dark as to the
9 environmental, social and economic risks that fracking
10 and the extraction of unconventional oil and gas can
11 cause on our livelihoods.

12 The uncertainty around fracking and
13 misunderstandings around the science cause considerable
14 angst amongst communities and it's understandable that
15 protests and community outrage have occurred in places
16 as far afield as Australia, the United States, the
17 United Kingdom and the other parts of the world.

18 A large part of the problem is that we simply
19 don't know the extent of the risk and the extent of the
20 impacts of fracking and the extraction of oil and gas on
21 a mass scale are having in our communities and the
22 environment.

23 Fracking is often associated with other
24 infrastructures as well, including pipelines, processing
25 plants, port developments and increased development of
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1 the fossil fuel industry more generally.

2 One the most precious resources that we have
3 is water, both for drinking and for agriculture but also
4 for the environment. Fracking can cause unacceptable
5 risk to water supply including the contamination of
6 underground aquifers.

7 Recent experience has also showed that
8 fracking can impact upon geological formations beneath
9 the ground and even have a risk toward seismic
10 activities such as earthquakes.

11 The process of fracking, or otherwise called
12 hydraulic fracturing, involves injecting water with high
13 pressure and sometimes chemicals down into the rock
14 formations in order to release the gas. Its commonly
15 used, types of gas, like shale gas and sometimes for
16 coal seam gas which is also known as coal bed methane
17 where the gas is tightly held within the coal seams.

18 The major environmental risks associated with
19 fracking include contamination of the aquifers beneath
20 the ground, contamination of ground surface water, the
21 possibility that gas can escape and ignite and also the
22 possibility that the salty water which comes up from the
23 ground can impact upon the local cropping and land.

24 When the gas is released as a result of
25 reduction in the pressure there is often a large amount
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1 of water which also comes to the surface. This water is
2 often incredibly salty and at times is stored in large
3 evaporation dams which is unsuitable for drinking or for
4 irrigation.

5 Associated infrastructure can also pose risks
6 to the environment and surrounding communities. The gas
7 often needs to be transported many hundreds of
8 kilometers to a place where it can be used for fuel
9 generation or for export. Clearing of vegetation,
10 laying of pipelines, possibility of erosion from this
11 can also cause impacts on communities and the local
12 environment.

13 In places like Australia an associated
14 development, which is liquefied natural gas processing
15 facilities, are being built on the coast of Australia in
16 order to ship a lot of the gas to overseas markets. In
17 some of these cases the processing facilities are being
18 built in world heritage areas, for example, Australia's
19 Great Barrier Reef.

20 It should not be forgotten that there are also
21 considerable risks to those people working with and
22 alongside gas and oil extraction activities. In
23 developing countries the regulatory frameworks and rules
24 of occupational health and safety are often
25 undeveloped. This can cause significance human rights
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1 concerns for those people working on those projects.

2 Finally we shouldn't forget that fossil fuels,
3 including gas, including oil, beneath the surface of the
4 ground are also contributing to increased levels of
5 greenhouse gases in the atmosphere.

6 We have a responsibility for future
7 generations to keep the climate at a stable level.
8 Although gas is often touted as something which is far
9 less dangerous than coal with around 50% of the
10 emissions still, nonetheless, a fossil fuel and the
11 extraction of the gas along with the associated
12 infrastructure still contributing to climate change in a
13 negative way.

14 MS. REVEL POINTON: During this week as
15 judges you have been asked to apply the standards of
16 International Human Rights Law and render an advisory
17 opinion on the following four fundamental legal
18 questions.

19 (1) Under what circumstances do fracking and
20 other unconventional oil and gas extraction techniques
21 breach substantive and procedural human rights protected
22 by international law, as a matter of treaty or custom?

23 (2) Under what circumstances do fracking and
24 other unconventional oil and gas extraction techniques
25 warrant the issuance of either provisional measures, a
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1 judgment enjoining further activity, remediation relief
2 or damages for causing environmental harm?

3 (3) What is the extent of responsibility and
4 liability of states and non-state actors for violations
5 of human rights and for environmental and climate harm
6 caused by these oil and gas extraction techniques.

7 (4) What is the extent of responsibility and
8 liability of states and non-state actors, both legal and
9 moral, for violations of the rights of nature related to
10 environmental and climate harm caused by these
11 unconventional oil and gas extraction techniques?

12 Fracking has a wide range of impacts.
13 Therefore, the issues have been broken into six sub-
14 cases through which the prosecution will be arguing.

15 Firstly, the human health case will address
16 the human rights dimensions of adverse impacts on all
17 dimensions of human, physical and mental health.

18 The climate impacts case will address all the
19 human rights and earth rights dimensions for both
20 present and future generations of fracking and climate
21 change including of governments' continued subsidizing
22 of fossil fuels.

23 The environmental, ecosystem, hydrologic and
24 seismicity cases will address the human rights and earth
25 rights dimensions of adverse environmental ecosystem and
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1 wildlife impacts as well impacts on air, surface water,
2 ground water and earthquakes.

3 The public participation case will include the
4 human rights dimensions of public participation, or the
5 lack thereof, in decision making about unconventional
6 oil and gas exploration, extraction and policy making.

7 The fuels infrastructure case will address the
8 human rights and earth rights dimensions of exploration,
9 drilling, fracking, extraction and delivery processes as
10 well as of the infrastructure needed for transport,
11 storage and exported products and waste generally.

12 For example, pipelines, storage facilities,
13 waste treatments facilities, waste water disposal, LNG
14 terminals, compressor stations, et cetera.

15 Finally the social costs case will address the
16 human rights dimensions of social and cultural impacts
17 on individuals, families and communities.

18 As set out by Tom Kerns in his 2017 article,
19 An International Tribunal on the Human Rights Impacts of
20 Fracking, Structural Grounding and Purposes, the
21 following legal test should be applied by the Tribunal
22 in hearing the evidence and developing any
23 recommendations in your decision. These tests are
24 representative of those of a human rights court.

25 As to the question of standing every
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1 individual person is considered to have legal standing
2 in international human rights courts. Therefore, there
3 is no restriction as to who could be before the
4 Tribunal.

5 As to standards of proof needing to be tested,
6 standards of proof in international human rights courts
7 favor the plaintiff over the state to balance the fact
8 that the plaintiffs are often disadvantaged in the
9 evidence they can access to support their case.

10 As to the burden of proof, the burden of proof
11 in human rights courts is on the state, in such an
12 action, rather than on the plaintiff even though the
13 state would be the defendant normally.

14 We will now provide a background as to where
15 human rights norms can be found that can be applied by
16 the Tribunal.

17 Human rights norms can be found in a variety
18 of international human rights instruments including
19 those comprising the International Bill of Rights, being
20 the Universal Declaration of Human Rights, The
21 International Convention on Civil and Political Rights,
22 The International Convention on Social, Economic and
23 Cultural Rights.

24 Human rights can also be found and provided
25 for through state or regional constitutions, charters or
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1 laws.

2 Human rights can be substantive rights. For
3 example, the rights to life, liberty, law or reputation
4 consider to exist for its own sake and to constitute
5 part of the normal legal order of society.

6 Or they can be procedural rights which are
7 rights that exist to provide a means to enforce
8 substantive rights through legal and governance
9 processes.

10 Examples of substantive human rights that are
11 likely to be raised before the Tribunal this week
12 include the right to life. The right to the enjoyment
13 of the highest attainable standard of physical and
14 mental health. The right to a healthy environment.
15 Right of self-determination. The right for indigenous
16 peoples to enjoy their own culture. And the right to
17 safe and healthy working conditions.

18 Examples of procedural human rights that may
19 be raised before the Tribunal this week include the
20 right to an effective legal remedy. The right to access
21 information and public participation. The right to
22 equal access to the public service. The right to equal
23 protection of the law. And the right to legal
24 protection against arbitrary or unlawful interference
25 with privacy and family in the home.

1 The main focus of the PPT is on human rights
2 as a Human Rights Tribunal. However, time will also be
3 given to consider the rights of nature itself through a
4 full day of the Tribunal's hearings. The rights of
5 nature, or earth jurisprudence, recognizes that our
6 earth or environmental values or ecosystems also have
7 inherent rights which should be recognized and honored,
8 just as we honor the rights of human.

9 We recognize the holistic systems of our
10 planet that all ecosystems on earth are now very deeply
11 intertwined and therefore what is good for human beings
12 must also been balanced against what is good for other
13 species and what is good for the whole planet.

14 While there is a human right to a healthy
15 environment the case addressing fracking's impact on
16 ecosystems will be argue primarily from the earth
17 charter perspective that all beings are interdependent
18 and every form of life has value, regardless of its
19 worth to human beings.

20 Some constitutions also include reference to
21 the rights of nature. This is not a new concept for
22 many indigenous cultures around the world for whom the
23 rights of nature are embedded into their world views and
24 traditions of living in harmony with nature and with
25 acknowledgment of the deep connection between all life.
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1 For the purposes of the Tribunal the rights of
2 nature features such as water resources, rivers, ground
3 water basins, et cetera, and ecosystems that depend on
4 will be considered and investigated amongst other
5 things.

6 There are a variety of documents that we
7 recommend to the Tribunal for providing a helpful
8 background to key matters that may assist the Tribunal's
9 deliberations. A Compendium of Scientific, Medical and
10 Media Findings Demonstrating Risks and Harms of Fracking
11 around unconventional gas and oil extraction has been
12 produced by the Physicians for Social Responsibility and
13 Concerned Health Professional of New York. This is the
14 5th edition and was produced in March of this year.

15 The compendium provides a compilation of
16 several hundred scientific, medical and media findings
17 that detail evidence for the risks and harms associated
18 with fracking. The compendium focuses on topics most
19 closely related to the public health and safety impacts
20 on unconventional gas and oil drilling and fracking.

21 The Fifth Assessment Report by the
22 Intergovernmental Panel on Climate Change in 2013 and
23 the expected forthcoming updates for 2018-2019 can
24 provide a useful reference point for climate change
25 related issues to do with unconventional gas and oil.

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1 The IPCC set up in 1988 is a highly respected
2 and renowned international body set up by the world
3 metrological organization and the United Nations
4 Environment Program. It was set up to assess the
5 science related to climate change to provide
6 policymakers with regular assessments of the scientific
7 basis of climate change, its impact of future risks and
8 options for adaptation and mitigation.

9 Their assessment reports present projections
10 of future climate change based on different scenarios
11 and the risk that climate change poses and discusses the
12 implications of response options.

13 We would now like to introduce the Tribunal to
14 various documents that provide helpful background to the
15 human rights norms and laws as related to the issues and
16 consideration by the tribunal.

17 Firstly, the Declaration On Human Rights And
18 Climate Change produced by the Global Network for the
19 Study of Human Rights and the Environment in May 2016
20 provides a useful overview of agreed human rights issues
21 arising from climate change.

22 Two human rights assessments have been
23 undertaken in New York in 2011 and in the UK in 2014
24 which looked directly at the human rights issues arising
25 from fracking for natural gas and other unconventional
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1 gas developments. These are sure to be of use to the
2 Tribunal in their deliberations given their relevance to
3 the topic in question.

4 UN Special Rapporteur on Human Rights and the
5 Environment, John Knox, has produced a report of his
6 five years of working in this role, Framework Principles
7 on Human Rights and the Environment: The main human
8 rights obligations related to the enjoyment of a safe,
9 clean healthy and sustainable environment. A very
10 useful report indeed.

11 Sister Aine O'Connor from the Mercy Global
12 Action Group has produced a rights-based guide to
13 advocacy directly on human rights law and fracking. The
14 guide aims to contribute to the debate on fracking by
15 outlining how international human rights law can empower
16 and reposition people in communities as rights holders
17 providing an extensive overview of accountability
18 mechanisms to address threats of harm from fracking.

19 Further helpful background documents for the
20 Tribunal include an outline of indigenous rights issues
21 provided in the indigenous peoples afro-descendant
22 communities and natural resources, human rights
23 protection in the context of extraction, exploitation
24 and development activities report by the Inter-American
25 Commission on Human Rights produced in 2015.

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1 An overview has been given of rights of nature
2 issues in fighting for our shared future, protecting
3 both human rights and nature's rights in the 2016 update
4 produced by the Earth Law Center. Also the United
5 Nations Tool Kit on the Right to Health may be helpful
6 for the Tribunal.

7 We will now provide an overview of the
8 testimony and evidence that will be put before the
9 Tribunal in the coming week.

10 For the rest of day you will hear about
11 various pre-tribunals that have been held in preparation
12 for this Tribunal hearing.

13 Firstly, you'll here from Rick Sahli who will
14 present on the pre-tribunals held in Athens and
15 Youngstown, Ohio in the summer of 2017.

16 These tribunals were held in an effort to
17 gather and correlate data to submit to the UN Human
18 Rights Council charging the State of Ohio and the US
19 federal government with human rights violations through
20 their unchecked allowance of the oil and gas industry to
21 operate when their actions are directly infringing upon
22 the citizens rights, health and the environment.

23 You will then hear from Shay Dougall and
24 Benedict Coyne of Australia who will be presenting on
25 outcomes and issues raised in the Australian pre-
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1 tribunal.

2 On Tuesday the morning will start with
3 presentations on the Rights of Nature by the Earth Law
4 Alliance's, Lisa Mead. The submissions around Rights Of
5 Nature will be arguing the unconventional oil and gas
6 extraction violates the rights of nature to exist,
7 thrive, regenerate and evolve and that both state and
8 non-state actors are responsible, accountable and liable
9 for these violations.

10 Whereas other submissions and testimonials
11 before the Tribunal will be focusing on the human rights
12 and impacts of climate change and fracking these
13 submissions will focus mainly on the harms to nature and
14 climate.

15 Nathalie Eddy and Bruce Baizel will then
16 provide presentations from Earth Works who work closely
17 with communities directly impacted by fracking and oil
18 and gas extraction in the United States.

19 In their submissions they will focus on the
20 first two questions at the fore. They will argue that
21 the precautionary principle needs better and stronger
22 application in current and future gas and oil
23 development, and that the burden of proof should be
24 shifted to the industry to demonstrate whether harm is
25 being caused.

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1 After lunch you will hear from Robin Bronen
2 who will provide testimony as to climate forced
3 migration in Alaska. Robin will present on the demand
4 for and difficulty in climate forced communities
5 relocation, arguing that the continued increase in
6 greenhouse emissions is forcing those who have least
7 contributed to the climate crisis to make the extremely
8 difficult decision to leave the homes where they have
9 lived for millennia.

10 Robin will be followed by Ceal Smith and
11 Eunice Brower from Alaska Climate Action Network who
12 will continue consideration of issues in Alaska from
13 fracking in the native village of Nuiqsut.

14 Raymond Cusson, representing the issues
15 arising from hydraulic fracturing on the west coast of
16 Newfoundland, Canada, has unfortunately had to cancel
17 his personal testimony to the Tribunal this week but his
18 written submissions stand and we encourage the judges to
19 review these important submissions.

20 Raymond does have insight as into how small
21 communities in the oil dependent Canadian province of
22 Newfoundland and Labrador organized community resistance
23 to fracking in an attempt to protect their communities,
24 their human rights and the increased potential impacts
25 on climate change.

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1 You will then hear from Amanda Kennedy from
2 Australia who will be presenting on issues around
3 Australian state and federal laws regulating
4 unconventional gas and oil extraction from the
5 perspective of procedural human rights.

6 You will then hear from Lakshmi Fjord and
7 Irene Leech who will be presenting on the
8 Charlottesville peoples pre-tribunal in Virginia U.S.A.

9 In October 2017 a day long tribunal was held
10 to collect testimonies about the human and environmental
11 impacts of two interstate fracked gas pipelines already
12 under construction through parts of Virginia, West
13 Virginia and North Carolina.

14 This will be followed by Andy Gheorghiu
15 presenting from Food And Water Watch and Food And Water
16 Europe.

17 After lunch Dr. Michelle Maloney of the
18 Australian Earth Law Alliance will present further on
19 the rights of nature. Michelle will continue to present
20 on the need for rights of nature and not just human
21 rights to be better protected from the impacts of the
22 unconventional gas industry.

23 Declan Doherty, also from Australia's
24 Environmental Defender's Office in Western Australia,
25 will present submissions from the experience of WA where
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1 an inquiry has been commissioned by the WA government to
2 investigate the risks of fracking. This is ongoing.

3 Declan will focus on the first legal question
4 being the circumstances in which fracking activities and
5 the risk they pose to the natural environment, health,
6 communities and aboriginal heritage breach substantive
7 and procedural human rights protected by international
8 law.

9 Vanessa Brown from Vermont 350 will end the
10 day with some discussion around philosophies of Druids
11 and unconventional oil and gas, amongst other
12 submissions.

13 350 Vermont is a non-profit organization that
14 organizes, educates and supports people in Vermont to
15 work together towards climate justice, resisting fossil
16 fuels, building momentum for alternatives and
17 transforming our communities toward justice and
18 resilience.

19 On Thursday Simona Perry will start by
20 presenting her field research, being evidence also
21 submitted on behalf of local communities and families
22 across the USA over nine years. These families have had
23 their human rights violated as a result of fracking and
24 other unconventional oil and gas developments, including
25 infrastructure developments and associated climate
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1 change impacts.

2 Over the past nine years social, environmental
3 and community health scientists have been closely
4 documenting the consequences of these activities on
5 local communities through various scientific
6 perspectives which Simona will present on.

7 This will be followed by Megan Hunter
8 presenting on the Fresh Water Accountability Project, a
9 nonprofit organization with a mission to preserve and
10 protect fresh water supplies through education and
11 community action. And it's dedicated to promoting
12 health and well-being while protecting the environment.

13 Since its origins Freshwater has served as a
14 community advocate helping individuals and communities
15 impacted by fracking to organize, educate and
16 participate in environmental decisions that effect them.

17 Allie Rosenbluth, who represents Rogue Climate
18 based in Jackson County in Southern Oregon, Rogue
19 Climate works in the many of the rural communities
20 impacted by the proposed Pacific Connector Fracked Gas
21 Pipeline and Jordon Cove LNG export terminal.

22 Jody McCaffree will follow with a presentation
23 also on Jordon Cove with the Citizen Environmental and
24 Human Rights Assessment of exporting hydraulic fractured
25 gas.

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1 Daniel Taillant will follow from the Center
2 for Human Rights and the Environment on the issues of
3 human rights violations and climate change, inducing
4 invisible methane and deadly volatile organic compounds
5 and other pollutants emitted by the oil and gas sector,
6 which can be identified with infrared technology.

7 The afternoon will then provide time for
8 attorneys and judges to answer questions posed by the
9 judges and to engage in general discussion.

10 On Friday the morning will start with Maura
11 Stephens providing testimony from Coalition To Protect
12 New York. The coalition formed in 2010 by a group of
13 central New York individuals in grassroots organizations
14 in response to the growing threat of unconventional
15 shale gas activities to the health, environment,
16 communities and ways of life.

17 Maura's submissions discuss the evolution of
18 community understanding, concern and activation in
19 response to the issues they were facing from increasing
20 unconventional gas activities being proposed around
21 them.

22 I will then return to appear before you to
23 present closing submissions for the Tribunal. As judges
24 you will then have the opportunity to consider and
25 provide any recommendations and/or statements that you
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1 might choose to offer in resolution of this Permanent
2 Peoples' Tribunal hearing.

3 DR. EVAN HAMMAN: This concludes our
4 opening address. Revel and I were greatly honored to be
5 able to provide this information to you and thank you
6 for listening.

7 We would like to finish with the words of
8 Article 1 of the United Nations Universal Declaration of
9 Human Rights. This is a point where we first started.

10 All human beings are born free and equal.
11 They are endowed with reason and conscience. They are,
12 therefore, able to reason through logical arguments and
13 also share compassion to our fellow human beings, those
14 in the environment that we rely on for survival, and
15 hope that you take these words through with you
16 throughout the week.

17 Thank you.

18
19 [youtube.com/watch?v=wS8GQqJJyvo]
20
21
22
23
24
25

1 ATHENS, OHIO

2 YOUNGSTOWN, OHIO

3 PRE-TRIBUNAL BRIEFS, PART I

4 MAY 14, 2018 11:00-12:00

5
6 MR. RICHARD SAHLI: Greetings from
7 Columbus, Ohio. A pleasure to be here today with the
8 Permanent Peoples' Tribunal.

9 My name is Richard Sahli. I am an attorney.
10 I've been practicing environmental law in Ohio since
11 1980. So I think that's 38-years. I've been in my own
12 private practice since 1995 and I've only represented
13 citizen groups all the way from the smallest grass-
14 roots groups which, frankly, are most of the fracking
15 activists in Ohio all the way up to national groups.
16 That is both in state and federal court.

17 My presentation today is going to be in two
18 parts. This will be one hour and then we'll break for
19 lunch and I'll be talking about the two pre-tribunals
20 that we did in Ohio last year and also discuss the 40-
21 page report that came out of that, talk about some of
22 the very specific testimony that we received, also some
23 of the unique issues in Ohio and, frankly, in the United
24 States in general trying to deal with fracking.

25 And I'll try to hold a few questions, time for
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1 a few questions at the end of that. And then we'll have
2 a hour and a half for lunch and then when we come back
3 I'll have individual interviews with some of the
4 witnesses who testified at the tribunal last year. I'll
5 be showing several items from their testimony to give
6 you a sense of what it's truly like, day-to-day, in the
7 state of Ohio when it comes to fracking.

8 Hopefully also my discussion will give other
9 groups who are thinking about doing tribunals some
10 background, how to do the report and how to approach
11 pre-tribunals.

12 So on that score let me start the formal part
13 of my presentation by saying that these pre-tribunals
14 were very important to the people in Ohio. It was very
15 good for us to do this. And that is because people
16 affected by fracking have had very, very few
17 opportunities to get their story out.

18 And when fracking started in Ohio in 2011 Ohio
19 was still in the grips of the terrible recession that
20 began in this country in 2008. And our political class
21 has always been very close to the oil and gas industry,
22 as they were to the coal industry before that,
23 absolutely embraced fracking with a passion as a
24 potential way out to get some new economic development
25 going.

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1 To the extent that the newspapers have covered
2 the stories at all they've only covered it in the sense
3 that so much new investments coming in, so many more
4 millions of dollars and here's the gross numbers on the
5 amount of oil or natural gas that Ohio is now producing
6 due to fracking.

7 Another reason that the people who testified
8 thought it was so important is about a very important
9 aspect of the Ohio fracking story and that is all of the
10 fracking production wells, a quarter of all the fracking
11 waste water injection wells, is located in eastern and
12 southeastern Ohio, in an area we call Appalachian Ohio.

13 Now the Appalachian Mountains is a large
14 mountain range in the central part of the eastern United
15 States. Covers quite a few states and historically that
16 mountain range has been a difficult weight on economic
17 development. As a result Appalachian counties are the
18 poorest, they're the most economically disadvantaged
19 where all the fracking production is occurring.

20 In Ohio that's normally in the Utica shale,
21 although there is also some production out of the
22 Marcellus shale which is where the earlier production in
23 Pennsylvania started.

24 So our state's government has been controlled
25 by republicans most of the last 20-years who are very
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1 anti-environmental. And our regulator is an entity
2 called the Ohio Department of Natural Resources, ODNR.
3 They are the exclusive oversight body for the oil and
4 gas industry in Ohio.

5 We have an Ohio EPA but their authority over
6 oil and gas has been stripped away and given to ODNR.
7 And ODNR is a notorious captive regulator, has been for
8 40-years by the coal industry and it has been for the
9 oil and gas industry almost as long. They're notably
10 hostile to citizens, dependable allies of the oil and
11 gas industry.

12 So when I say that the tribunals were very
13 much welcomed it's because this was the first time so
14 many people had an opportunity to tell their story. And
15 a lot of tears were shed as soon as people got up from
16 the table to testify because of the relief and the
17 pouring out of anxiety that they'd had for years not
18 being able to tell what's been happening to them.

19 We had two days of testimony. One of them was
20 in Athens County, Ohio. That is in the southeastern
21 part of the state close to the Ohio River and close to
22 the state of West Virginia. Seventeen people testified
23 there, including two experts, a hydrogeologist and an
24 attorney.

25 The second tribunal was in the larger city of
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1 Youngstown, Ohio, northeast Ohio, what we call the rust
2 belt. Was a great steel town but has been on hard times
3 for 30-years since the steel industry pretty much left
4 there country. It's close to the Pennsylvania border
5 and it's where an additional 12 people testified,
6 including one expert geologist.

7 While the majority of people testified about
8 their personal experience, that is living by fracking
9 operations, both production and also the injection well
10 disposal system, others testified as to the deficiencies
11 of Ohio's public participation process which, frankly,
12 does next to nothing for the public.

13 So our report spent a lot of time talking
14 about the problems with public participation. There's
15 virtually no advanced notice of the hearings. There's
16 no hearing that is given to the public to speak on these
17 items and the state is very tight-fisted when it comes
18 to giving up public records about fracking.

19 Now this testimony was all recorded on video,
20 the web by the Buckeye Environmental Network. That is
21 an oversight group for grassroots groups across Ohio.
22 It's on the youtube page and Facebook page of the
23 Buckeye Environmental Network. It's also summarized in
24 our report. That report is available on the PPT web
25 site.

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1 In addition we had a panel of what we call
2 jurors listening to the testimony. And the role of the
3 jurors was to ask questions, cross-examine the
4 witnesses, to fill in any gaps in the information
5 chain.

6 And they also made the determination
7 afterwards whether, and which, human rights and the
8 environment had been violated shown by the testimony.
9 And they also made a recommendation for action. Our
10 report was published last December and it's 39-pages
11 long.

12 So let me get into the some of the key parts
13 of our report. The introduction had really two things
14 that it principally focused on. The first we noticed
15 that a key feature in the fracking story, and not just
16 in Ohio but in the United States as a whole, is that
17 it's come about at the point in time in our nation's
18 history when American government at all levels,
19 national, oh my god certainly the state, and also even
20 at the local level, is virtually incapable of effective
21 regulation due to the massive amounts of corporate money
22 that's now funding American political campaigns.

23 I think this is probably pretty well-known
24 internationally at this point but our governments are
25 much, much closer to the corporations that pay for their
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1 campaigns than they are to our citizens.

2 But not only is that a fundamental feature of
3 the Ohio fracking story but the second major factor is
4 that the oil and gas industry in the United States is
5 the only industry that isn't regulated by a
6 comprehensive federal program. All the other industries
7 are regulated and the federal law supplies a minimum
8 level of safeguards, of technical requirements and the
9 minimum level of public participation.

10 That's not the case with oil and gas, not
11 controlled by a federal program except for a small
12 component of the injection well program.

13 So what we have is the state of Ohio and the
14 people here being dependent upon our industry friendly
15 legislature, captive state regulator, to give them the
16 only protections they've got.

17 And due to those two factors we close our
18 introduction by making the main point that because of
19 these factors the question is very forcefully presented
20 in the United States, whether Americans are getting the
21 minimum level of internationally recognized human rights
22 by the industry.

23 Next our report went into some background. We
24 wanted this to be a stand alone report. We thought if
25 we just had the witnesses testifying out of the blue
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1 that folks couldn't feel grounded in the context of what
2 their lives had come into contact with. So we had a
3 history of Ohio's oil and gas industry.

4 And you may not believe this but in the 1880s
5 the state of Ohio was the world's leading oil producer,
6 1880s. That was when Standard Oil Corporation, that was
7 John Rockefeller's big corporation that later became the
8 Standard Oil Trust, it was founded. It was founded in
9 Cleveland, Ohio, Ohio's largest city.

10 Then it went into discussions how Ohio's
11 always had a boom and a bust cycle when it comes to oil
12 production and gas production, in which Ohio had three
13 distinct booms, the fracking being the fourth.

14 They started in 1884, 1961, 1978 in which
15 there were investments in oil and gas, a lot of removal
16 of oil and gas. But each of those collapsed within a
17 few years to a bust, what we call an economic bust, the
18 economic floor comes out of the industry and all the
19 corporations that had come here to exploit our natural
20 resources wound up in massive bankruptcies and they left
21 thousands of plugged and abandoned wells, thousands of
22 abandoned waste pits that had waste fluids from the oil
23 and gas industry were simply left here and all the
24 profits were taken out of state.

25 Now we believe this history leaves a very
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1 strong inference to the readers of our report that the
2 current boom in fracking will likely be no different
3 except that the breadth of potential of environmental
4 harm, particularly that from the toxic chemicals
5 involved, are greater.

6 Now Ohio fracking began in 2011. As of last
7 month, the latest number, we have 2,338 producing
8 horizontal fracked wells. All of these are in the
9 traditionally poor Appalachian counties, the most
10 politically vulnerable counties in our state, and worse
11 than that they're highly concentrated in just seven of
12 Ohio's 88 counties. The counties are our political
13 subdivisions and they divided them in to 88 of them.

14 In addition to those existing 2300 some wells
15 currently drilled the state has already issued an
16 additional 500 permits for wells that simply haven't
17 been drilled yet. The industry is waiting for the price
18 of oil to go back up which is, frankly, now starting, at
19 least in this country.

20 And also Ohio's being crisscrossed by three
21 new pipelines, federally regulated pipelines, that the
22 state has no say in. And when those pipelines open we
23 expect a lot of those additional 500 wells to come
24 on-line. So we're going to have 3,000 horizontally
25 fracked wells now pretty much guaranteed.

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1 So our history section then goes into
2 separately about the unique problems Ohio has with the
3 injection disposal wells. I trust you're familiar with
4 injection disposal wells. They take all the highly
5 contaminated waste water that comes back up out of these
6 wells when the injection of fluids ends, they're heavily
7 contaminated with the toxic chemicals involved in the
8 fracking process, and they're simply reinjected back
9 down a mile or more where the theory is that this is
10 going to stay there until the end of time.

11 But between the start of fracking in 2011 and
12 today the number of these injection wells in Ohio has
13 increased from 144 to 239. The amount of the waste
14 water disposed in those wells increased by 240%. It's
15 now over 30 million gallons a year that is reported.

16 Now why this is significant in Ohio is that
17 our neighboring states of Pennsylvania and West
18 Virginia, both of them have extensive and certainly in
19 Pennsylvania a very mature fracking industry. Each of
20 them have about two dozen injection wells for disposal.
21 Meaning that much of their waste is being trucked here
22 for disposal.

23 So we have the phenomenon in Ohio of clusters
24 of injection wells close to the state borders, close to
25 our largest highways, taking an endless number of tanker
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1 trucks every day bringing fracking waste water, highly
2 toxic fracking waste water, to these clusters of
3 injection wells.

4 And in Youngstown that is close to the
5 Pennsylvania border they have a lot of injection wells.
6 Athens County, which is the leading county in the state
7 for taking injected disposal waste, it doesn't have a
8 single production well in that county. Utica shale does
9 not extend that far but they are the No. 1 recipient of
10 the waste water, much of which comes from West Virginia.

11 So we had one person testify that they spent
12 24-straight hours in front of their house watching
13 tanker trucks go by. One went by on the average of 13
14 minutes all night and all day.

15 Now a section that I think is particularly
16 useful is the next one which talks about the history of
17 the regulatory program of oil and gas. And it really
18 builds a story that so much of the testimony supported,
19 which is how these regulators have become hopelessly
20 compromised by the oil and gas industry itself.

21 Ohio's program, oil and gas, started itself in
22 the second of our booms in 1961. This happened in an
23 area about 50 miles north of where I am now in Columbus
24 and there was a large pool of oil and just as soon as
25 one of those new oil wells found some oil immediately 5,
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1 6, 10, 12 additional wells would be drilled within just
2 a couple hundred feet of the first well, sometimes in
3 every back yard of a neighborhood.

4 And there's pictures from that time showing
5 every backyard in some neighborhoods having wells. And
6 they're just stealing oil from someone else's well. But
7 as a result of that the legislature adopted spacing
8 regulations.. And to enforce those spacing regulations
9 there had to be a state program. So that's how our
10 state program came together at the behest of the oil and
11 gas industry itself.

12 Now the industry allows some language in there
13 that kind of referred to the environmental issues. It
14 didn't talk about so much keeping the oil out of the
15 water or off of the land. It said that you should not
16 waste the resource. We want to make sure that the
17 profits are maximized. So the prohibition is not on
18 pollution. It was on wasting the resource. And that
19 was the only environmental protection in the program
20 and, frankly, it's pretty much still the operative
21 language in our state law today.

22 When our next boom started in the 1970's this
23 program just had 27,000 -- I'm sorry, 27 employees for
24 the entire state. And at that time there were close to
25 50,000 old wells that those 27 people had to oversee.
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1 So already it was a terribly underresourced program.
2 Some of these wells wouldn't be inspected for decades.

3 But with the next boom that started in 1978 is
4 when Ohio had its last environmentally sympathetic
5 governor. He was elected in 1981. He expanded the
6 program by 1986, the height of that boom, to 124
7 employees. And to the great dismay of the industry the
8 program then had an enforcement office specifically with
9 8 special investigators just to do enforcement cases.

10 It also had three dedicated prosecutors to
11 bring cases into court about oil and gas companies
12 violating their requirements. But there was an
13 underlying danger in this expansion.

14 Before the program had been funded by what we
15 call general revenue funds. That's money from the state
16 income tax, state sales tax, comes from all Ohioians.
17 When the expansion was done all that general revenue was
18 taken away and instead the expansion was funded by fees
19 on the industry. Permit fees were increased
20 significantly. But also there was, for the first time,
21 a severance tax put on oil and natural gas.

22 For instance for every barrel of oil taken out
23 of Ohio there was a 10 cent, 1/10th of one American
24 dollar, severance tax had to be paid.

25 So from that point on success of the industry
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1 became necessary to fund the program and the two
2 programs, probably from that point on, had a serious
3 conflict of interest that led the program to be closer
4 and closer to the industry as a way to ensuring that
5 their salaries would ever been paid.

6 So when the bust in production occurred for
7 the boom that started in 1978 most of the funding for
8 the state program disappeared overnight.

9 At the industry's urging legislature did
10 nothing to address this funding shortfall. Staff of 124
11 in 1986 dropped to just 35 by 2007. The first cut in
12 staffing happened in 1991 just as soon as the first
13 republican replaced our last environmentally sympathetic
14 governor.

15 1991 a 42% cut in staffing. And that
16 enforcement office I talked about was the first thing
17 cut. It has never been replaced. There hasn't even
18 been an enforcement coordinator position since and ever
19 since fracking started not a single case has been
20 referred for prosecution in one of our state courts.
21 And that's after we've had plenty of spills, plenty of
22 fracking fluid spills in the waterways. We've had
23 explosions and none of this has lead to either a civil
24 or criminal enforcement type action. In fact our state
25 has not even published and publicly released statistics
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1 on its enforcement efforts.

2 This was also part of the real estrangement
3 between the people of the state and the oil and gas
4 program.

5 The 1978 boom put a lot of the wells in
6 suburban areas, especially in the politically powerful
7 areas around Cleveland and Akron, a lot of wells showed
8 up in suburban areas. And ODNR which, at that time, had
9 just 14 inspectors through most of that period was not
10 able to deal with all these complaints that came
11 forward. It lost all public confidence, suffered
12 withering criticism in the media and the gulf between
13 the agency and the public just became enormous. The
14 program at ODNR has never attempted to bridge this gap
15 since and have a good meaningful program between it and
16 the public.

17 So because there is no leadership, no
18 protection on the state level our local governments, our
19 cities, our villages, began to draft their own laws
20 regulating oil and gas wells where they could be placed,
21 the amount of protection they had to have. But in 2004
22 oil and gas industry went to our legislature and got it
23 to pass a state law that prohibits the local governments
24 in this state from having any controls on oil and gas
25 wells.

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1 We have zoning laws that says where you can
2 have your industry, where you can have your residential
3 areas. You have agricultural areas that have
4 traditionally been the main determinant of land use in
5 Ohio but oil and gas is completely cut out of that and
6 it could go wherever the company filed an application to
7 locate their well.

8 So when fracking began in 2011 its program
9 only had 14 inspectors. At that time it had 63,000
10 active vertical wells all ready to address. Even that
11 tiny underresourced program was, by law, the exclusive
12 regulator of oil and gas here.

13 Now with the new production from fracking,
14 permit fees increased, severance tax got collected, some
15 more staff came in. By 2012 we had doubled it to 30
16 inspectors. Even with that doubling of inspectors they
17 were only able to inspect less than 20% of all the
18 producing wells annually.

19 ODNR announced that it was going to have to
20 increase the severance tax. The governor proposed it.
21 They said they needed 90 inspectors to properly run the
22 program with fracking. The severance tax increase was
23 thrown out of the legislature but reintroduced twice
24 since. Each time the industry has blocked it with their
25 friends in our legislature.

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1 So currently the severance tax is .20 cents a
2 barrel and that is one of the lowest in the country.
3 And those resources obviously aren't sufficient to do
4 the job. The program is definitely struggling to make
5 even a pretense of good regulation.

6 In 2014, here I think is an important
7 indicator, the program itself identified 20 areas that
8 needed to identify regulations or it had to have
9 regulations to implement existing law.

10 In 2014 we need 20 new major regulatory
11 developments. We only adopted one as of this date.
12 That was done in 2015. Still no public outreach program
13 and the program is extremely late in providing public
14 records.

15 In the United States our public records law
16 says the records are the people's and it's got to be
17 supplied upon request and done so promptly. If you just
18 want one or two records you should expect to have that
19 record in one or two days. So ODNR takes months and
20 months to produce public records.

21 It uses just a simple two page application.
22 That is all it requires on production wells, fracking
23 production well, a two page application. It approves
24 those permits in just a week or two and we have yet to
25 see a single fracking production well permit denied. We
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1 have yet to see a single injection permit denied.

2 I want to spend a little bit time also talking
3 about the injection well program that is so important in
4 Ohio. There is a small federal component who regulate
5 wells injection in the United States. It comes out of
6 the Federal Safe Drinking Water Act. It was adopted in
7 the 1970s. All injection wells have to meet that law's
8 requirements. And they have five different classes of
9 wells. And Class II wells are the oil and gas waste
10 wells. So the ones that are of concern to us here.

11 Well the US EPA first adopted the standard
12 regulatory program. Very specific regulations that
13 address permitting requirements, technical requirements,
14 engineering requirements, public participation
15 requirements. A very full standard regulatory program
16 in the American sense.

17 Ah, but later, the Class II oil and gas wells
18 were exempted and they had their own program, something
19 called the Section 1425 Program, where as long as the US
20 EPA considered any state program effective in regulation
21 it could be approved and handled its own injection
22 wastes. And no regulations have ever been adopted by US
23 EPA establishing any requirements for this program.

24 The only thing that was done was a simple and
25 very vague guidance document was adopted by US EPA when
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1 Ronald Reagan was president in 1983 as for this
2 standard. And that guidance document has not been
3 amended in the 35-years since.

4 In addition Ohio was given authority to do
5 it's injection wells on the basis of what's called a
6 simple Memorandum Of Understanding that is 12 pages
7 long. That was adopted also in 1983. That has never
8 been amended since.

9 So injection wells are controlled by a 35-
10 year old program that has not been improved a bit since
11 and critically no improvements were made to it after
12 fracking started in the United States. There is some US
13 EPA oversight but it's the weakest oversight of any
14 program that US EPA oversees.

15 In 2010 the Department of Natural Resources
16 was able to update to the US EPA its program statistics
17 by submitting one and one-half pages of information to
18 them. That information did not include the fact
19 anywhere that there were only three staff members
20 dedicated to the injection well program in the state of
21 Ohio at that time.

22 US EPA does what they call audits of the
23 program. And when I first got involved with this I got
24 the two most recent audits, 2005 and 2009. They were
25 fairly brief. What was really sad was that there not
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1 much detail, very vague. And comparing the two it
2 became apparent the 2009 audit was a simple cut and
3 paste tool from the 2005 audit. Over 95% of the wording
4 was identical between the 2005 and the 2009 audits. This
5 is all talked about in reports and we have links that
6 you can see in the report to get you to that data.

7 So we concluded this whole section on
8 regulatory capture, our history section, we concluded
9 with a section on regulatory capture. I don't know if
10 you have that term where you're from but in the United
11 States it means a situation when the government
12 regulator is actually captured by the industry it's
13 supposed to regulate. And the two work hand-in-hand and
14 keep the public out of the loop.

15 And that has been a great concern of so many
16 of the people who have testified at our tribunal. And
17 we have hard documentary proof that has occurred in
18 Ohio.

19 Let me tell you this little story. 2014 we
20 had our public records request to the Department Of
21 Natural Resources. And they gave to us about a 15-page
22 document which is what was called a press strategy that
23 had been done by the very highest end of the agency.
24 The press strategy is right at the top in our agencies.

25 The legislature the year before had passed
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1 legislation to allow fracking in our state parks and our
2 state forests. This strategy is how the state was going
3 to "encourage and support that program" to allow for
4 fracking into our state forests.

5 And the ODNR listed what it called a group of
6 "allied groups" that they would work with cooperatively
7 in this effort. And the people identified were the
8 Halliburton Corporation which you may know as one of the
9 key people promoting fracking globally. The Ohio Oil
10 and Gas Alliance which is the lobbying arm and mouth
11 piece of Ohio's oil and gas industry. Natural Gas
12 Alliance which is the national mouth piece for the oil
13 and gas industry.

14 So this was the industry itself they said
15 would be their allied groups and they delegated an
16 explicit role to the frackers and that was to "minimize
17 public concern" about the practice of fracking.

18 So as revealing as that was even more
19 revealing is what they said about us on the
20 environmental group side. They described environmental
21 groups as "adversaries." They also called them
22 "eco-left pressure groups." Here is my favorite quote,
23 "zealous environmental activist opponents who are still
24 the propogandists that would react emotionally and
25 attempt to create public panic over fracking's potential
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1 health risks."

2 As a result of all this propaganda this press
3 strategy said the state would use a Crisis Readiness
4 Program so that they could respond within hours of any
5 press, any public release of information, about problems
6 with fracking in state forests.

7 So this was, to us, proof positive that
8 fracking -- that this was a captured regulator and that
9 they held themselves close with industry and they were
10 dead set against, not only the environmental groups
11 themselves, but also against anybody who would be
12 opposing the industry out in the field.

13 I think this discussion of regulatory capture
14 was important and hopefully other states can also cite
15 some concrete evidence like this. It was important
16 because a lot of the testimony at the hearing was about
17 how little the ODNR seemed to concern itself with the
18 public's concerns about fracking.

19 And so you heard a lot of complaining about
20 ODNR. Unless you had some background like this I don't
21 think the anecdotal information would have the same
22 impact.

23 So now if you would go through the video tapes
24 of the testimony and see person after person talking
25 about the hostility they received from ODNR I think it's
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1 something that will have a little more bite now because
2 of that section.

3 So the next part of our report dealt with the
4 issue of international law. I don't know how things are
5 in your country but in ours very few people study UN
6 conventions and covenants and these types of things. So
7 we knew that we had to let people know what these things
8 were. And it turned out that they were quite surprised
9 to hear that these situations were addressed by global
10 entities and that their state government was falling so
11 far short of meeting those obligations.

12 We did have one problem and that, of course,
13 is the fact that of all these various conventions only
14 one of them has ever been ratified by the United States
15 Senate. That was the 1966 Covenant on Civil and
16 Political Rights and that wasn't ratified by the US
17 Senate until 1992.

18 Now because of that ratification the covenant
19 has treaty status. It has some legal significance under
20 American law. But since none of the other covenants,
21 and that would include the Covenant On Economic, Social
22 and Cultural Rights and the Environmental Declarations
23 of Stockholm, Rio and Aarhus, none of them have been
24 approved by the US Senate. So their formal status is
25 rather questionable in this country.

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1 I didn't want to spend a lot of time on that
2 and the way I dealt with that issue and the way I think
3 is an effective way for other groups to consider it in
4 their doing their reports, would be to explain these
5 covenants more in the terms of setting moral and ethical
6 standards set by the global community as a whole.

7 And so we make our case in fracking that our
8 country is not meeting its moral duties, its ethical
9 duties to its people when it fails to meet the standards
10 set by these covenants.

11 The section ends with our stating 10 different
12 rights that we felt were directly affected by fracking
13 in Ohio.

14 So that's the background part of the report
15 that's probably news for a lot of you and we think that
16 gives context to the testimony.

17 The next section of the report, which is the
18 longest section of the report, just summarizes the
19 testimony and refers folks to where they can see the
20 full video tape if they want. Those video tapes also
21 include the cross-examination of the witnesses done by
22 the jurors.

23 We divided the testimony into two parts. The
24 first was the testimony on the direct physical effects
25 of fracking on the people who live beside those
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1 operations. And the second dealt with the public
2 participation problems of Ohio law.

3 We think that the second item needed to be
4 specifically singled out because, on the ground here in
5 Ohio, the state's suppression of fracking information is
6 a major problem and we think, especially in light of the
7 language of Principle 10 of the Rio Declaration, the
8 voting affected the public participation of Aarhus
9 Convention discussion of governance by disclosure, since
10 those things were so strong we really wanted to give
11 focus to that and show the people of Ohio how their
12 government is failing to meet anything close to those
13 requirements.

14 Now both testimony sections, you know,
15 fracking is a technical area and research on fracking
16 has been exploding in the last years and rather than
17 take a lot of time in that we just cited relevant
18 portions of a document that I trust you're familiar
19 with, a Compendium of Scientific, Medical and Media
20 Findings Demonstrating Risk and Harms Of Fracking. This
21 is produced by the Health Professionals of New York.
22 This was used to support their moratorium on fracking.
23 Also by the Physicians Of Social Responsibility. This
24 gets updated, I think, every year.

25 So we put this into evidence and then really
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1 focused from that point on on the personal stories
2 rather than on the technical data.

3 Now the witness statements I am not going to
4 go through them in anything specific. Here again we'll
5 have three of them in the second half of our
6 presentation today. A lot of commonalities came out
7 that I wanted to share with you. I think a lot of these
8 are not going to be very surprising.

9 The main commonality, of course, was how fully
10 the presence of a nearby fracking operations disrupted
11 people's enjoyment of their home and property and caused
12 great anxiety about the potential impacts on their
13 health.

14 The testimony was consistent on the following:
15 Being impacted by strong and noxious odors, loud
16 disruptive noises day and night, very strong vibrations
17 from the ground, frequent episodes of burning eyes,
18 burning lungs, frequent episodes of headaches and mental
19 confusion, even tremors, hand tremors, feelings of
20 vertigo, frequent skin rashes and odd metallic tastes in
21 people's mouths. Also extremely bright lights night and
22 day.

23 In Youngstown there is a trailer park of
24 several hundred people right beside a fracking
25 production well that has very bright lights upon its
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1 production towers that even at midnight at night that
2 trailer park is as bright as the noon sun, night and
3 day.

4 Lots of episodes of people having increases in
5 their blood pressure which they believe was triggered by
6 stress living in these conditions.

7 A lot about earthquakes. Earthquakes are
8 almost unknown in Ohio but then fracking started and now
9 we have several thousand a year.

10 One of the witness statements will be a
11 geologist that will give you a lot of detail on that.
12 Earthquakes are particularly happenng in the Youngstown,
13 Ohio area in the northeast part of our state. They also
14 are almost everywhere where we have fracking.

15 The problems of fires and explosions at
16 fracking sites compounded by the fact that the emergency
17 responders to these fires have no current information,
18 either on what chemicals are on site or where the
19 chemicals are located on the site as they go in to fight
20 those fires.

21 There is also pervasive problems that almost
22 everyone testified about that they often have to simply
23 remain indoors to avoid these impacts. They're
24 essentially prisoners in their own homes. Children
25 can't go outside to play. The pets can't even go out.
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1 Also there is a consistent theme about a drop
2 in property values which are -- a consistent number put
3 forth was about a 60% drop in property values if you're
4 within a couple thousand yards of a fracking operation.
5 So those are the general consistent comments that people
6 made.

7 But also there was some specific focused
8 presentations on some unique topics. One of them was
9 the impact of fracking on forests. A lot of the
10 southeast part of Ohio where fracking occurs is heavily
11 forested. Our only federal national forest is in that
12 area called the Wayne National Forest. And our US
13 government, particularly under the current
14 administration, is moving very quickly to open up that
15 forest to fracking.

16 Also a lot of concern about impact on
17 farmland. Farms are down there. A lot of these wells
18 are isolated locations. Their only neighbors are farms
19 and a lot of the testimony came from farmers who have to
20 go outside day to day to work their farms when smell is
21 virtually overpowering.

22 A lot of concern particularly from organic
23 farmers. Organic farmers in this country are certified
24 with that status. That status is very valuable to them
25 financially. As the air continues to deposit chemicals
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1 on their farm land there is a great deal of concern that
2 they will lose that certification.

3 There's testimony on, of course, climate
4 change impacts and the special dangers of pipelines.
5 Pipelines are crisscrossing our state. And there is a
6 special problem with something called compressor
7 stations.

8 Periodically along a pipeline there is a
9 turbine that pressurizes the gas in the line to continue
10 to shoot it on its way. There is a lot of air pollution
11 problems that have been associated with these
12 facilities. A lot of bad gas odors and, frankly, a lot
13 of leaks.

14 Now the second section on testimony addressed
15 the public participation problems. So I address those
16 briefly.

17 There is virtually no effective public
18 participation in Ohio on the fracking production wells
19 where there is no federal program of any kind. There is
20 no advanced notice given to the public that a production
21 well has been applied for at the ODNR.

22 If it was in an urban setting the concerns
23 that came out in the 1970 boom with all the suburban
24 areas in northern Ohio got fracking wells, there is a
25 new category of well in Ohio called an urbanized well.
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1 And it depends on how many people around it.

2 Those wells have some advanced notice but all
3 the fracking wells are rural wells, no advanced notice.

4 Now for the injection wells, because of the
5 federal overlay, there is some notice. Requires just a
6 newspaper notice that normally appears in the legal
7 notices section of the newspapers which very few people
8 read. Also it's to be published in a local newspaper
9 general circulation and a lot of these rural counties
10 don't have many newspapers so ODNR will pick a paper in
11 the neighboring county and most of the people in that
12 county actually get a newspaper from the big city 60-
13 miles away. They never have any notice of a fracking
14 well.

15 Even if they have gotten notice there is a
16 public comment period of only two weeks, just 14 days,
17 that the ODNR will make let them make public comment.

18 You can imagine these are very complicated in
19 engineering how you're going to engineer safely an
20 injection well. Also the geology, particularly in
21 southeastern Ohio, there is very little of a data base
22 on geologic information, especially after the first 100
23 to 200 feet from the surface of the ground.

24 These wells go 9,000 to 12,000 feet down.

25 There is virtually no meaningful geologic data that can
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1 be had let alone something that can be assembled, get
2 your expert together and have comments in this two week
3 period.

4 Also there is no requirement for public
5 hearings on these wells where people can ask questions.
6 Early on in fracking ODNR had something that they called
7 information meetings. These were something of their own
8 creation and were very tightly controlled. Normally in
9 a public hearing a person can get up, testify on the
10 record, sometimes have their questions responded to and
11 the whole audience hears these things.

12 At these information meetings, however, there
13 are a dozen different stations and different tables in a
14 large room. People are spread out to go to these
15 different tables and asked individual questions about
16 individual aspects of it. There is no time where the
17 community comes together and can be addressed.

18 Also the police presence at these information
19 meetings was large and very intimidating. There were
20 even police dogs brought into one of these information
21 meetings on fracking on the very last one held by ODNR.

22 ODNR, I mentioned this before to give you some
23 detail, they're constantly in violation of the state's
24 public records law. They're required to respond within
25 a reasonable time. And reasonable is to be determined
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1 by what's being asked for. Therefore, if you ask for a
2 lot of records, normally the courts say two weeks is
3 fine to respond in that time. If it's just one or two
4 documents you may have to supply them that day to
5 someone who requests them.

6 ODNR typically takes at a minimum of 10 weeks
7 to respond to a public records request. And this is a
8 situation where the appeal deadline on an injection well
9 permit where there are no appeals allowed for production
10 wells. For an injection well permit you have a 30 day
11 time limit. They don't publish the date of the
12 publication of the injection well permits so how are you
13 going to find out about it, get a copy of the permit,
14 get it to an attorney so that an appeal can be filed
15 within 30 days when it takes ten weeks to respond to a
16 public records request.

17 I've sued the ODNR at least four times now
18 because they were late in responding to records. Every
19 time the state has admitted to the violation, admitted
20 that it was much too late and paid the full fine that
21 Ohio law provides. That is \$1,000.00. Whether it's one
22 document or 150 documents still the same \$1,000.00
23 fine.

24 And ODNR is happy to pay that slap on the
25 wrist fine rather than go through the ordeal of
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1 overhauling its public records program to make it
2 responsive to the public.

3 I see we're kind of getting close to our time
4 so I'll jump ahead to the report's Conclusion Section
5 where our jurors made recommendations and it's stated on
6 the very last page of the report.

7 Based on all the testimony they indeed found
8 that violations of international law guaranteed rights
9 had occurred. They recommended an immediate moratorium
10 on all fracking activities in Ohio until a "full
11 industry-independent, publicly funded, evidence-led-
12 human rights impact assessment has been developed and
13 published in Ohio."

14 And the jurors also found that because the
15 evidence of impacts from fracking is so clear in Ohio
16 and so strong they urged that such a study be undertaken
17 immediately. Again, we put this report out in December
18 and no such effort has been undertaken so far.

19 So that concludes my overview of the report
20 and filling you in on what we're dealing with here in
21 the State of Ohio in the USA.

22 I see that it's just like five minutes until
23 we're done, even with the extra ten minutes that we were
24 given, so if one has any questions I will be happy to
25 address those or we can just break for lunch now and
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1 gets back together at 1:00 Pacific time.

2 Any questions?

3 MR. LOUIS KOTZE: Rick, if I could jump
4 in. And thank you for your presentation and also for
5 the very detailed report which I have read. It's obvious
6 that a huge amount of effort has gone into that and I do
7 want to congratulate you on all of the efforts so far.

8 I've got two questions and they are probably
9 related. When I read your report and what I hear from
10 what you're saying here is that the issue is not only
11 about government enforcement and industry compliance but
12 there's also seemingly, to me, a real issue about access
13 to courts and to judicial recourse.

14 So why has there not been litigation on this
15 issue, as you said?

16 Is it because people could not access courts?

17 Is it because the laws prevented them
18 actively?

19 Is it because they have little knowledge of
20 judicial processes?

21 No money to litigate?

22 No proper counsel?

23 And it seems to me to be a very issue since,
24 if people have adequate access to adequate judicial
25 recourse, they already would have had an opportunity to
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1 voice their concerns in these forums on these matters.

2 My second related question, if I may, is that
3 in South Africa we know the term "state capture" very
4 well although with the previous Jacob Zuma
5 administration it was closely connected to the issue of
6 corruption. The state being captured by corrupt forces.

7 Now our courts have played a hugely important
8 role in confronting state capture to the point where it
9 almost overstepped the sacred line of the separation of
10 powers. So it seems to me that the US courts should and
11 could have an equally important role in addressing
12 regulatory capture, especially if one were to assume, as
13 one should, that courts would play an important
14 oversight role in keeping governments to account and
15 making sure that they execute their duties diligently
16 and according to the law.

17 So the question is, is why haven't the courts
18 stepped up to this important duty?

19 Because they have not been asked to?

20 Because they are somehow powerless, which I
21 doubt is the case.

22 Because they have not allowed such claims to
23 become before them?

24 Thank you.

25 MR. RICK SAHLI: Yes, thank you, Louis.
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1 You definitely got to the heart of the issue.

2 One of the main problems is what we are
3 talking about a lot here which is these wells, the
4 offenses against human rights, are occurring in the
5 poorest, most politically vulnerable communities in the
6 state of Ohio. These folks do not have funding to bring
7 in attorneys, first level.

8 Second level. There is only two of us
9 attorneys who have brought these cases in Ohio. There
10 are hundreds and thousands of industry lawyers in Ohio.
11 You can count the number of people who have ever
12 represented an environmental group in Ohio on the
13 fingers of a single hand.

14 There are legal impediments as well. For
15 production wells there is a single permit required and
16 historically that permit could be appealed to an
17 administrative body called the Ohio Oil And Gas
18 Commission, which has five members appointed the by
19 governor who would hear that appeal.

20 But at the beginning of the fracking case,
21 before any of us had really heard about it, in 2010
22 industry got an initial bill in that talked about well
23 stimulation was authorized. That turned out to be
24 fracking. But they used this comfortable phrase of well
25 stimulation. That bill stripped away the ability to
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1 appeal production well permits from the Oil and Gas
2 Commission.

3 Now I can tell you that the people appointed
4 to these things are as bad as can be. They're political
5 folk. Several people from the industry itself. There is
6 a member of the commission now whose main job is an oil
7 and gas services company he's the guy who gets their
8 clients. He's the guy who goes out and has dinner with
9 folks and wants to hire their company. And, wow, what a
10 nice calling card to say he's also the person who you
11 may have to talk to to consider any action brought
12 against them.

13 I brought some actions on injection well
14 permits. Lost those on procedural grounds.

15 Big problem here again is we have only 30 days
16 by statute to get that permit appealed to the Oil And
17 Gas Commission. There is no publication of the permit
18 when issued and even then half of the permit is
19 considered to be the same type of permit that isn't
20 liable to be appealed to this Oil And Gas Commission.
21 That determination is what I lost my last appeal on.

22 Parts of the permit are going to divide this
23 permit in two and say that parts that you're concerned
24 about is not appealable.

25 Our courts, particularly our Ohio Supreme
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1 Court, they're very close to industry. You normally
2 look at those administrative tribunals as just a place
3 to make your factual records and take it into the court
4 system and have your errors of law ruled on. Our courts
5 are getting caught up just as bad as our politicians
6 are.

7 So that is the short answer. We're still
8 looking for solutions to that. A lot more resources
9 have to be made available, both to bring legal services
10 to these communities but also to have a constant watch
11 dog role over this agency to be able to access when
12 these permits are issued.

13 So often I talk to folks and that 30-days has
14 already gone and there's nothing left to be done. That
15 30-days is a jurisdictional requirement.

16 With that I think I've exhausted my time and
17 I'll exhaust Tom Kerns if I don't stop.

18 MR. LOUIS KOTZE: Thank you.

19 MR. RICK SAHLI: Thank you Louis.

20
21 [youtube.com/watch?v=Kv14ZBXn_WQ]
22
23
24
25

1 ATHENS, OHIO

2 YOUNGSTOWN, OHIO

3 PRE-TRIBUNAL BRIEFS, PART II

4 MAY 14, 2018 1:30-2:20

5
6 MR. RICK SAHLI: Good afternoon. We are
7 now going to start our second session of discussing the
8 pre-tribunal reports from the state of Ohio and the
9 reports that we submitted in December of last year.

10 For this afternoon's agenda I have submitted,
11 for the record before the tribunal in this matter, three
12 different witness statements that I recorded slightly
13 after the statements were made in the tribunal. They
14 are three fairly different in subject matter approaches
15 so we can cover as much as possible of the problems
16 we're encountering here in Ohio.

17 The first video, each of them will be slightly
18 less than 15 minutes long, would be from a young woman
19 named Annie Burke. Annie lives beside a 30-year old
20 injection well in Athens County that has a horrible
21 record of noncompliance going back decades and yet it
22 somehow still finds itself operating in our modern age
23 taking out of state fracking waste into Annie's
24 community.

25 Second will be from a professor in geology,
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1 Ray Beiersdorfer, he's from the Youngstown State
2 University. Ray's introduction came to him quickly one
3 morning in the midst of an earthquake caused by an
4 injection well close to his home.

5 As a professor in geology he began to study
6 the problems of earthquakes and fracking in Ohio and has
7 a lot to say about what he's uncovered.

8 The third statement will be from a woman whose
9 name is Teresa Mills. Teresa is in Columbus and she
10 works in the grassroots organization in Ohio called the
11 Buckeye Environmental Network served to work with local
12 groups and she's worked with local groups all over the
13 state of Ohio, particularly in getting them information
14 about fracking in their communities. She knows a lot
15 about the public participation problems we've had.

16 So without any more further ado I am going to
17 put up the statement of Annie Burke.

18 MR. RICK SAHLI: Good morning. I am here
19 today with Annie Burke who is going to give some
20 testimony about what her life's been in the State of
21 Ohio dealing with the problems of fracking.

22 And can we start off can you please give us
23 your full name?

24 A. My name is Annie Burke.

25 Q. And where do you live, Annie?

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1 A. I live in Hockingport, Ohio. It's in Athens
2 County, Ohio which is where I have grown up, as well as
3 my parents. And it's only less than three miles from a
4 very close injection well site.

5 Q. And what do you do for a living Annie?

6 What is your profession?

7 A. I'm a registered nurse.

8 Q. Going back to the People's Tribunal that we
9 had here in Ohio you spoke, at some length, about the
10 Ginsburg injection well. Can you describe this well for
11 us and give its history?

12 A. Yes. I actually had not realized that this
13 well existed in our area until I joined and I was
14 talking with other members and when I first saw it I was
15 just appalled at what I was seeing. It was just this
16 big open pit that looks disgusting and smells
17 disgusting. I just can't believe that that is
18 considered a protected area that is supposed to contain
19 toxins for our environment.

20 And this well is here in Athens County in
21 Alexandra Township and, as I said, it's open to any kind
22 of animals. There is a fence around it but it does not
23 look that secure to where animals could fall into it or
24 come drink out of it. I don't understand how it's not
25 putting toxins into the air.

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1 It also it's really old. It's a converted
2 well. And I believe it to be, and we have seen from the
3 public records, that it's been in violation many times
4 of the few standards that govern these types of well in
5 Ohio.

6 Q. What do you mean by it's a converted well?

7 A. It's an old oil and gas well that they now use
8 to store and inject fracking waste.

9 Q. And does a converted well have to meet the
10 same standards as a new well?

11 A. My understanding is that the old well is a
12 converted well and was kind of grandfathered in so they
13 don't exactly have the same standards, which I find
14 appalling because based on the same potential for
15 contamination.

16 Just because this is an old site that some how
17 has been allowed to be used doesn't mean that it
18 couldn't also release things out into the air and water.

19 Q. You said that this waste is fully open. It is
20 exposed to the weather? Every time it rains does it fill
21 with water?

22 A. Yes. It would be exposed to rain,
23 evaporation, wind, all of that would effect it because
24 it's open.

25 It's also very close to a road. It is out in
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1 the country, driveways. There are a lot of people that
2 live nearby. There is a sheep farm down the road.
3 Passerbys. There is people visiting it to see what it
4 is experience a burning sensation in their eyes, nausea.
5 The smell, it's got a foul smell.

6 It's definitely a problem in our area.

7 Q. You mentioned that this well has a history of
8 violations.

9 A. Yes. Like I said it's been operating for over
10 30-years and many residents of Athens County have
11 reported concerns about their drinking water supply, the
12 air that they're breathing.

13 And there are reports that a person can access
14 on the Ohio Department of Natural Resources web site. I
15 am registered nurse and I'm used to reading lab reports
16 and determining that they look like they're accessible
17 for the patient or that kind of thing. And I find these
18 reports and a lot of the tests that are done to be very
19 hard to decipher, kind of intimidating.

20 So I'm kind of off the question a little bit
21 but I also think that is a problem that they say, well,
22 everything is publicly accessible but (1) you have to
23 have a special computer program, and it's not
24 inexpensive.

25 You have to be able to figure out how to
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1 access, which is not easy. I had to take a day of
2 training to figure out. And you actually have to have
3 the right program that is expensive.

4 And, in addition to the fact, that residents
5 of Athens County many of them do not have a computer or
6 access to the internet. So I feel that that is a
7 problem as to how they're getting by with things in an
8 area that is considered more disadvantaged from a
9 socio-economic standpoint.

10 So, anyway, we have looked at some of the
11 reports and we have seen the mentioning of violations.
12 And there is one rule that if a well that is inoperable
13 for a certain length of time that it should be entirely
14 closed and plugged and is no longer accessible for us,
15 which we had tried to get that to occur because this
16 well was inoperable for many months. There was
17 continuous reporting and could not be used because of a
18 faulty pump.

19 So we wrote senators. We did a protest. We
20 sent letters. And they just put a new pump in there,
21 which it should have already been closed. That
22 shouldn't have happened. So these are band-aid solutions
23 to fix a bigger problem and tried to work around a
24 technicality. Like I said these reports are very
25 upsetting but we do read them.

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1 Here's one. In 2016 when the well was listed
2 as not operational and had a faulty pump suddenly 60
3 barrels of waste were added to the volume tables, which
4 was not consistent with what should have been occurring
5 since it wasn't being used. It doesn't seem to
6 correspond with the rainfall during that time. There is
7 really no explanation to it.

8 And then according to the Athens Messenger
9 newspaper the ODNR spokesperson stated that 60 barrels
10 of waste were injected to the prior to the pump
11 malfunction. We could not find a record of this.

12 In my mind it was one of two things. Either
13 there's lying and using it or somebody made a mistake
14 and because they were showing a lack of attention to
15 detail in their reporting of it, either of these
16 frighten me.

17 I don't want those supposedly safeguarding me
18 but then lying about what is actually occurring at these
19 sites. Nor do I want people monitoring sites that can't
20 pay attention to dates and numbers and keep track of
21 what's going on. I don't trust any of that if they can't
22 explain to me what happened and why did that increased
23 volume occur.

24 The ODNR said that they are there to protect
25 us and the environment and the community but I don't see
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1 how that's occurring, especially at that site.

2 Q. When you mentioned there was a long period of
3 malfunction I think you referenced the role of the Ohio
4 Department of Natural Resources that if a well is not
5 functioning for 60 days they are required to shut it
6 down. And not only shut it down but also actually plug
7 the well so it can't be used again.

8 Was it not operable for more than than 60-
9 days?

10 A. Yes. I believe it was since October of 2015
11 and they put the new pump in last fall. So that's over
12 a year.

13 I'm not sure if they're actually really using
14 it even now but they technically could if there's a new
15 pump.

16 Q. I think you are also concerned, from your
17 testimony before the Ohio Tribunal, about there being
18 leaks at the site and the potential for contamination.

19 A. Yes. The whole point of these wells is to
20 contain this fluid and, hopefully, protect us.

21 And there was an inspection report that we
22 found on November 19th of 2015 and it stated that the 5-
23 foot dumpster located next to the entrance to the
24 unloading pad had large holes in the bottom. And this
25 is the dumpster that is used to dispose of the brine
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1 filters which contain a lot of the contaminant.

2 The report itself stated that that area behind
3 the dumpster is contaminated. The contaminated soil
4 must be removed and taken to an EPA landfill.

5 We looked at all of the reports for the next
6 several months and there would be a time when an
7 inspector would say still has -- everything is still in
8 place. Nothing has been removed. And a couple of times
9 they didn't mention it. So it went several months
10 before there was any clean up.

11 And then when it was finally noted that,
12 obviously, a clean up had occurred the inspector could
13 not give an answer about which USA EPA approved landfill
14 it had been taken to.

15 So we don't know for sure where it went or if
16 it went to appropriate place. Obviously it was stuff
17 that was there. It was contaminated soil for quite some
18 time. So all of that area would be contaminated.

19 And they did do stuff with the soil around it
20 but it was so much later who knows what the rain and the
21 run-off and where the contaminants would have gone into
22 to air or into the ground during these months of nobody
23 being held accountable for what little role that we do
24 have.

25 Q. Now you said you were able to access the ODNR
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1 records. Was there any record governing this supposed
2 clean up or what they had done?

3 A. All I ever saw was the inspector stated that
4 he could see that something had been done, dumpster
5 removed. There was -- looked like the soil was fresh
6 soil but, as I said, it was several months after the
7 first time, which that is like locking the barn door
8 after the cow gets out.

9 Q. And there were no details that were ever
10 presented by ODNR about the nature of the clean up.

11 Now you talked about this dumpster holding
12 brine filters. What is a brine filter and should we be
13 concerned about brine filters?

14 A. Well, just like any kind of filter it's very
15 important to the mechanisms. And if you just think
16 about how, you know, your vacuum filter catches things,
17 objects and particles of stuff that goes through, that's
18 what a brine filter would do.

19 And we believe that -- as we believe that the
20 fluid in these injection wells is hazardous, contains
21 contaminants, there would be contaminants trapped in the
22 filter.

23 Q. Now you talk about contaminants. Is there any
24 particular contaminant that worries you?

25 A. I'm very concerned about several different
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1 ones. There have been a lot of -- there have been
2 articles saying that there are different contaminants
3 found in fracking waste that alter -- the endocrine
4 disrupters which causes the cancers and birth defects.
5 It's also possible that they're radioactive which we
6 know is a problem.

7 I believe brine filters are radioactive and
8 we're just allowing them to just lay out sometimes, you
9 know, in a broken dumpster with just holes in the bottom
10 of it.

11 And people around the area aren't being told
12 that and so anybody walking by or taking a Sunday walk
13 is being exposed to this radiation.

14 I really think that is what another big
15 injustice is being perpetrated on in our county. There
16 is all these rules protecting these companies but they
17 need to protect their copyright fluid solution or
18 whatever but we're the ones that have to live it. We're
19 the ones who are breathing the air. We're the ones
20 drinking the water. We're the ones who have seen our
21 family members die of cancer from other contaminants and
22 now we're just holding our breath for them to start
23 saying what's causing the next wave because we're out
24 there being exposed.

25 These companies are being protected but we are
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1 not. We are not allowed to know for sure what is in
2 things. We find things out. There are ways that we
3 find out a little bit. And there have been studies of
4 certain things people get a hold of but there's all this
5 hush-hush to protect these companies.

6 They don't need to be protected. My family
7 needs to be protected.

8 Q. Do the brine filters and the concern for
9 radiation that the ODNr records show any testing that
10 was done for radioactive contamination?

11 A. No, not that I'm aware of. No, which I feel
12 is pretty standard. I don't know of them doing those
13 types of testing.

14 Q. What about the overall monitoring of the site,
15 is there any monitoring for water pollution or for air
16 pollution?

17 A. Well, interestingly, they were originally when
18 this was turned into a well for fracking waste there
19 was -- it was discussed and part of the permit was that
20 they would put in a fresh water monitoring well so there
21 could be testing and comparisons made about
22 contamination.

23 There is no well access at that site and
24 there's never going to be one because that is an extra
25 expense. And they haven't had it at all at this time
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1 why would they do it now. No one is making them do it.

2 And it just feels like another example of how
3 our government, our own ODNR, is not protecting us.
4 They are not taking the effort to make sure that there
5 are safeguards in place.

6 I don't want these wells here but right now we
7 have them and so it angers and saddens me that even
8 though we have a few rules and a few things we could do
9 to try and help mitigate the problem those aren't even
10 happening.

11 It makes me feel like my community isn't that
12 important in the eyes of the ones who are making these
13 decisions.

14 Q. So the permit requires a groundwater
15 monitoring well that's not present. The facility was
16 allowed to operate long after it was required to be
17 plugged. It had a requirement that there be a clean up
18 but the clean up was never documented in any way. That
19 must give you a lot of concern about where the loyalties
20 of the Department of Natural Resources are.

21 Did you try to speak to them about these
22 problems and what type of response did you get?

23 A. No response. Yes, I actually was very active
24 and I really thought that with the pump not being
25 operable we could get the leaks to this well shutdown
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1 and closed off or maybe at least help in one area.

2 We sent new letters to the editor,
3 newspapers. We wrote our senators. We contacted the
4 ODNR. We did all of this and the only thing that
5 happened was that this pump showed up which we weren't
6 notified.

7 I called my political representatives myself
8 and left my phone number and e-mail and I never hear
9 anything back.

10 MR. RICK SAHLI: Well, Annie, thanks for
11 your testimony today. Is there anything else that you
12 would like the world to know about the situation here in --
13 so that's the end of the first video.

14 Now we are going to do the video of Dr.
15 Beiersdorfer who is an expert geologist and Dr.
16 Beiersdorfer's video is going to start off and the audio
17 might be a little bit soft but it will, I think, soon
18 pick up for you.

19 DR. RAY BEIERSDORFER: My name is Dr. Ray
20 Beiersdorfer.

21 Q. (By Mr. Rick Sahli) And what city do you live
22 in doctor?

23 A. I live in Youngstown, Ohio.

24 Q. What are your professional credentials.

25 A. I have three degrees in Geology; a bachelor's
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1 degree, a master's and a PhD in Geology. And for the
2 past -- this is my 25th year I have been a faculty
3 member at Youngstown State University where my current
4 rank is Distinguished Professor of Geology.

5 Q. How did you first get involved with fracking
6 in Ohio, Professor?

7 A. I became aware of it due to it happening in
8 other places. I worked in the oil and gas industry
9 between my master's and PhD so I knew about fracking
10 back in the 80's which was quite different from what's
11 been happening now.

12 My real awareness stemmed from the injection
13 well that started earthquakes in 2011. In fact that
14 would have been seven years ago on St. Patrick's Day.
15 March 17th of 2011 I was sitting home at my computer and
16 I felt an earthquake. And in fact there were two that
17 morning. And then I became aware that they were related
18 to the injection well which was taking the fracking
19 waste. And so that's how I became aware.

20 Q. Well, how has the overall level of earthquake
21 activity changed in Ohio since fracking and injection
22 wells began to operate?

23 A. Yeah, from about Revolutionary War time until
24 say 2011, 2010, there have been about 120 earthquakes in
25 Ohio. Most of them were out in western Ohio near Anna.
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1 There was some up near the Great Lakes and the Cleveland
2 area. Some of those were due to human activity from a
3 Class I injection well and then sporadic earthquakes
4 along the Ohio River. But, again, about 120.

5 We now have, I would estimate, counting the
6 small ones, close to 2,000 earthquakes in this eight
7 year period mostly focused in eastern Ohio in counties
8 like where I live, Mahoney County, Trumbel County where
9 we are now, that never had a historical record of
10 earthquakes now have had hundreds of earthquakes.

11 Q. Doctor, you testified at some length during
12 the Citizens Tribunal about the North Star 1 injection
13 well in Mahoney County.

14 What occurred there that concerns you?

15 A. Well, they drilled that well in 2010 and I
16 actually first became aware of it but actually, in the
17 summer of 2010 when they were drilling it, because they
18 hit a gas pocket and I woke up in the middle of the
19 night gasping for air. There had been a small blow out
20 and people were not aware of this.

21 The police were driving around thinking there
22 was a gas leak, knocking on peoples doors. And it
23 turned out that it was that well.

24 They started injecting that December and small
25 earthquakes started that January. Again, it wasn't
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1 until March that we felt it. We then continued to have
2 sporadic large earthquakes.

3 In fact we had eight and a half months of, you
4 know, noticeable earthquakes that were felt and that
5 were reported and -- but what woke me up was that the
6 ODNR our, Ohio Department of Natural Resources was, at
7 that point, was denying any connection between these
8 earthquakes in close proximity to this well and the
9 well.

10 And my 80-year old neighbor saw the
11 connection. My freshman students saw the connection.
12 Yet our state regulators were denying that there was any
13 connection. They continued.

14 There was an earthquake on December 24th,
15 Christmas Eve, and fortunately the Columbia University
16 which, at ODNR's request, put up four portable
17 seismometers. They were able to figure out exactly
18 where the focus or hydrocenter was, close proximity to
19 the bottom of the well. They shut the well down on
20 December 30th. And the next day, New Year's Eve around
21 3:30 in the afternoon, there was a magnitude 4.0, which
22 caused localized damage. After that the earthquakes
23 continued and at least 566 earthquakes from that well.

24 That well should have been shutdown within 60-
25 days after they shut it down back in 2012. Here we are
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1 in 2018, seven years, six years after, and they still
2 haven't plugged that well down.

3 Q. So what did ODNR do, the state regulator,
4 about these earthquakes? And has what they've done
5 been, in any way, effective?

6 A. Well, they've gotten worse. We've continued
7 to have earthquakes. And so that was 2011 during that
8 year.

9 In 2014 we had two issues. We had a well --
10 a fracking well in Poland, Ohio, southeast of
11 Youngstown, that started to have earthquakes. They had
12 77 earthquakes on a fault that was three football fields
13 in length, 300 meters in length, which ODNR then called
14 a microfault. A microfault is something you need a
15 microscope to see.

16 Yet this thing was 300 meters in length, 77
17 earthquakes, and they had admitted that it was due to
18 fracking and that wound up getting a lot of
19 international and national attention because supposedly
20 this was the first place in the United States where
21 fracking had caused the earthquakes. Turned out that
22 wasn't true.

23 It turned out in the prior year, in 2013,
24 October of 2013, there had been over 400 earthquakes in
25 Harrison County in southern Ohio due to fracking. ODNR
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1 kept that secret. None of them were big enough to get
2 on the regional US Geological Survey Network and let the
3 world know about them.

4 But the paper that finally was published and
5 came out said that ODNR had deployed their portable
6 seismometers to this site, meaning they knew about it,
7 yet they kept it secret. They didn't put it on their
8 web site.

9 Their rules. If it's a felt earthquake or
10 it's a magnitude 2.0 or larger it should be on their web
11 site for recent events. They kept it off their web
12 site. Eventually they did put it on after the
13 publication had come out and I nagged them via e-mail
14 why isn't this on? Why isn't this on?

15 Also after the Poland earthquakes they had
16 announced that any new fracking permits within three
17 miles of a known fault were going to have special permit
18 regulations and/or requirements.

19 I've gone subsequently and found wells that
20 were permitted within a mile of a known fault and they
21 had no special permit restrictions on them. I actually
22 got, from the head of oil and gas at ODNR, Rick Simmers,
23 in writing that they were not even following their own
24 rules. And so that has continued.

25 There's now at least a half a dozen fracking
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1 sites down in southern Ohio in Harrison County that have
2 caused earthquakes. I doubt very much -- I haven't yet
3 gone and checked -- but I doubt very much if they even
4 have any of these special permit conditions.

5 We also here in Trumbull County in 2014 we had
6 a well that they drilled 2.9 miles from a high risk dam,
7 the reservoir for the drinking water supply for up to, I
8 think, 400,000 people, including my own water supply,
9 they put that in. They drilled two wells.

10 They had started having earthquakes there.
11 Again, ODNR kept them secret until one was large enough
12 to get on the -- so the regional network and let the
13 world know about it and that one wound up causing 108
14 earthquakes under -- on two different faults.

15 And I just recently -- a pre-publication came
16 out this very week about earthquakes due to injection
17 wells -- an injection well in Washington County in
18 southeastern, near Marietta, that had caused over 300.
19 I think about 318 earthquakes in a complicated series of
20 several faults.

21 So things have not gotten better. Just the
22 more that we're finding out about it we're realizing how
23 bad it actually is.

24 Q. Has the Department of Natural Resources ever
25 prepared a study or given any comprehensive report to
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1 the people of the state about this problem?

2 A. They -- after the Youngstown earthquakes, so
3 that was the first -- you know, papers -- let me back
4 that up.

5 The Ashtabula Class I injection well there was
6 some publications, not by the state to my knowledge, but
7 by scientists from Lamont-Doherty Earth Observatory. So
8 there was some publications about that injection well.

9 After the Youngstown they prepared a rather
10 lengthy preliminary report. They never did a final
11 report. And then the next one were public.

12 After the Poland earthquakes all they did was
13 a press release. I contacted them and said after the
14 Youngstown you did a report. Is there going to be a
15 report?

16 They said no. It was just -- there was just
17 the press release. I had to do a public records request
18 to get more further information about that because they
19 were not going to be forthcoming.

20 Just last year there was a -- just a notice
21 that a well had been shutdown because of seismic
22 activity. Nothing other than a statement.

23 I contacted ODNR and I wanted the well number,
24 the API number for the well. They wouldn't even give me
25 that.

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1 So it's gotten worse. From preliminary report
2 to a press release and now just a statement and they
3 won't even tell you which well it is.

4 I suspect they didn't tell me which well it
5 was because I was going to go back and look at permit
6 conditions and see that, again, they were violating
7 their own rules from April of 2014.

8 Q. The report, the preliminary report that you
9 mentioned, can I go on-line today and look at that data
10 and try to find at least what the state has tried to put
11 together about it?

12 A. Yeah, it was available on-line. I haven't
13 checked recently. And so I think I checked last summer
14 and it still wasn't available but I haven't checked if
15 it was available.

16 I would imagine it is unless they scrubbed it
17 from their web site.

18 Q. Well, could you please sum up for me,
19 Professor, your opinion on what the Department of
20 Natural Resources record has been on fracking
21 regulation?

22 A. I think it's been very poor particularly with
23 these induced earthquakes. They are not doing their due
24 diligence. They are going ahead and requiring the
25 operators to prove that there is no fault.

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1 We know now that there is a series of faults
2 deep in the basement in here, in the geologic basement,
3 9,000 feet below the surface. They are not requiring --
4 they're allowing the companies just to go right ahead
5 and monitor things. I believe in the proportionairy
6 principle, especially after.

7 There is some evidence that this is happening
8 yet they are not doing that and I feel that they have
9 really dropped the ball in terms of protecting public
10 health and safety.

11 Q. With all this history of earthquakes in
12 northeast Ohio and injection wells and, I guess, other
13 parts of the state with production wells, is ODNR still
14 authorizing injection wells in these areas of known
15 activity, known earthquakes?

16 A. Well, right here where we're sitting in
17 Brookfield, Ohio they've actually already permitted two,
18 and they have three more that the company has applied
19 for. These poor citizens are going to get five
20 injection wells.

21 I've looked at what the proposed volumes for
22 that and applied it to a formula from seismologists from
23 the U.S. Geological Survey where, according to their
24 work, there's a relationship between the amount of
25 fluids you pump underground and the energy associated
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1 with those fluids.

2 And then if there is an earthquake -- again,
3 it's a gamble, if there's a fault there that energy is
4 going to get released. And the calculations, based on
5 the proposed injection volumes from here, they're going
6 to have anywhere -- over a magnitude 5.00 earthquake if
7 there's a fault and if it all gets released in one
8 seismic event.

9 They're basically doing some sort of perverse
10 science experiment with the citizens of Brookfield,
11 Ohio. So, no, they are not doing their due diligence
12 and they are not protecting public health and safety.

13 They had a public comments period. I provided
14 them with that information. I have not heard anything
15 back from them and, frankly, I don't expect to hear
16 anything back from them.

17 MR. RICK SAHLI: That is the second
18 statement from Dr. Beiersdorfer.

19 Now I would like to show you the third and
20 last statement that I have for you today from Teresa
21 Mills about public participation in Ohio

22 TERESA MILLS

23 Q. (By Mr. Sahli) And who do you work for or how
24 is it that you work with these communities?

25 A. Well I have been an activist, an environmental
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1 activist for 30-years, so I have a lot of experience. I
2 do represent two organizations. Statewide I represent
3 the Buckeye Environmental Network and nationally I work
4 with the Center For Health, Environment and Justice,
5 which is -- was started by Lois Gibbs from Love Canal
6 fame.

7 Q. You said that you had a large concern about
8 the environmental justice impacts of fracking in Ohio.

9 What is environmental justice and what are
10 those impacts that concern you?

11 A. To me environmental justice and human rights
12 should go hand-in-hand. Environmental justice is the
13 equal treatment of the population.

14 No one population should be over-burdened more
15 than another population when it comes to environmental
16 stresses. And there is no bigger stress in the state of
17 Ohio right now than fracking to our local communities.

18 Q. Well, what are those impacts that effect
19 environmental justice from fracking?

20 A. Well, what I see not only the health impacts
21 and the psychological impacts that occur with fracking
22 and injection wells but there is a huge human rights
23 violation in the state of Ohio that is being supported
24 by US EPA. And that is there is a total lack of citizen
25 participation in the permitting process, both with the
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1 production wells and the oil and gas wells.

2 It's a human rights violation to not have a
3 say in what goes on in your own community. What goes on
4 right next door. An injection well or a production well
5 can be 150-feet from a domicile, someone's house. I know
6 earlier people said 1800 feet or 1800 yards. They can
7 be as close as 150 feet.

8 When it comes to production wells you will not
9 know that there is a production well being proposed for
10 your community unless you see (1) the ravaging of the
11 land preparing for the well pad or (2) all of a sudden a
12 rig shows up in your sky.

13 Other than that you have no indication that a
14 production well is being proposed. You have no
15 opportunity to comment on any permit and that is for
16 production wells.

17 Injection wells there is a phony 15-day
18 comment period, a public notice, which is very
19 inadequate. They expect people to be able to read an
20 application. It's not a permit. It's just the
21 application, which is like two or three pages, and be
22 able to make a technical comment on an application.

23 I want to make a technical comment on a
24 permit, not an application, because by the time the
25 permit is issued there could be changes that I never get
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1 to comment on a permit. All I get to comment on is the
2 application. That is an injustice that is a human
3 rights violation.

4 Q. You said that the 15-day comment period is
5 ineffective. Why?

6 A. Typically most citizens would not have the
7 technical expertise to be able to technically comment on
8 a permit. And even if they had had the ability to hire
9 a technical person within 15 days that is not going to
10 happen. And the information in an application does not
11 give the technical person the ability to comment.

12 And in the permit application there's supposed
13 to be an area of confinement. So there's supposed to be
14 a confining zone.

15 Q. That's a geologic term.

16 A. Yes. Sorry. Yes, that's a geological term.
17 But that's not stated in the permit application but
18 there is supposed to be a confinement zone. Okay.

19 So when I looked at the torched wells, the
20 wells -- the technique wells, I noticed that there was
21 no confinement zone listed. So I called and made an
22 appointment with a geologist from Ohio University and I
23 actually had to do a PowerPoint of what I saw in order
24 to be able to convey it, to convey my concerns to the
25 geologist.

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1 Because what I was seeing was there was no
2 confinement zone, solid confinement zone. And she
3 agreed with me that it was already a fractured
4 confinement zone.

5 Q. So you've got a complicated geologic
6 situation.

7 A. Right.

8 Q. And you're got 15-days to analyze and develop
9 comments.

10 A. Right. Absolutely.

11 And as a citizen, you know, not as a technical
12 expert -- most people can't hire technical experts and
13 they don't realize, you know, well let me call the
14 university and see if they've got someone that can at
15 least look at this. You can't do that in 15-days.

16 Q. And you only have 15-days if you see the legal
17 notice --

18 A. Absolutely.

19 Q. -- in the newspaper.

20 A. Absolutely. If you see the legal notice and
21 you understand what that legal notice is saying then
22 that makes a difference.

23 Q. Now fracking in Ohio is mostly in the
24 southeastern part of the state. That's where the shale
25 clay is located geologically. It's also pretty
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1 well-known that southeastern Ohio is also considered
2 Appalachian.

3 A. Right.

4 Q. And that is an area of significant economic
5 disadvantage compared with much of the rest of the
6 state. Does that factor into your concerns about the
7 environmental justice?

8 A. It does factor into my concerns a great deal.
9 And one of the reasons is because it factors into my
10 concerns but nobody else's. I mean not -- I'm not
11 talking about citizens but I'm talking about
12 governmental agencies that are supposed to be -- you
13 know, especially federal government that are supposed to
14 be under, you know, Clinton's executive order on
15 environmental justice.

16 All of these things should be taken into
17 consideration and the state of Ohio does not consider
18 environmental injustice whatsoever.

19 Q. Have you notified the US EPA and the
20 Environmental Justice Office about your concerns about
21 the disparate impacts on this area?

22 A. Yes, we did. We notified US EPA several
23 times. We've gone to them asking them to do several
24 things and they've just brushed us off.

25 So we did take a step and sent a letter to the
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1 Office of Environmental Justice in Washington D.C., a
2 lengthy letter, quoting the laws, quoting where Ohio
3 Department of Natural Resources were in violation of
4 federal laws. And to our great, great disappointment
5 the Office of Environmental Justice also blew us off.

6 So that is one of the reasons -- we have
7 tried every step that I can think of. I tried all the
8 tricks in my book and I'm just to the point is I don't
9 know what to do any more.

10 So that was why we initiated the original Ohio
11 Tribunals to give citizens a chance to have their say.

12 You know, we're not sure what's going to
13 happen with that yet but during the tribunals citizens
14 were crying. And I went out into the hallway and the
15 one lady said, you don't understand. This is the first
16 time I feel that someone really cared and someone
17 listened to me. That is shameful. That is absolutely
18 shameful.

19 We should not have to, you know, spend our
20 money to hold tribunals when it should be the obligation
21 of the state of Ohio and the federal government to
22 protect us. They should be protecting our right to
23 participation and they should be protecting our right to
24 information. And we have none of that.

25 Q. Is there any federal law that applies to the
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1 production wells that are being fracked?

2 A. No, not that I can think of. Because unlike
3 injection wells there is federal laws that production
4 wells I think those are just regulated by the state.
5 And, you know, with the captured agency of the Ohio
6 Department of Natural Resources who are in bed with the
7 petroleum industry, you know, what do they expect.

8 You know, they're going to be -- they know
9 what side their -- what's the saying, they know what
10 side their bread is buttered on.

11 Q. I know that saying.

12 A. So they're not going to go against anything
13 that the oil and gas industry wants and the citizens are
14 the ones to suffer.

15 Q. You said that there's a federal oversight
16 layer that at least addresses injection wells.

17 A. Right.

18 Q. Now I assume with all of the explosion in
19 fracking in the last few years there's been a lot of
20 activities and changes and improvements in that federal
21 law. Would I be correct in thinking that?

22 A. You would totally be wrong on that. Ohio
23 received primacy in 1983 to regulate injection wells.
24 And that was under statute or code -- it's not a code --

25 it's 1425 which was 30-years ago and their rules or
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1 their laws have not changed in 30-years.

2 Actually it was just a guidance that was
3 written. Those have not been updated in 30-years even
4 though the injection wells and the production waste has
5 changed greatly with the addition of chemicals, with the
6 addition of the radioactive, you know, isotopes in the
7 waste and the lack of just caring.

8 Again, we wrote the letter under 1425 and
9 here's what -- what really bothered me, one of the
10 things that bothered me about this, if you look at the
11 next state over, Pennsylvania. Pennsylvania is not --
12 they did not settle for primacy under -- I can't
13 remember the title or the code, but Ohio did.

14 So Pennsylvania is regulated by both the
15 federal EPA and the Pennsylvania Department of
16 Environmental Protection. So it takes much longer. The
17 requirements are much more strict and stringent than
18 they are in Ohio.

19 When you come to Ohio, you know, it's like we
20 might as well go to the corner of Broad and High where
21 the state house is and just hand out permits willy-nilly
22 because that's what they're doing.

23 But -- so, actually, the federal EPA is
24 encouraging, and there is a word I'm looking for,
25 perpetuating.

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1 Q. Perpetuating, yes.

2 A. Perpetuating at the environmental justice
3 itself because of the difference in the regulations
4 between Pennsylvania and Ohio.

5 Pennsylvania has a handful or two handfuls of
6 injection wells. And their statement always is well,
7 we'll, just send our waste to Ohio.

8 So the EPA, US EPA, is creating their own
9 environmental justice issue by the way they have issued
10 primacy.

11 Q. So how many wells, injection wells are there
12 in Pennsylvania and how many in Ohio?

13 A. Well, they've just issued a couple more
14 permits. I think they may have 11.

15 Q. 11?

16 A. 11.

17 Q. And Ohio has --

18 A. And Ohio has 238 permits that have been
19 issued. But back in 2011 when we first were inundated
20 with fracking we had 144. So from 2011 to 2018 we went
21 from 144 up to 238.

22 Q. And the federal government designates counties
23 as being Appalachian.

24 A. Right.

25 Q. From all those injection wells do you know,
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1 approximately, what percentage of those are in the
2 economically disadvantaged Appalachian counties?

3 A. Yes. And there's 32 Appalachian counties and
4 out of those 32 I think 23 have injection wells but
5 those 23 counties take in 3/4 of the injection waste.

6 Q. Let me try to summarize this, Teresa.

7 There's no federal law overseeing the fracking
8 production wells.

9 A. No.

10 Q. The federal law that pertains to injection
11 wells dates back to the 1980's and hasn't been updated
12 at all in Ohio since the advent of the fracking
13 revolution?

14 A. Correct.

15 Q. And the most economically disadvantaged, the
16 most politically disadvantaged portion of Ohio is
17 getting over 3/4 of the fracking waste.

18 A. Right. Right.

19 Q. And you think there's an environmental justice
20 issue involved in those three facts.

21 A. Absolutely. Absolutely.

22 And one thing is in Athens, where we are right
23 now, in Athens County, Athens County ranks No. 1 in the
24 state for poverty, for being at poverty.

25 So it's not the people they're working for.
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1 You know, it's -- so when -- like with production wells
2 and injection wells I see a lot of counties where some
3 citizens will say, well, it's jobs, you know.

4 And now we have an industry that goes in and
5 what I call buys out the local politicians by the
6 promise of, well, we'll give you some money to update
7 your fire department or we'll give you money to build a
8 building. Or, in Columbiana County they bought them a
9 truck, a police car, and a crime dog.

10 So there's a lot of citizens when they see
11 that, they think, well, it's good for the community.

12 Well, it's not good for community. That's
13 like dangling a radioactive carrot in front of a hungry
14 rabbit and expect it not to eat that carrot.

15 It's an injustice. These are human rights
16 violations and this needs to stop before there is so
17 much disease and so many cancers that it would be too
18 late.

19 MR. RICK SAHLI: That is the end of our
20 three statements. And I think we have about 10 minutes
21 left, maybe, to have questions.

22 Francis, perhaps you would like to ask your
23 question again that you tried to ask earlier.

24 MR. FRANCESCO MARTONE: I was referring
25 back to one of the statements that were made during the
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1 first presentation before the last break related to the
2 media smear campaign against environmental organizations
3 and the environmental NGOs. That these are basically
4 one on of the first, let's say, signals of the worrying
5 tendency that is actually repeating itself in many
6 situations where there are strong resistors or strong
7 resistance on the ground against large scale
8 infrastructure projects, especially the fracking
9 industry.

10 And I was wondering whether this is just
11 something that is confined to media misrepresentation or
12 slandering of environmental activists or if this is also
13 followed by some consistent behavior by police, for
14 instance, in terms of intimidation or restricting the
15 capacity of initiative or environmental groups?

16 Is there any signal that this kind of smear
17 campaigns actually lead to criminalization of the
18 environmental rights defenders and to some specific
19 police control over territories and the demonstration of
20 the case like at Standing Rock.

21 MR. RICK SAHLI: I think in the fracking
22 situation, while there is intimidation by the state and
23 I think with the expressions of hostility that
24 regulators constantly give the citizens there, they're
25 definitely trying to push the citizens away and get them
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1 not to care.

2 There's only one incident where the police
3 were involved that was similar to your concerns and that
4 was when the Department of Natural Resources had a
5 public information meeting that they very tightly
6 controlled, and I've heard from several people who were
7 at that meeting police presence was extremely large.
8 Especially for a small rural area to have a lot of
9 police is somewhat unique.

10 In addition to just the police themselves,
11 they had guard dogs. So here you come out to meet with
12 your state officials and you're met with guard dogs
13 before you can ask your questions. That is as close as
14 I've seen.

15 Often times with my clients, claims, oh hey,
16 if you continue on to question our activity, if you hurt
17 our profits, we'll bring a lawsuit against your client
18 for interference with our contract rights.

19 And to which I say, fine, go ahead because
20 we'll countersue you for trying to intimidate us and
21 exercise of our free speech rights.

22 And I have had that conversation more often
23 than I would like to think of and there has never yet
24 been a lawsuit filed because they realize it's still
25 free speech right and is far different than what any
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1 court wants to go to suppress.

2 So up until the current administration in the
3 White House I was not really concerned about those
4 matters, Francis. But this new administration that's
5 gone so much further than any other one, the fact that
6 the reach of that new president of ours seems to be
7 heading throughout the entire republican party, while
8 we're entering another campaign season and it seems like
9 so many candidates are falling over themselves in their
10 fealty to the new president, that we're on path that may
11 lead to the type of concerns that you just said.

12 MR. FRANCESCO MARTONE: Thank you.

13 MR. GILL BOEHRINGER: Yes, Gill Boehringer
14 here.

15 Actually Francesco asked the question that I
16 was going to ask. I think it's important for us to
17 state, on the basis of research that I've done and
18 others, that being a human rights activist or a
19 supporter or a lawyer is a very dangerous activity
20 around the world.

21 In the Philippines, for example, where I
22 mainly do my research, environmental activists are being
23 killed all of the time. It's one of the most dangerous
24 countries in the world but also lawyers and journalists
25 and others who are trying to protect the public and the
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1 rights of nature.

2 So I guess I would have to say to you, Rick,
3 it must be very frustrating for you to do the work that
4 you're doing and receive the rubbish that you get from
5 the corporations and the government agencies but at
6 least you're not being disappeared or killed as of
7 today.

8 I wanted to also maybe follow-up on what Louis
9 was asking this morning and that is you mentioned that
10 in civil cases it's very difficult for systemic reasons
11 and other reasons. I was wondering if any criminal
12 sanctions are available and have they been brought
13 against the corporations -- I think I know the answer --
14 as result of their operations and/or corruption, tax
15 evasion and other things of that sort, which might be
16 connected with their operations in fracking?

17 MR. RICK SAHLI: There was one example of
18 a successful criminal prosecution but it was brought by
19 the U.S. Attorneys' Office in the northern part of Ohio.

20 This involved a company that was transporting
21 fracking waste water and they were supposed to take it
22 to a treatment or disposal facilities and neighbors of
23 the truck garage where they would be stored began to
24 notice that there were strange odors in that garage and
25 certainly began to grow concerned. And they noticed
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1 that the trucks were dumping fracking water into the
2 local river, which was very close to Youngstown.

3 And someone passed that word along to the ODNR
4 and ODNR actually sent investigators out there. Those
5 investigators got information and sent it to the U.S.
6 Attorneys office, frankly, because I don't think that
7 they trusted the state prosecutors in any type of a
8 criminal case.

9 They caught them red-handed. They did get a
10 conviction and agreed to a sentence but that was the
11 only time that involved some pretty alarming
12 circumstances.

13 Meanwhile we've had spills, kind of routine at
14 some of these sites, but it's the industry itself,
15 legitimate part of the industry doing that. And that's
16 not where we're seeing enforcement.

17 We see explosions. That's not where we see
18 enforcement. So they were very unsafe conditions a lot
19 of the times with the explosions.

20 MR. GILL BOEHRINGER: I wanted to follow
21 that up, if I may. I noticed that in your report you
22 refer to the Guiding Principles on Business and Human
23 Rights. Many critics of the infamous, I would say,
24 pillars, state protection, business respect for rights
25 and providing access to justice, many critics of those
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1 so called pillars, believe that while they sound good,
2 and who could deny that, nevertheless, they are really
3 failing and almost inevitably likely to fail because of
4 what has happened through the market globalization and,
5 in particular, the dominance of corporations over states
6 and their agencies. Would you like to --

7 MR. RICK SAHLI: That was my staff that
8 came in. It's dinner time.

9 MR. GILL BOEHRINGER: We're in trouble
10 now, mate.

11 Would you like to comment on the principles
12 and what might be done to advance the establishment of
13 norms and implementation?

14 MR. RICK SAHLI: I agree with the
15 reservations. I mean the statements -- just one moment
16 please.

17 MR. GILL BOEHRINGER: Must be a warning.

18 MR. RICK SAHLI: The statements do make
19 appropriate comments about the role of nongovernmental
20 actors. The corporations need to be brought into the
21 system of accountability as well.

22 As in so many areas the real force you're in
23 opposition to is a corporate force and not a
24 governmental force.

25 That's certainly the case in Ohio. What we
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1 often have in Ohio is government acts as a sponge that
2 stands between the community and the corporate actor.
3 So that they take the rage of the public, they take the
4 worry and the corporation stays high and dry.

5 The problem here in the United States and in
6 our discussion of legislative enactments that we've had
7 in Ohio have been essentially dictated by the oil and
8 gas industry and our legislature has been little more
9 than a stenographer to write it down and pass it into
10 law.

11 When industry has that level of control over
12 the governing process I don't think saying nice words
13 about corporations being responsible are going to get us
14 very far.

15 The United States of America has a huge
16 problem now with campaign finance. It's something I
17 have seen in the environmental movement for at least 25-
18 years.

19 Now with our Citizens United case that lets
20 corporate money go directly into the political system
21 and to be untraceable how everybody, I think, sees what
22 I've been able to see in the environmental movement what
23 the sale of a government is.

24 More than the legislature it's the courts too.
25 I used to have a pretty good success rate in court and
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1 I've seen it's peter-out over the years and, frankly, I
2 don't think that petering-out is due to my becoming a
3 worse lawyer as I gain more experience.

4 We can't talk about corporations playing nice
5 when they are in as much control of this system or in
6 this much control of the media and how it gets described
7 to the public. We need more aggressive steps than that.

8 That is my view, Gill.

9 MR. GILL BOEHRINGER: I think many would
10 agree with you.

11 MR. RICK SAHLI: Well, it's been a
12 pleasure. You've shown a lot of patience to listen to
13 the Ohio story. I appreciate that patience very much
14 and I wish you Godspeed and enjoy your upcoming week and
15 I look forward to speaking to you close to the end of
16 the process and I wish you well.

17 Thank you much.

18
19 [youtube.com/watch?v=zBjGpVDDBW8]
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21
22
23
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25

1 AUSTRALIA PPT PRE-TRIBUNAL

2 MAY 14, 2018 2:30-4:30

3
4 MS. SHAY DOUGALL: Hi, this is Shay
5 Dougall from Australia. And, Benedict, do you want to
6 unmute yourself?

7 MR. BENEDICT COYNE: Hello, I'm Benedict
8 Coyne from Australia.

9 MS. SHAY DOUGALL: And Mariann
10 Lloyd-Smith.

11 DR. MARIANN LLOYD-SMITH: Hi, it's Mariann
12 from Australia.

13 MS. SHAY DOUGALL: And Dr. Geralyn
14 McCarron.

15 DR. GERALYN MCCARRON: Hello. I'm
16 Geralyn McCarron.

17 MS. SHAY DOUGALL: So, thank you very much
18 for this opportunity.

19 What else I might do is just go straight into
20 some introductions. Can you see the screen there?

21 Okay. My name is Shay Dougall. I'm a wife, a
22 mother, an OHSE professional, a landholder advocate and
23 a gas field resident and the convener of this Australian
24 Tribunal.

25 Benedict is a member of the Australian Lawyers

1 For Human Rights. He's also the Chair of the Human
2 Rights Action Committee. And Benedict is a
3 well-qualified and well-respected human rights lawyer in
4 Australia who has got an enormous amount of experience.

5 Doctor Geralyn McCarron is a GP who practices
6 in Brisbane. She has spent lots of years on the ground
7 out here in the gas fields and is very well respected by
8 the people out here and is in a very unique position
9 among her peers.

10 And Dr. Mariann Lloyd-Smith, again, eminently
11 qualified. A doctor who is expert in toxicology and who
12 has given evidence all the world and she'll be talking
13 about the toxics of the unconventional gas.

14 Our overview of the session is the basically
15 I'll give a brief introduction. Benedict will then
16 undertake his part. Doctor Geralyn McCarron will talk
17 about health. Doctor Mariann Lloyd-Smith will talk and
18 then I'll continue to complete the process of our other
19 sessions and then Benedict will summarize our session.
20 We'll have some time for questions at the end.

21 So basically unconventional gas in Australia.
22 Well, it's big business. How big?

23 Well, let's have a look at just how big it is.
24 I'll show you this interesting slide. So there is an
25 interesting slide and this will show you just how big

1 the business is in Australia.

2 So that's a map of Australia obviously. This
3 is the oil and gas tenements across our country. And
4 this is oil and gas wells that are currently drilled in
5 our country. And you can see where the tenements are
6 and where we are expecting it to be drilled in the
7 future. And this is the gas pipelines across the
8 country.

9 So, yes, gas is certainly very big business in
10 Australia. As elected representatives of the people the
11 government also has a contract with us and that
12 contract, though, has limited rights.

13 So when the government is pursuing the gas our
14 contract with them only requires them to consider
15 limited rights with regard to us, the people, but they
16 maximize the rights of the industry. And this is what
17 is resulting in the impact.

18 The thing is that way back in 1932 a pair of
19 academics may well have been prophetic when they
20 theorized that the corporation as an economic organism
21 may even supersede the state as a dominant form of
22 social organization.

23 Well, in my current experience as advocating
24 for landholders impacted by the unconventional gas it is
25 clear to me that the line between the government and

1 multi-national companies is not only bird but in some
2 cases it's not existent.

3 So basically us, the landholders, are the
4 trade-off in the government's dash-for-cash. In the
5 pursuit of the dollars of getting the gas out of the
6 ground the government and the industry is trading off
7 what they see is short term impacts on landholders for
8 their own shareholders value. But the reality is that
9 this is where they are mistaken because there are long
10 terms impacts that they're not factoring in but it will
11 cost them and it will cost us.

12 What they are actually doing is managing for
13 gas shareholders and they're forgetting about the other
14 stakeholders, who are us.

15 So our contribution to this tribunal
16 highlights those failures to govern for us, the
17 stakeholders, and the rights that our limited contract
18 with the government fails to address.

19 Our evidence is hosted at that web address.

20 We've written a report that summarizes our
21 evidence and submitted that to the tribunal and that
22 report maps out evidence against John Knox's 2018
23 reports and applies that to the five sub-cases that we
24 provide evidence for.

25 So in considering the evidence that we have

1 provided and given the 20 to 40-year impact ahead us of
2 in this existing industry both those impacts that are
3 still to occur and this industry that is rapidly
4 expanding, we're asking the judges to consider the
5 potential future harm as well as the harm and our
6 contribution to this tribunal.

7 And our contribution to this tribunal is a cry
8 from thousands of real individuals who are pleading for
9 you to help us to make our government start governing
10 for stakeholders and not gas shareholders.

11 So I'd like to introduce the next speaker who
12 is Benedict Coyne. And I will just unshare my screen so
13 Benedict can take it.

14 I think I've done that. Benedict, over to
15 you.

16 MR. BENEDICT COYNE: Thank you, Shay.

17 Good morning everyone. Our tribunal members,
18 for the record, my name is Benedict Coyne. I'm
19 executive counsel at a Queensland law firm and the
20 immediate past national president of Australian Lawyers
21 For Human Rights, which is a national association of
22 legal professionals who advocate on the promotion and
23 protection of international human rights standards in
24 Australia and overseas.

25 I stepped off two weeks ago after being in the

1 national president's position and I now remain on the
2 Executive Management Committee and the Chair of the
3 Human Rights SubCommittee, which will become relevant
4 later in my submissions.

5 I appear today on behalf of the Australian
6 sub-cases and to provide submissions to assist the
7 tribunal in relation to this petition and in relation to
8 its considerations and deliberations of the
9 Australian's government obligations under International
10 Human Right Law as it relates to the impugned conduct
11 and activities of the unconventional oil and gas
12 extraction industry, which I will collectively refer to
13 as the fracking industry, in both Queensland and
14 Australia.

15 I thank the tribunal members and the Permanent
16 Peoples' Tribunal and all of the organizers,
17 specifically Tom, Anna, Damian and Carly and everyone
18 else and all the contributors, the lead attorneys, Shay
19 especially, for organizing everything at this end.

20 And I thank everyone for this exciting and
21 worldly opportunity to present to the tribunal through
22 an open accessible forum of digital media on these very
23 important human rights and environmental issues at a
24 crucial time where humanity finds itself precariously
25 perched upon the precipice of irreversible, catastrophic

1 climate change.

2 I would like to pay my respects to the
3 traditional custodians of the land on which I am today,
4 which is beautiful sunny but albeit wintery Brisbane and
5 by the Jagger and Turrible people I pay respect to their
6 elders past and present and emerging, their ancestors
7 and their future generations.

8 And I would also like to acknowledge that I
9 speak today on stolen land. That sovereignty was never
10 ceded neither by aboriginal Australians nor the Torres
11 Strait Islanders.

12 I would further like to acknowledge the
13 traditional indigenous custodians of the land on which
14 everyone listening resides around the world, their
15 elders, past and present and emerging and ancestors.

16 And finally I would like all of to us
17 acknowledge our future generations. Our childrens'
18 childrens-children and so on, the plants, water bodies
19 and eco-systems on whose behalf we engage in this
20 important work.

21 In the words of the Special Rapporteur on the
22 issue of human rights obligation relating to the
23 enjoyment of a safe, clean, healthy and sustainable
24 environmental, John Knox who said, "Human rights
25 environmental protection are interdependent; a safe,

1 clean, healthy and sustainable environment is necessary
2 for the full enjoyment of human rights, including the
3 right to life, to the highest sustainable standard of
4 physical and mental health; to an adequate standard of
5 living; to adequate food; to safe drinking water and
6 sanitation; to house and participation in cultural life
7 and to development as well as the right to a healthy
8 environment itself, which is recognized in regional
9 agreements and most national constitutions in 2018."

10 At the same time the exercise of human rights,
11 including rights to freedom of expression and
12 association, to education and information, to
13 participation and the effective remedies is vital to the
14 protection of the environment and I would add to the
15 protection of our democracies.

16 The global frontier of fracking and of the
17 fracking industry -- sorry, I'll start that again.

18 The global frontier of the fracking industry
19 brings high prices to international human rights law and
20 the democracy and for the rule of law. However, the
21 raging expansion of this dirty and dangerous and toxic
22 industry also presents opportunities for change.

23 We know well the evidence of some 270,000
24 wells that are being fracked across North America and
25 the world and hundreds of incursions of human rights

1 violations by large corporation throughout Australia,
2 which will become the subject of detailed evidence to
3 this, our Tribunal.

4 In terms of giving a bit of an overview of
5 where Australia is at it is worth noting that in
6 Queensland there is unrestricted access for fracking
7 companies. Whereas our Victoria became the first state
8 to permanently ban fracking last year. There are
9 moratoriums in Tasmania and West Australia and New South
10 Wales has applied certain restrictions.

11 The new nukes out on South Australian liberal
12 conservative government is planning a 10-year ban on
13 fracking in much of the state's southeast, however, the
14 Northern Territory recently announced on the 17th of
15 April that its ban on fracking will be lifted, much to
16 the caution and terror, perhaps, of the Northern
17 Territories who knows what's been happening in
18 Queensland.

19 The federal government is also pushing for
20 more fracking. Our federal minister for environment And
21 Energy Josh Fryenburg recently stated, "I would like all
22 moratoriums and bans across Australia lifted because
23 more gas is good for jobs and it's good for energy,
24 security and supply."

25 And thus we meet here today and the work of

1 the Tribunal is incredibly important.

2 So fracking presents high pressure politics in
3 Australia and if the highly destructive disruptive
4 fracking boom precedent in the U.S. and Queensland is
5 anything could go by and expanded there is much at
6 stake, including the very integrity of our democracy.

7 Beyond this proven devastating toxic
8 environmental effects being to dire water, land and air
9 and climate change causing contamination this most
10 controversial industrial activity of our time is an
11 unprecedented global threat to the intertwined complex
12 of universal human rights.

13 Humans, I guess I would state, very obviously
14 require a healthy environment for a fulfilling and
15 dignified life, for the ability to achieve self-
16 realization, self-determination and community harmony.

17 Fracking engages the profiteering might of the
18 industrial military complex. Companies such as
19 Halliburton, whose conduct in the U.S. to Australia is
20 rupturing the very socio-cultural fabric of our
21 democratic socio-cultural commons, the collective good
22 in a place that we like to call home.

23 Historic boundaries delineated by law have
24 been uprooted and challenged by the right to frack. It
25 has exposed the profound frailties of our political

1 institutions meant to regulate industry, protect human
2 health and environment.

3 And as our opening session explained the state
4 is meant to be the guarantor and protector of our human
5 rights, however, that is certainly not the case in
6 Australia.

7 Fracking signifies the tragedy and promise of
8 the dusk of an era and a last ditch rapacious land rush
9 of a plummeting and I would submit fossil-foolish
10 paradigm in its last desperate clutch for power,
11 political power, energy policy power, private profit
12 power and power itself.

13 Yet, of course, the counter, people power and
14 human rights are still relevant in the mix, certainly in
15 Australia and around the world and may indeed yet
16 surmount the Goliath gargantuan corporate gas interests
17 and just make it through to the finish line of
18 protecting all of our rights, albeit gasping for breath.

19 The aforementioned moratorium throughout
20 Australia and the determined work of civil society
21 groups, in particular people like Shay, Geralyn, John
22 Jenkin and his family and the over 40,000 persons strong
23 Lock The Gate Alliance, which is landholders committed
24 to engaging their fundamental democratic rights to
25 commit civil disobedience if necessary, to refusing

1 access to private fracking companies to their private
2 property and in that way to prevent from violating their
3 human rights. All of that represents the hope.

4 Whereas the abhorrent destructive
5 scorched-earth examples in Queensland over unrestrained
6 rapacious fracking industry and government selling out
7 such policy represent the horror and the danger to
8 them. Therefore, there is much at stake which is why
9 this petition to the Permanent Peoples' Tribunal is of
10 such crucial importance.

11 I will now be focusing on my area of
12 speciality being human rights law and international
13 human rights law in Australia and outlining for the
14 Tribunal the answer to the question of why things in
15 Queensland, in particular, and Australia more generally,
16 are so democratically dysfunctional to have allowed the
17 rapid expenses of the rights violating industry.

18 And I think that the answer to and the
19 exploration of that question is instructive, as history
20 always is, to be informing our mapping of how we take
21 steps into the future and the recommendations and
22 advisory opinions that this Tribunal may make that will
23 assist all of us in trying to plot a path through a more
24 safe, sane and sustainable future.

25 So in order to answer the question it is

1 necessary to traverse the history of human rights in
2 Australia and outline the motivations and mechanisms of
3 its ongoing international human rights law recalcitrant.

4 Conceptualization of human rights have existed
5 for many centuries mainly the threaded theaters of the
6 world's theologies and sacred spiritual teachings
7 weaving through the winds of time.

8 Human rights are ancient concepts imbued in
9 the world's major religions. Principles of mutual
10 respect, tolerance, compassion and dignity are a core
11 part of Christianity, Islam, Buddhism, Hinduism, Judaism
12 and hopefully even Pokeman god and so on.

13 Another historic source of human rights is, of
14 course, the common law, rules and principles established
15 by judges on a case by case basis throughout the
16 centuries and when Australia was invaded the common law
17 was imported into this land.

18 Of course, the world's first Bill of Rights
19 the Magna Carta, is probably the most famous founding
20 human rights document which then influenced various
21 declarations, revolutions in America, in France. And
22 all of those developments and evolutions formed the
23 creation of the modern conceptualization of
24 international human rights law through the formation of
25 the United Nations.

1 It's also important to mention that the -- all
2 the international treaties emanating from the United
3 Nations and the seven core international human rights
4 treaties, which Australia has signed and ratified, are
5 all predicated on what I would call the international
6 consensus of good faith participation in the modern
7 international order.

8 And that comes by Article 26 of the 1969
9 Vienna Convention on the Law Of Treaties which
10 stipulates the Principle of Pacta Sunt Servanda. And
11 that is every country who ratifies the international
12 treaty must do so in good faith. That it will uphold
13 the principles and laws therein, including by the
14 domestic implementation of those principles and law.

15 And I would suggest that this is colloquially
16 the handshake of humankind that allows for the efficacy
17 of international law which is arguably the cornerstone
18 of our civilization. And without those good faith
19 obligations being realized and without those good faith
20 obligations being respected we are all in a much more
21 precarious place as a global order. It's a very
22 delicate handshake.

23 Human rights came into their own in an
24 official universal international legal context as a
25 fierce Phoenix arising from the holocaust horrors of

1 World War II in the revelations of an abhorrent
2 widespread genocide.

3 The preamble of the Universal Declaration of
4 Human Rights expounds, "Whereas disregarding contempt
5 for human rights resulted in barbarous acts which have
6 outraged the conscience of mankind and the advent of a
7 world in which human beings shall enjoy freedom of
8 speech, belief, freedom from fear and want has been pro-
9 claimed as the highest aspirations of the common
10 people."

11 And all of that is applicable and transfer-
12 able to the predicament in which we find ourselves
13 regarding our corporate and state violations of human
14 rights in an environmental context. Especially because
15 we're facing such a global catastrophic situation with
16 emissions causing climate change, et cetera.

17 So Australia's history in this whole process
18 is quite remarkable given that we are such, I guess, a
19 small nation relatively and according to population in
20 the sense that Australia was instrumental in the
21 drafting of the International Declaration Universal
22 Human Rights. In fact we had one of the eight member
23 drafting party.

24 That drafting party was chaired and supervised
25 by Eleanor Roosevelt and it basically formulated a blue

1 print for an architectural dignity tolerance and
2 inclusive plurality amongst the multi-rational, multi-
3 ethnic, multi-cultural, multi-political, multi-sex,
4 multi-gender, multi-ability, multi-indigenous
5 kaleidoscopic expressions of humanity.

6 And our delegate, Australia's delegate there,
7 Colonel Roy William Hodgson, was a survivor of the Anzac
8 Gallipoli historical movement and incident in the First
9 World War and he went on to become an international
10 diplomat. At the same time Australia did also have a
11 foreign minister who became the third president of the
12 UN General Assembly and oversaw the adoption of the
13 Universal Declaration Of Human Rights on the 10th of
14 December, 1948. We have the 70th anniversary this
15 year.

16 And I saw all of that because I believe very
17 strongly that Australia bears a significant
18 responsibility in upholding that delicate handshake of
19 which I spoke. We are now on the UN Human Rights
20 Council from the 1st of January this year. We were
21 elected in October last year and yet we are absolutely
22 have a very deplorable and despicable record in terms of
23 the failing to uphold our obligations to the
24 international community.

25 Now I'll spend a lot of my time drawing those

1 contrasts and distinctions and highlighting them as well
2 and also painting a positive way in which we can easily
3 rectify those issues.

4 So I think that also is worth pointing out the
5 competitive false dichotomies around conservative ideas
6 of what human rights are or are not or who they belong
7 to and whom they do not.

8 There appears to be a profound misconception,
9 especially these days, of rising near liberalism,
10 nationalism, militarism and anti-rights groups that
11 human rights are somehow a finite resource. Whereas
12 actually the fountain of human rights is an infinite
13 spring. It flows freely for every one by virtue of the
14 fact of being human.

15 And a meme I saw the other day on instagram
16 and we're seeing on digital media I thought I might cite
17 it which said "Equal rights for others does not mean
18 less rights for you. It's not pi."

19 So I might jump forward, just noticing time.
20 Now Australia, unfortunately, holds the unenviable
21 position of being the only western liberal democracy and
22 common law legal system without a Bill of Rights or any
23 Human Rights Act. We have had four decades now of UN
24 treaty bodies, special rapporteurs, heads of UN member
25 states, recommending that Australia implement its

1 outstanding international obligations by way of a Human
2 Rights Act or an International Bill Of Rights. And all
3 of those cause have gone ignored.

4 Unfortunately, when the constitutional framers
5 were meeting in the 1890s they had a number of
6 conventions. And they were very enamored with the
7 American model of constitutional law but also felt a
8 loyalty to the United Kingdom and the way that was
9 constituted. So they kind of borrowed from both. But
10 whilst there were a number of advocates for a Bill of
11 Rights it was rejected because it was considered that
12 rights protections, like due process of law, may
13 interfere with laws made to the detriment of racial
14 minorities, including immigration laws and those laws
15 prohibiting chinese people from working in the gold
16 fields.

17 So it had started out as a racially
18 discriminatory motivation to not have a Bill of Rights.
19 And our constitution, very sadly, remains one of the
20 only liberal democracies with an actively racist
21 constitution which does not uphold any stipulations or
22 protections even for basic quality, which is absolutely
23 remarkable in this day and age.

24 As an international human rights law expert
25 professor Ben Saul put it, "A Bill of Rights was

1 rejected during the drafting of the constitution because
2 it was said that elected parliaments would never violate
3 rights as long as you were white."

4 Now Australia, as I said, is a signatory and
5 has ratified the seven core International Human Rights
6 Treaties being the International Covenant On Civil And
7 Political Rights, the Economic Covenant On Economic And
8 Social And Cultural Rights, both of 1966 and we signed
9 that on the 10th December 1972, and ratified in the
10 subsequent years.

11 We've also ratified the 1963 International
12 Convention of Malaysia on all forms of racial
13 discrimination. The 1984 Convention against torture and
14 other cruel, inhuman or degrading treatment or
15 punishment. The 1981 Convention on the elimination of
16 all forms of discrimination against woman. The 1989
17 Convention on the rights of the child and a 2006
18 Convention on rights of persons with disability.

19 As I stated before since our first periodic
20 report, and this all became very live and illustrated
21 during our First Universal Periodic Review in January of
22 2011 and also the Second Universal Periodic Review in
23 November 2015 that Australia has had, as I said, four
24 decades of UN bodies basically saying why haven't you
25 promptly implemented your outstanding international

1 obligations.

2 So I'm going to jump forward a little bit
3 again and just talk about our special rapporteurs with
4 regards to Australia, have criticized Australia's lack
5 of constitutional and legislature human rights
6 enforcement mechanisms as follows.

7 We in 2000 -- and this is just a
8 non-exhaustive list of examples. In 2006 we had the
9 report of the Special Rapporteur on Human Rights
10 Compliance while encountering terrorism, again,
11 recommending Australia's ongoing failure of domestic
12 implementation remains a significant concern of the
13 Human Right Committee.

14 And the special rapporteur urged Australia to
15 enact federal legislation implementing the ICCPR. So we
16 haven't even complied with implementing the ICCPR which
17 is, I would suggest, significantly embarrassing for a
18 country who now advocated so fiercely to be on the
19 United Nations Human Rights Council.

20 2007 a Special Rapporteur on Adequate Housing
21 said the same thing. 2009 the former UN Special
22 Rapporteur On Indigenous People, James Anaya, visited
23 remote indigenous communities and also found Australian
24 breach and those remote indigenous communities are
25 affected by fracking directly.

1 Former Prime Minister Tony Abbott's response
2 then, and this is symbolic of Australia's general
3 demeanor when it comes to selective aspects of the
4 international order was, "This is the kind of nonsense
5 we are used to from these armchair critics."

6 I think he should get a life. I think
7 factually and objectively James and I probably visited
8 more indigenous communities than Tony Abbott ever did.

9 2010 the Special Rapporteur on Health
10 recommended Australia constitutionally enshrine rights
11 encompassed in all of those outstanding treaties and
12 make them directly distributable.

13 And in March 2015 the Special Rapporteur On
14 Torture found Australia in breach of the torture
15 convention which was absolutely unprecedented and that
16 was due to Australia's treatment of asylum seekers in
17 off-shore detention centers and Nauru and Manus Island.

18 November 2016 the Special Rapporteur On The
19 Rights Of Migrants also found similarly and recommended
20 a federal human rights framework be implemented post-
21 haste.

22 And the Special Rapporteur On Violence Against
23 Women in March last year and in April last year the UN
24 Special Rapporteur On The Rights Of Indigenous People,
25 Victoria Tauli-Corpuz, also made similar and broader

1 criticism, specifically with regard to the rights on
2 indigenous peoples. And then earlier this year, 2018,
3 the Report Of The Special Rapporteur on the Situation Of
4 Human Rights Defenders and that is the French jurist
5 Michelle Frost.

6 Now I had a number of clients who were -- had
7 cases against the fracking industry and fracking
8 companies in particular and we were doing advocacy on
9 that. And I had quite a large number of environmental
10 advocates and communities advocates like Shay, like
11 Geralyn, met with Michelle Frost to talk about the
12 significant problem.

13 So I'm going to jump right ahead and kind of
14 finish up now basically just talking about the rapid
15 expansion of fracking has unfortunately manifested as
16 the headstone of democracy and logical progression of
17 unrestrained corporate power, a systemic indication of
18 government against it's people.

19 And it violates numerous universally accepted
20 human rights as contained in all of those treaties,
21 including the Right To Life, Article 6 of the ICCPR;

22 Article 6 of The Declaration Of Human Rights,
23 The Right To The Enjoyment Of The Highest Attainable
24 Standard of Physical And Mental Health;

25 Article 12 of ISESCO, Article 12 of the

1 Declaration of Human Rights. The new emerging right to
2 a healthy environment which finds its place in the
3 January 2018 framework principles that have been
4 formulated -- framework Principles On Human Rights And
5 The environment by the former Special Rapporteur On The
6 Environment, John Knox.

7 But we also need to think about, perhaps, less
8 direct violations including the Right To Affective Legal
9 Remedy, Article 8 of the Declaration Of Human Rights;

10 The Right To Not Be Arbitrarily Deprived Of
11 Property;

12 Article 17 of the Declaration Of The Right To
13 Self-Determination finds itself in all of those
14 instruments;.

15 The right to the equal protection of the law;.

16 The right for indigenous people to enjoy their
17 own culture and the Declaration Of The Rights Of
18 Indigenous People becomes important there;

19 The right to Safe And Healthy Working
20 Conditions, talking about workers:

21 The Right To An Adequate Standard Of Living,
22 including adequate housing;

23 The Right To Legal Protection Against
24 Arbitrary Or Unlawful Interference With Privacy, Family
25 And Home;

1 The Right To Equal Access To The Public
2 service, Article 25 of the ICCPR.

3 And also it's very important and I'm sure
4 there will be focus on it and I've seen it in the
5 submissions, the 2011 Guiding Principles On Business And
6 Human Rights, rapidly emerging as being a substratum
7 formulations of acceptable standards that through the
8 behavior ever non-state actors, like corporations, are
9 becoming more and more accepted as the standards by
10 which corporations should operate and in fact the
11 framework principles which I'll talk to in my next
12 presentation, endorse and encourage and embody and apply
13 those standards.

14 I think I have gone over my time. I'm pretty
15 much at the end and I just wanted to finish off -- and,
16 sorry, talking about the Guiding Principles On Business
17 And Human Rights, particularly Guiding Principle 25,
18 which stipulates as part of their duty to protect
19 against business related human rights abuse states must
20 take appropriate steps to ensure through judicial,
21 administrative, legislative and other appropriate means,
22 that when such abuses occur within their territory in
23 all jurisdictions those affected have access to
24 affective remedy. And that is what we need, urgently,
25 in Queensland and in Australia.

1 I think might leave it there but all of what
2 I've said will inform our recommendations to the
3 Tribunal in its considerations and deliberations on this
4 petition.

5 Thank you very much.

6 MS. SHAY DOUGALL: Thank you very much for
7 that, Benedict. Thank you.

8 What we'll do now is start our first
9 presentation on the sub-case of Health. I'll just start
10 that presentation now. Share my screen and give Geralyn
11 control. So just bear with me one minute.

12 So now in our first sub-case it is about
13 Health and I would like to introduce Dr. Geralyn
14 McCarron who will be taking this sub-case.

15 Geralyn, over to you.

16 DR. GERALYN MCCARRON: Hello. My name is
17 Geralyn McCarron. I'm a doctor who works in Brisbane.
18 I would like to talk about the sub-case of Health.

19 Health, as we know, is a state of complete
20 physical, mental and social well-being and not nearly
21 the absence of the seeds of infirmity. And the basic
22 requirements for physical good health are clean air,
23 clean water and other food supplies of uncontaminated
24 nutritious food, but physical requirements are not
25 enough. To be healthy one needs mental and social

1 well-being.

2 Through all the sub-cases the impact of the
3 gas industry and the health of vulnerable groups is
4 apparent. As far as back as 2008 in the exploratory
5 phase, physical health impacts have been reported to
6 health authorities in the government here. And these
7 physical health impacts included mostly eye irritations,
8 skin irritations, rashes, headaches, nausea, metallic
9 taste, chest tightness, cough, muscles spasms, severe
10 fatigue, weakness, pins and needles. And these were
11 happening even in small children.

12 At the expense of their own health Australians
13 have spent years embedded in the struggle to protect the
14 land they love or the well-being of generations to come.
15 Some of them have likened their experience to post-
16 traumatic stress disorder but the trauma goes on.

17 And for the first peoples of this country
18 whose connection to country and their responsibility for
19 protecting it is an intrinsic part of who they are. An
20 invasion by the gas industry has devastated it.

21 In this framework in terms of what I would
22 like to do I would like to frame the issue of health in
23 terms of principles to the Australian government's
24 failure to respect, protect and fulfill human life in
25 order to ensure a clean, safe, healthy and sustainable

1 environment.

2 The means they used to do this was through a
3 cultural of no data, no problem. The unconventional gas
4 industry has been allowed rapid unprecedented expansion
5 to Queensland with little regard for the public health
6 consequences.

7 Industry and government failed to establish
8 base lines. Communities have continuously raised
9 concerns regarding impacts on health, both direct and
10 indirect.

11 Public health concerns have been trivialized
12 and ignored by government and industry and to date no
13 formal comprehensive health study have been undertaken
14 to determine impacts of the industry. But despite the
15 lack of specific official data the residents who lived
16 with it know and can demonstrate the impact of the
17 fossil fuel industry.

18 I would just like you to look at this time
19 line. By 2010 complaints of ill health in the heart of
20 the emerging industry were gaining traction in the
21 media. Finally in 2013 the Queensland government
22 produced the only publicly available assessment of
23 health impacts of coal seam gas which was commissioned
24 by the state.

25 In the same year I produced a report

1 documenting the health complaints and critiquing the
2 Queensland really inadequate report and recommended
3 action.

4 By about 2016, Morgan, et al, had recognized
5 the mental health impacts and published research
6 indicating coal and gas concerns were a significant
7 contributors to psychological morbidity.

8 In 2017 Werner, et al, documented increased
9 hospital admission rates for neoplasms and blood immune
10 diseases in coal seam gas areas compared to other study
11 areas in Queensland.

12 And then earlier this year I published a paper
13 using gas industry and acknowledged emissions on
14 Queensland health own data of hospitalization to
15 indicate that there is very possibly a very large public
16 health issue.

17 And then in 2018 also this year Claudio, et
18 al, published a paper looking very closely at the 2013
19 Queensland government report the one that's listed
20 there. It is really important to understand that the
21 Queensland's government report from 2013 had one very
22 important recommendation.

23 That recommendation was to monitor total gas
24 field emissions and the exposure of the community to
25 those emissions. And it's important to understand that

1 in that 2013 report that not only did the government
2 fail to follow-up on that Queensland health
3 recommendations but that the regulator actively blocked
4 that recommendation.

5 So in 2018 Claudio, et al, published a paper
6 looking at the Queensland government 2013 report from
7 the point of view of international best practice health
8 impact assessment methodologies. And what they found was
9 that it failed to meet these international best
10 practices because seven out of nine steps were omitted.

11 Also in 2018, this year, GISERA, which is a
12 government and industry funded research study, they
13 undertook a project to review the state of knowledge
14 about health impacts on coal seam gas, identify the gaps
15 and develop a framework that can be used to design and
16 study.

17 And this report now 13-years after the start
18 of the industry acknowledges that an in-depth health
19 impact study has yet to be conducted in Australia. A
20 coordinated data base of chemicals used by the Australia
21 coal seam gas industry is not currently visible. And
22 inventories of emissions resulting from the extraction
23 process which is VOCs, NORMs, metals and salts are also
24 not available and access on the data owned by industry
25 is restricted.

1 The problem then is what is the difference
2 between alternative truths and straight lies?

3 The significance of the evidence on the time
4 lines is that on the basis of their totally inadequate
5 2013 report the government actively promoted the
6 outright lie that they had comprehensively investigated
7 the health complaints. And on the back of that lie they
8 promoted massive expansion of the coal seam gas industry
9 in Queensland.

10 The expansion of the coal seam gas industry
11 into Auckland, which is a beautiful productive
12 agricultural land which has been the site of yet another
13 type of unconventional gas exploration and it has been
14 the site of various environmental harms caused by LINC
15 Energy's underground coal gasifications. And for years
16 local people have been reporting serious environmental
17 and health harms to people.

18 Just last week LINC Energy was fined a record,
19 for Australia, 4.5 million dollars, with Judge Shanahan
20 saying, that the offending was carried out over seven
21 years and was persistent and in clear breach of its
22 obligations.

23 But one might ask what on earth were the
24 regulators doing for years?

25 The government itself was a partner at the

1 beginning of this project. And although LINC Energy has
2 been fined 4.5 million dollars, no compensation and no
3 rehabilitation is proposed for the landholders in the
4 extensive area of the environmental contamination.

5 Instead, the government, ignoring all pleas to
6 the contrary, has given coal seam gas companies
7 permission to drill hundreds of gas wells into the same
8 coal seam through the contaminated land under Hopeland.

9 It's not just failure, it's willful failure.
10 The government has ignored all evidence on coal seam gas
11 and underground gasification. They also have willfully
12 ignored the industries contribution to the health
13 impacts of climate change.

14 They have also actively sought industry
15 participation in the shale gas development and they did
16 this despite the mounting international evidence of
17 serious adverse health impacts, which includes increased
18 hospitalization for asthma, cardiac, neurological and
19 skin condition, increased incidence of congenital heart
20 defects, increased childhood leukemia, low birth weight
21 and early infant death.

22 Our government has failed to protect human
23 rights of health. There's been a failure of the
24 government to identify the health risks. There's been a
25 failure to assess the health risks in association with

1 impacts on the environment. There's been a failure to
2 properly assess the environmental impact and, therefore,
3 to integrate the environmental assessment with the
4 well-known associated health risks. There's been a
5 failure to monitor and to measure the impact on the
6 health risks. There's been a failure to protect people
7 when people have raised concerns with the government
8 regarding the experience of health risks.

9 The health risks are known from the gas
10 fields. The residents themselves can identify the
11 impacts. So I would like to hand you back to Shay who
12 will show you some visuals.

13 MS. SHAY DOUGALL: Thank you very much,
14 Geralyn. I appreciate that.

15 I thought I would start by showing us a map of
16 Australia with an insert of the shape and size of the
17 State of Oregon. And just to give you some comparison
18 to the next image, which is broadly the same sort of
19 size and shape as the State of Oregon, in the State of
20 Queensland this is our community here. This is where I
21 live. This is a vision from Google Earth and you can
22 see my community of Chinchilla and what you can see
23 there is colored in red is actually the land that is now
24 owned by a coal seam gas company.

25 If we zoom in just a little bit tighter this

1 is a little bit closer view of peoples properties and
2 homes, our community, state forests and also a bit
3 closer view of how much of the land is owned by the coal
4 seam gas industry. No longer owned by individuals,
5 mothers and fathers and families.

6 That is an image of all of the wells that have
7 been drilled into our community today and overlapping
8 the homes and the backyards of families.

9 And that, you can see, scattered through there
10 is a few little red dots that show the acknowledged
11 industry contributions to the atmospheric emissions and
12 the atmospheric toxins that are produced by the
13 industry. They are called the National Pollution
14 Inventory Sources.

15 And this is what the industry admits and
16 acknowledges that they're producing and this is just in
17 one year as emissions into the atmosphere in that
18 particular community there.

19 Now this is an even closer image of just one
20 family's home, that black star there, in a two kilometer
21 radius of their home. Certainly the wells -- but the
22 wells aren't shown in this image. What is shown in this
23 image is the points of emissions that are coming from
24 those infrastructure from the industry but are not
25 accounted for in any of the National Pollutant Inventory

1 Data.

2 And this is what we see when we use a fluro
3 camera forward looking infrared camera to identify these
4 emissions that aren't being counted. They can't be seen
5 by the naked eye but when you look at your fluro camera
6 you can see the see the volume of gases being emitted in
7 a manner that is not monitored, is not measured, not
8 mitigated and certainly not recorded.

9 And when we do our own testing of those
10 emissions that we just showed you footage of this is
11 what we find is coming out of those points of emissions.

12 So what I would like to do is now introduce
13 you to our next speaker which is Dr. Mariann Lloyd-Smith
14 who is going to address the issues of the toxics
15 associated with unconventional gas and the human rights
16 impact.

17 So I'll start sharing my screen and introduce
18 you to Dr. Mariann Lloyd-Smith.

19 DR. MARIANN LLOYD-SMITH: Good morning.
20 And thank you for this opportunity to add to what you
21 have already heard from the National Toxics Network in
22 our testimonies and written submissions which have been
23 provided to you.

24 This time, however, I'd like to speak to you
25 as the Chair of the IPIN Toxic Fracking Working Group.

1 IPIN is a Global Public Interest Network representing
2 many hundreds of NGOs and community organizations across
3 100 countries all committed to achieving a toxic free
4 future.

5 And I'd like to highlight three important
6 chemical issues of global concern related to the
7 unconventional gas industry.

8 Firstly the international failure of the
9 industry to adequately assess the chemicals used and
10 released. The climate induced impacts on the industry's
11 wastes practices and finally the role of unconventional
12 gas and the manufacture of the plastic and the resultant
13 marine plastic wastes. We consider these three issues as
14 seriously impacting on basic human rights, particularly
15 our right to live in a pollution free world.

16 This right was acknowledged by the United
17 Nations Human Rights Commission in 2001 and they
18 established that the fundamental right to life is
19 threatened by exposure to toxic chemicals, hazardous
20 wastes and contaminated drinking water.

21 So, first, the failure to adequately assess
22 the chemical impacts.

23 I'm sure many of you have had governments from
24 countries including the UK, US, Australia, New Zealand,
25 South Africa, all regularly claim that the industry's

1 fracking and drilling chemicals have all been fully
2 assessed and government regulators know all the products
3 constituents and all their impacts.

4 This claim is naive at best and dishonest at
5 worst. You may have heard in my earlier testimony of the
6 significant failures of the Australian's government
7 assessment of fracking chemicals. The situation is
8 similar across all of OECD countries.

9 Much of the information on the potential
10 environmental impacts of unconventional gas chemicals
11 has still not been generated and what is available much
12 is protected under confidentiality regimes.

13 Governments and industries have not evaluated
14 the impacts of hydraulic fracturing mixtures,
15 particularly their long term effects, nor their
16 interactions with each other or with the natural
17 contaminants of the coal and shale seams.

18 As it was put so well by one chemical
19 regulator attending an OECD workshop for those
20 responsible for the assessment of the industries
21 chemicals, and I quote, "We do not have adequate
22 information to undertake even the most basic hazard and
23 exposure assessment."

24 A couples of years ago when I was
25 participating in a debate over access to information on

1 fracking chemicals organized by the OECD representatives
2 of Halliburton, our major producer as you know of the
3 industry's chemicals products, repeatedly told the
4 audience that the full information on product
5 constituents would not be provided as this was their
6 confidential commercial business information.

7 Commercial confidentially regimes exist in all
8 countries, and while they may vary according to domestic
9 law, the overwhelming protection they gave for the
10 secrecy of product details appears universal.

11 Nevertheless, we are aware that fracking and
12 drilling products can include persistent
13 bio-accumulative toxins, for example flurocarbons
14 surfactants, bromiate herbicides and chlorinated
15 paraffins used in drilling.

16 Fluronated chemicals, often nicknamed for
17 every chemical, are extremely persistent and some simply
18 never breakdown.

19 These very persistent chemicals interact with
20 each other and with the natural chemicals in coal and
21 shale seams forming a range of very toxic persistent
22 by-products, some of which are recognized ozone
23 depleters.

24 For example, dichlorodifluoromethane or
25 trichorotrifluoromethae, which is often called Freon 11,

1 it has some of the highest ozone depletion potential.

2 Many of the Freon chemicals that are already
3 banned for use under the Montreal Protocol but continue
4 to be released unabated by the industry.

5 We have measured them in flow back at the well
6 head and, as you know and as you've seen from Shay's
7 presentation and Geralyn's, volatile and semi-volatile
8 toxic compounds have been detected in the air, water and
9 urine of surrounding communities.

10 There remains significant data gaps about the
11 complete range of product constituents, their
12 interactions, their environmental fate, their
13 eco-toxicity, their long term impact on human health and
14 the environment. And, hence, any attempt at risk
15 assessment for this industry is bound to fail as it
16 simply cannot evaluate the full impacts of the
17 industry's toxic footprint.

18 The impact of this on a child's right to clean
19 water and to live in a pollution free world are simply
20 incalculable.

21 Now I know most of you are aware of the impact
22 the industry has on climate change through its
23 considerable release of methane. Few are aware that
24 climate change also can impact on the industry's toxic
25 footprint.

1 Climate change is altering emissions to air of
2 the persistent pollutants by changing their rate of
3 mobilization from materials stockpiles or even the waste
4 water ponds.

5 The higher temperatures and changes in weather
6 pattern are also remobilizing historical contaminants
7 and altering the distributions through long range
8 transport.

9 Climate change impacts are altering the
10 degradation, bio-availability and even toxicity of
11 chemicals.

12 For example, increases in water temperature
13 have shown to increase the toxicity to aquatic species
14 of commonly used chemicals while changes in water
15 acidity have been shown to affect the bio-accumulation
16 of toxins in fish.

17 Yet none of these impacts are being addressed
18 by the unconventional gas industry or their regulators.
19 The use of extensive holding ponds for waste water, the
20 burying of contaminated drilling waste in situ, the
21 creation of massive contaminated salt stockpiles and the
22 ongoing release of thousands of tons of volatile organic
23 compounds into the atmosphere are all practices that
24 will be affected by increasing climate change.

25 For an industry generating significance

1 amounts of chemical wastes, which it is currently unable
2 to manage, ongoing climate change represents some very
3 serious challenges and some very serious risks.

4 So finally we are deeply concerned about the
5 rapidly growing use of shale gas for the production of
6 plastic and resultant plastic wastes.

7 The impacts on vulnerable communities of the
8 ever increasing amounts of plastic waste contamination
9 is simply devastating.

10 Natural gas is now the primary source of
11 chemicals for plastic production in both North America
12 and in the Middle East. The ethane is used to make
13 ethylene, which is a feed stock for polyethylene, for
14 PVC, for PET and for polystyrene, while the propane is
15 used to make propylene and ultimately polypropylene.

16 The shale and gas boom in the US has made
17 these plastic feed stocks extremely cheap driving
18 investment at increasing production.

19 The US industry is planning to invest over 164
20 billion by 2023 with many new ethane crackers designed
21 and built specifically to produce ethylene from fracked
22 ethane.

23 With the over abundance supply of shale gas
24 analysts expect the production capacity and demands to
25 increase by one-third in the next five years. This

1 increased plastic production comes at a time when the
2 global community has recognized the serious and, in some
3 cases, irreversible impacts of plastic pollution across
4 the world.

5 Communities and countries are rapidly becoming
6 aware of the devastating environmental degradation from
7 plastic and their associated toxic chemicals and as
8 considerations for the new international treaty to
9 address marine plastics progress, it has highlighted the
10 human rights impacts on vulnerable populations,
11 particularly those dependent on the marine environment
12 for their only source of protein.

13 We believe the unconventional gas industry can
14 no longer be allowed to remain silent about its part in
15 this rapidly expanding catastrophe.

16 So to conclude we're only just beginning to
17 understand the full implications of the toxic footprint
18 of the unconventional gas industry and we can only hope
19 that we are in time to respond to effectively and to
20 stop the industry's global pollution of our air, soil
21 and water.

22 So thank you very much for listening.

23 MS. SHAY DOUGALL: Thank you very much,
24 Mariann. That was excellent. I appreciate your input.

25 What we'll do is now move straight into the

1 presentation on the second sub-case which I'll start the
2 power point for you now.

3 This second sub-case is on Infrastructure. So
4 this is our sub-case and the evidence. And the summary
5 of that evidence that we'd like to provide the judges
6 based on our second sub-case which is on Infrastructure.

7 My name is Shay Dougall and the basis of our
8 information and the evidence that we've provided in
9 testimony already identifies that the vast
10 infrastructure and the way it has popped up across the
11 landscape industrializing the rural community has
12 adverse physical and economic impacts on property and
13 property values attributable to the activities and
14 exposures associated with unconventional gas.

15 So what are we talking about as far as
16 infrastructure goes?

17 Well, there is a starter list that is just a
18 basic outline of some of the infrastructure including
19 the arbitrary applications of the tenements,
20 prefabricated cement, ponds, infield compressing, waste
21 water trucks but, anyway, this is a list that is much
22 better told in pictures.

23 So what you see here is that people are not
24 even a consideration in the arbitrary application of the
25 tenements. So when the government leases out whole

1 sections of the country to multinational gas companies
2 they do so in arbitrary shapes like you see on this side
3 of the screen.

4 But on this side of the screen what is
5 underneath that is actually peoples homes and the
6 cadastral boundaries of their property. So there's
7 absolutely no consideration given from the get-go as to
8 the people who are underneath this business deal that
9 has been rolled across the landscape.

10 This is a view of that same area but with the
11 overlaying the industry's infrastructure, the big parts
12 of the infrastructure and their names.

13 This is the view from -- as a landholder who
14 lives in that area exactly what's going on there. What
15 used to be basic moms and dads and farms is now
16 scattered with -- the country is now owned by CSG
17 companies and pockmarked by wealth.

18 Now if we zoom even closer you can see this is
19 a very good model that is produced actually by Jazeera
20 in their most recent report and it's very useful in that
21 it really clearly identifies the massive impact when we
22 zoom in from a broad view down into the view from the
23 ground just what this industry does to one particular
24 area.

25 And if you look at that image there's a vast

1 impact from the sky to the air, to the ground, to the
2 water, to the underground. It's absolutely intense and
3 the only thing missing from that image is the families.

4 We zoom in even closer and this is some one's
5 property. This is an example of some other
6 infrastructure. This is a prefabricated cement roadway
7 in what is supposed to be a farmers grazing paddock.

8 That previous picture is actually specifically
9 taken from this image of what the industry has of that
10 person's property. So the person who owned that
11 property this is how the industry sees his property. No
12 longer his home. No longer his business. Now simply
13 industry's dash for gas.

14 And this is someone's home. This is more
15 infrastructure being installed.

16 This is actually a public road. And this is
17 another example of the government -- of the industry
18 taking advantage of the entire area becoming their work
19 place, their lay-down yard. This is a public road. It
20 used to be my kids' bus stop. Apparently on that day it
21 didn't matter.

22 This is an example of a multiple-pad gas
23 well. More infrastructure.

24 This is an example of the type of things that
25 are in peoples' backyards.

1 This is an example of the vents, uncontrolled,
2 unmitigated, unreported in peoples' backyards, in their
3 businesses. More the industry's infrastructure.

4 The core infrastructure has leaks and spills,
5 which we also need to deal with, and you can see the
6 boundary fence on that particular piece of
7 infrastructure isn't doing a lot to contain the leak.

8 And then there's the impact that
9 infrastructure has on the night's sky.

10 And that, of course, there is the massive high
11 voltage powerlines that are installed for the sole and
12 express use of the industry. It's not a public asset.

13 And then there's all the trauma that goes into
14 actually having those things rolled out across peoples'
15 homes.

16 And then there's the massive exporting
17 facilities that they're wanting to roll up and down the
18 coast of the entire country of Australia.

19 And then, of course, once you take into
20 account all of the industry's infrastructure, of course,
21 the farmers' infrastrucure is no longer useful and is
22 destroyed.

23 There is a photo of a kicking gas bore that is
24 kicking farmers stock and domestic water bore that is
25 now producing so much gas that the gas lifts what's left

1 of the water.

2 Basically in this particular sub-case we
3 address the framework principle No. 8 where the
4 government has actually, our evidence proves, that the
5 government has undertaken or authorized actions with
6 environmental impacts that we've just shown you, that
7 interfere with the full enjoyment of human rights.

8 The government has not required prior
9 assessment of the possible environmental impacts of
10 these projects and their policies including their
11 potential affect on the enjoyment of human rights.

12 How could it possibly have been when you look
13 at those images?

14 Principle No. 12, however, also shows that the
15 government has not ensured that the effective
16 enforcement of their own environmental standards are
17 undertaken against public and private actors.

18 That evidence also shows that, under Principle
19 10, that the government has not provided for access to
20 effective remedies for violations of these human rights
21 and domestic laws relating to the environment.

22 So as this infrastructure is rolled out and as
23 impacts of the infrastructure is born by the landholders
24 there is no remedy.

25 So that is the end of our presentation on

1 Infrastructures, our sub-case of Infrastructure. And
2 what I'll do now is just move on to the next
3 presentation if that's all right.

4 Okay. So this third sub-case that we're
5 addressed the evidence we've provided is based on the
6 Climate Change And Environmental Impacts Of The
7 Industry.

8 So the Environment Climate Change sub-case is
9 addressed -- we address the Principles 1, 11 and 16.
10 And basically what we're talking about here is the scale
11 of the industry.

12 The scale of this industry and its footprint
13 as we talked about in that very first picture I showed
14 you that shows the vast big business across Australia of
15 this industry as it rolls -- the footprint rolling
16 across ground water, dependent eco-system, agricultural
17 land, peoples homes, does not -- it can not ensure a
18 safe clean, healthy and sustainable environment.

19 And it's anything but a precautionary approach
20 that's being taken for this industry in Australia. The
21 technology is novel. It's not yet standardized. It's
22 poorly understood. There's uncertainty about the
23 consequences and, what's worse, is that the worst case
24 potential for harm is enormous and on the scale that
25 it's planned it's so large that the cumulative impacts

1 aren't even part of the permitting process.

2 So surely this is the very definition of human
3 rights and how it impacts. The government has made
4 these choices deliberately. They have decided to choose
5 fossil fuels over renewables. They've chosen to create
6 a gas industry. They've legislated that a portion of
7 electricity must be made from gas. And the governments
8 were so led by their desire of multi-nationals instead
9 of the good of the country that they've dashed to create
10 an export industry they've destroyed the supply and
11 demands basis completely for the product that they had
12 previously legislated must be used.

13 Exporting not only the gas but what
14 Australia's government is exporting the damage as well.
15 So there is such a thing as Australian companies
16 inflicting human rights impacts in this industry in
17 other countries, in particular in Latin America.

18 We have evidence provided to us from Latin
19 America that shows a previous company from Australia who
20 were responsible for the damage done to the Pilliaga
21 State Forest. That managing director is now in control
22 of a company who is working Uruguay.

23 And they are undertaking this activity and
24 putting at risk the major aquifer in Uruguay which is
25 one of the largest underground drinking water reserves

1 in the world. So we' managing to export the damage as
2 well, which is bringing into hilighting the issues
3 associated with the guiding principles of business and
4 human rights.

5 The environmental impact on large scale
6 developments with a extensive kettle of environmental
7 impacts and now evidence describes all the environmental
8 impacts as can be seen here.

9 And the environmental impacts, the planned
10 scale and the scope of the development in itself makes
11 the whole question of impacts really complex. The
12 projects are only licensed on a piece meal method but
13 the cumulative impacts are not even potentially
14 predicted and they may even be worse than you could even
15 imagine given that it's the environmental system is
16 subject to this sort of disturbance on such a massive
17 scale.

18 Also we've already identified in our evidence
19 and in the first sub-case of Health that the fugitive
20 emissions of this industry, along with the ones that are
21 actually acknowledged, doesn't mean that this -- proves
22 that this industry does not wash up as the spin
23 indicates as being cleaner than coal.

24 The scientific literature tells us that people
25 are already dying from climate change. So this is

1 actually a legal and moral question that climate change
2 that this industry is contributing to should it go
3 ahead.

4 Governments and industries are already being
5 sued for their contribution to this. And we already
6 know we have to leave at least the current -- we can not
7 start opening up new areas of fossil fuel by any level
8 of now of commitments from the Paris Agreement.

9 We're supposed to love our neighbor.
10 Australia's been called out by our neighbors for turning
11 our back on those who would be the first affected by the
12 impacts of climate change who have been affected now.
13 And here we are in this ever expanding CSG industry.

14 Then the climate change capsules are
15 attributable in the evidence that we've provided such
16 that there is a current and increasing threat posed by
17 these climate change conditions that means that they
18 will exceed the human capacity to deal with heat stress.

19 And in Australia, particularly in the Northern
20 Territory particularly, we're looking at a situation
21 where they are already very vulnerable to heat stress.
22 Any changes in climate change will be a huge impact in
23 that area and yet here it is and our government has
24 chosen just last month to raise the moratorium on
25 fracking.

1 So even if the government was to convince us
2 that their concerns regarding climate change were
3 meeting the community's concerns and they referred us to
4 their environmental impact statements as proof of the
5 rigor in which industry was held, well, they would still
6 fail.

7 Simone Marsh shares some extraordinary
8 evidence to the Tribunal regarding her submissions
9 identifying the lack of baseline data, lack of
10 scientific rigor, star chamber protective behavior
11 undertaken within the government in the industry all of
12 which, of course, brings up the fatally flawed adaptive
13 management mantra that the government hangs its hat on
14 that gives this industry permission to continue to be
15 rolled out.

16 But the environmental impact assessments
17 address only individual projects as I've already said,
18 they're missing the cumulative impacts.

19 Also ecologically speaking our evidence also
20 provides to the Tribunal shows that these approvals were
21 awarded to the industry without prior adequate
22 acknowledge of the ecological impacts on terrestrial,
23 ground water, marine environments. There are serious
24 flow-on consequences to these.

25 So what it is saying is what's it going to

1 take for our government to hear. The government's
2 continued response to anything that is raised as far as
3 concerns in requiring them to have a response that is
4 reasonable is continued denial and bloody-minded
5 ignorance.

6 So that's the end of that evidence load
7 regarding the sub-case No. 3. There's only two more
8 quick sub-cases left. So I'll move on now to the next
9 sub-case. And it will just take me a moment and at the
10 end of those two sub-cases there is time for questions.

11 So this sub-case, this presentation, is about
12 the evidence that we've provided the Tribunal on the
13 sub-case about Participation In Government.

14 In this case we looked at Principles No. 4, 5,
15 7 and 9 basically that the government does not provide a
16 safe and enabling environment in which we can operate
17 free from threats, harassment, intimidation and violence
18 in expressing our concerns for our human rights.

19 Our government did not expect them to protect
20 the rights of freedom of expression, peaceful assembly
21 in relation to environmental matters. The government
22 has not provided public access to environmental
23 information by providing affordable effective and timely
24 access to information upon request. And the government
25 has provided for and facilitated public participation in

1 decision making related to the environment and the
2 decision making process of this industry.

3 And taken from Benedict and the Australian
4 human lawyers example of what they've described is
5 really crystal clear. Our government is supposed to
6 protect against human rights abuses within our country.
7 This requires taking adequate steps to prevent,
8 investigate, punish and redress any abuses through
9 effective policies, legislation, regulations and
10 adjudication.

11 This is a significant failure of the
12 Australian government in relation to this industry.
13 They have not ensured that our human rights are
14 incorporated into the judicially enforceable
15 legislation. They haven't backed that up with
16 comprehensive implementation of policy and that's
17 enabled this GCS industry to manipulate the decisions
18 making process and the outcomes in the manner that basic
19 human rights have been ignored. Also their breaches have
20 been subject to inadequate corrective measures.

21 And the importance and the impartiality and
22 accountability in the management of this government's
23 resources is really hard to overstate particularly
24 in this case.

25 Mining licenses represent the largest transfer

1 of assets from the public to private hands where mining
2 companies stand to gain hundreds of millions of dollars
3 from any simple decisions that our government makes to
4 allow mining and gas field to go ahead. And that happens
5 with no public representation in that decision-making
6 process but we get to suffer through the negative and
7 economic impacts and on the non-mining industries, the
8 communities and the environment.

9 These impacts are devastating and they're not
10 certainly accounted for in any way that is appropriate,
11 either by the legislation, by the government or by the
12 industry.

13 This is what is at the heart of the
14 fundamental failure of our government to us, it's
15 people. They have failed in their duty to protect and
16 represent and facilitate public participation.

17 They have deliberately and relentlessly
18 pursued the creation of the gas industry, the removal of
19 red and green tape, the rejection of anything about the
20 proportionary approach and they avoid investing in
21 alternative energy industry.

22 The evidence we've provided this Tribunal has
23 been available at every single level of the
24 participatory process within our government. There's
25 been legislative bias. We've provided evidence of the

1 number of inquiries that we've had in this country and
2 that the outcomes have been clearly ignoring the will of
3 the people. The lack of the right to say no. The
4 lobbying and the revolving door. There's been
5 regulatory failures. There's devastating failure in the
6 compensation arrangements.

7 The right to information is awful as well.
8 There's unconscionable conduct demonstrable in the
9 industry and the individuals. They've failed to
10 investigate incidents. They failed to adequately
11 prepare for the industry potential emergencies in the
12 community. And the burden of proof of having any impact
13 rests with individuals and the anti-protest laws.

14 The government inquiries that I alluded to you
15 only have to look at the number of inquiries that have
16 been held into this one industry across Australia and
17 see the same outcome time and time again and realize
18 that the government is not listening to the people.

19 You only need to read the government's own
20 submissions to see the dismissive attitude that
21 ministers and senators have on the issue of public
22 opinion.

23 This slide just shows, in one simple view, the
24 number of inquiries that have been had. One of those
25 particular inquiries was the right of the inquiry into

1 the bill for landholders in Australia to have a right to
2 refuse gas and coal. This is a perfect example of the
3 people requesting the right to protect our lands and our
4 homes if the government was not going to do it.

5 So the insulting result of that bill was an
6 outrageously slippery maneuver on behalf of the
7 committee responsible for that inquiry. They reneged on
8 a technicality. They went to a lot of trouble to say
9 that, yes, sir, we do support the principle that an
10 agricultural landholders should have the right to
11 determine who can enter and undertake gas mining on
12 their priority. But we see all sorts of problems with
13 the details in the bill.

14 So instead of coming up with recommendations
15 or examples of fully participating in a meaningful
16 engaged discussion the committee's report, the one and
17 only recommendation was, we recommend that they don't
18 pass the bill, the end.

19 We provided evidence as well that, you know,
20 the government has focused on this industry to the
21 detriment to any alternative industry. And a really
22 disturbing aspect of this lack of participation that we
23 provided evidence about has been the rampant and out of
24 control cozy relationship that is between senior
25 government representatives, not just in the ministry

1 but, also in the important depths responsible for
2 enforcing and the industry. It's completely at odds
3 with the fundamental principle that all interested
4 parties get to be treated equally in the decision
5 making.

6 There's been regular untruthfulness and we've
7 identified it in previous sub-cases. These projects
8 have been pushed through with broad regulatory tools,
9 multiple land use frameworks legislation, broad lengthy
10 and inconsistent conditioning, all of which means
11 cumulative impact isn't considered and the public
12 ultimately is prevented from participating in the
13 decision making.

14 Very specific evidence we have provided about
15 the combating compensation agreement which is a really
16 significant abuse of human rights. The government
17 licenses the industry to get the gas off of peoples own
18 private property. These multi-national companies access
19 our private properties and put infrastructure in their
20 place.

21 The government refuses to give us permission
22 to deny them access, forces us to the table to negotiate
23 a compensation process that is constrained to a limited
24 pool to a number of issues that certainly don't have any
25 way close to representing the realities of what the real

1 impacts are.

2 The government forces individuals to deal with
3 these multi-national companies and sign the contracts
4 giving access.

5 The government gives each of these individuals
6 no assistance. They leave them to enter into these long
7 term contracts with no information, no rights and no
8 data.

9 But the government does draft a sample
10 contract for use in this process and, of course, that
11 sample contract is heavily biased in the favor of the
12 multi-national gas companies.

13 The problem with this is, again, one of those
14 framework principles that should be a fair and balanced
15 approach to land use access and compensation.

16 Well, we've provided evidence requiring the
17 contract to be signed does that mean that there is an
18 agreement. There is lack of requirement for the
19 companies to disclose information that is really
20 important to the individual expected to live with it.

21 The contract requires individual to provide
22 full disclosure about their plans for their own
23 property. It lacks any helpful information to provide
24 individuals about what types of additional conduct
25 requirements that might be useful for them to demand

1 from the company which is, again, advantageous to the
2 company.

3 These contracts encourage confidentiality
4 which is not in the best the interest of the individual
5 but certainly works for the tactic of dividing
6 communities.

7 We have provided evidence that shows that
8 these contracts fail to even encourage basic payment
9 terms regarding implications of when the industry
10 doesn't pay the individual.

11 It places an undue burden on the landholder to
12 protect the company's infrastructure and it proves that
13 the government knows about the poor insurance agreements
14 that exist and enshrines that poor arrangement into
15 these contractual clauses.

16 So basically their right to information is
17 non-existent. The landholder gets access to a handful
18 of information that is industry-centric and propaganda
19 and that's prior to being expected to sign this long
20 term contract for access and impacts to your life and
21 your property.

22 And I'll show you on the next slide the type
23 of documentation that you should really be requesting as
24 an individual from these companies just to begin to
25 understand what the real impact to you and your property

1 will be. And this suite of documents are not listed
2 anywhere. It's something that the individual is
3 required to identify and specifically request.

4 And then, of course, the company has to be
5 relentlessly pursued to get that documentation. And, of
6 course, if you ever do get it as a normal person you
7 then need to understand it.

8 So here's your example of the framework
9 principle requiring easy, prompt, effective and
10 practical access to information.

11 We provide evidence that shows that while the
12 gas company -- and this is one particular example -- the
13 gas company is pursuing a landholder, I personally dealt
14 with this, for access and an alternative arrangement.

15 The landholder requested a copy of the current
16 plan of operations, any pre-clearance surveys,
17 environmental reports listing non-compliances, any
18 emergency procedures, very reasonable things; noise
19 modeling, emissions modeling, risk assessments relating
20 to the current contamination incident you have when
21 you're not having a contamination incident and the
22 concurrent undertaking of CSG activities.

23 And the response from the industry was, yeah,
24 we don't consider it would be useful to get bogged down
25 in reams of paperwork. So, there you go.

1 So, say the landholder does sign this
2 ridiculous contract, well, an individual landholder is
3 then required to undertake their own preparation to
4 prove that there's been an impact in the future.

5 Me, I'm supposed to go out and undertake my
6 own surveys, atmospheric monitoring, water testing, weed
7 auditing, overland flow assessments, all of this, in
8 order to establish my own baseline in order to be able
9 to prove that there's been an impact in the future which
10 is, of course, prohibitive.

11 And not to mention important contributory data
12 is the domain of the companies and the stuff that I'll
13 never have access to. And when I do want to make a
14 complaint I have to make an approved complaint in order
15 for it to be recorded or any action to be taken.

16 We provided evidence that the industry is
17 dealing with individuals on his land they're trying to
18 access but none of this, none of these arrangements
19 consider the impact on neighbors.

20 Alternative arrangements is another completely
21 inconsistent issue in relation to human rights. An
22 alternative arrangement is something that the government
23 has permitted the industry to have access to and
24 effectively means that the industry, if they can get
25 individuals to sign an alternative agreement, they don't

1 need to comply with the legislative environmental
2 authorities.

3 So this is a really slippery slope which
4 enables the industry to breach and those breaches to
5 become the norm. And it's a loophole then for
6 compliance in the future.

7 And, also, as far as individuals are
8 concerned, again, if I don't sign an AAA but everyone
9 else around me does I'm the last man standing. I'm a
10 vexatious landholder because no one else is complaining.

11 Of course the anti-protest laws is another
12 example of this government failing in protecting our
13 human rights.

14 So basically, to summarize this particular
15 amount of evidence that we have provided on this
16 sub-case, our government has failed us by not providing
17 and actively avoiding the democratic and judicially
18 supported process to have our rights considered and our
19 concerns addressed and the individual people at the coal
20 face who are expected to host this industry are
21 literally left on their own to navigate this gargantuan
22 prospect of letting the industry into their home.

23 So there's only one sub-case that is left and
24 that is the sub-case on Culture. So it wouldn't take
25 very long either, the summary of that evidence provided

1 there. At the end of that sub-case Benedict will
2 complete his summary of our submission and then there
3 will be sometime for some questions.

4 So this is our last presentation that
5 summarizes the evidence that we have provided on the
6 social and cultural impacts of this industry.

7 In this framework the framework principles we
8 used in this sub-case were Principles 3, 6, 13, 14, and
9 15. And effectively the transformation of the rural
10 landscape into an industrialized gas field profoundly
11 changes the lives of the people who live here.

12 The people threatened by or who suffer losses
13 or injuries from gas field development, they're the one
14 who suffer the symptoms of emotional, economic distress
15 and physical ill health.

16 Those people, though, are not the
17 multi-national gas companies. They are well-funded
18 lobbyists or the politicians of government departments
19 responsible for this industry.

20 The evidence we've provided we gathered on our
21 web site says it all. It speaks of the horrendous
22 impact that this industry has had on the people and this
23 is but a small portion of the other thousands of similar
24 stories happening across this land at kitchen tables
25 everywhere and some that I get phone calls about each

1 week.

2 This evidence is the stuff that never ever
3 seems to be able to be heard over the thin and selfish
4 rhetoric over the industry lobbyists and the
5 government's greed.

6 It's in things like the Social Impact
7 Assessment, and the only one that the government ever
8 did in the ten years of the industry. And in that one
9 particular time they had the chance to do it they made a
10 conscious decision, as they wrote in their own report,
11 not to meet with local landholders and community groups.

12 What this impact on social and culture is
13 about it's the booms and busts. And we've provided the
14 evidence of the impact that that has on communities.

15 The social and cultural impacts include the
16 traditional owners of this land which is really
17 important to note that the effective and genuinely
18 representative involvement in the approval process of
19 the traditional landholders has not occurred and this
20 has a massive and direct impact on them.

21 The social and cultural impacts include
22 insurance impacts. Farmers can't get any insurance
23 product to protect them inches against CSG impacts. And
24 the industry won't insure the farm either.

25 Social and cultural issues are associated with

1 the National Vendor Declaration where the farmer is
2 expected to assure a product that is supplied in an
3 environment that he doesn't have 100% control of.

4 The social and cultural issues and evidence
5 that we have provided are about a change to the very
6 fabric of our community. It's proved by movies that are
7 made and songs that are written. Its impact is shown by
8 the evidence we have provided of the water that bubbles
9 with gas and is taken from the people.

10 So you know the social and cultural impacts of
11 this industry are also in the meetings that we are
12 forced to hold as communities. The submissions that we
13 make over and over and over and again. The time that's stolen
14 from being with our families.

15 It's shown and evidenced by entire change to
16 lexicon that we now have into the development of new
17 terms such as fracktivist, gas flu -- that's we call it
18 when you feel sick in the gas field -- gas hole,
19 sacrifice zone, frackwit, glow worm, land and lying
20 officers, collateral damage which, interestingly, was
21 the term that the industry used to describe us, ecocide,
22 land spraying, intergenerational theft, ecocrime, gas
23 fields refugee, produced water, and coexistence, of
24 course. The social impacts are also in the shocking use
25 of the then blue line by the government to try and

1 contain the thin green align.

2 The documented effects on the people living in
3 close proximity to unconventional gas are multiple and
4 they're listed here and include all of the things that
5 we have discussed and provided evidence for in our
6 testimony. Distress related to concern to our health
7 impacts. Cost associated with environmental damage,
8 increased stress, change to sleep patterns, impacts to
9 health by noise, anxiety, social division,
10 disempowerment, changes to community. Increase in all
11 of the demands but certainly no increase in the
12 infrastructure to cope with it.

13 So basically the summary of our evidence is
14 that it shows that the unconventional gas industry is at
15 the absolute coal face of the infringements on our basic
16 rights and the government fails, at every turn, to set
17 the bar at a standard that even attempts to balance the
18 perceived benefits from royalties and jobs against the
19 obvious intrusion on basically essential human rights
20 and freedoms.

21 As I was saying the documented effects there
22 to be seen in our evidence and our evidence shows that
23 the unconventional gas industry is at the absolute coal
24 face of the infringement on our basic rights. And the
25 government's failed at every turn to set the bar at a

1 standard that even attempts to balance the perceived
2 benefits of royalties and jobs against the obvious
3 intrusion on our basic rights and the essential human
4 rights and freedoms. So we have no rights and we have
5 no remedies.

6 So what is missing is an independent and
7 impartial judiciary, good democratic institutions and
8 democratic processes that are, in themselves, the
9 embodiment of these human rights.

10 I want to thank Tom, Carly and this steering
11 group and all of those behind the scenes. The Global
12 Network For The Study Of Human Rights And The
13 Environment, Environment And Human Rights Advisory,
14 Oregon State University and students in the master's
15 degree and the Spring Creek Project. And I want to
16 think the Permanent Peoples' Tribunal and judges.

17 Thank you for being the first institution in a
18 decade that has listened to those of us impacted by this
19 industry.

20 I would like to now hand it over to Benedict
21 Coyne to close our summary.

22 MR. BENEDICT COYNE: Thank you, Shay, for
23 an incredibly comprehensive assessment and probably the
24 most comprehensive assessment that we've seen in a
25 decade as well. So thank you for all of your hard work

1 on this. And I reiterate Shay's thanks to everyone
2 who's made this possible.

3 From all of the evidence provided in the five
4 sub-cases that Shay has outlined and Dr. McCarron's
5 evidence and Dr. Lloyd-Smith's evidence and all of the
6 evidence provided and available to the Tribunal it is
7 very clear that the fracking industry in Australia and
8 its destructive consequences has been enabled by a
9 perfect storm of democratic dysfunction, comprising from
10 the disproportional political power of the energy lobby
11 left unregulated and unfettered. And the frail corrupt-
12 ability of political regulations as well as the lacunae
13 of scientific evidence and baseline data and ongoing
14 assessments and monitoring to demonstrate how harmful
15 fracking is.

16 As I stated before fracking spotlights the
17 glaring inadequacies of our centuries old legal systems
18 and has seen a remarkable phenomenon of corporate might
19 with wanton disregard for our democratic foundations,
20 thundering even the most sacred creeds of capitalism
21 being private property ownership and the common law
22 right to the quiet enjoyment of your land without
23 arbitrary interference of the state or any non-state
24 actors.

25 I thought I might also, just on that note, in

1 terms of Australia, once again borrowing from the very
2 tainted and stained law books of other jurisdictions and
3 other more powerful jurisdictions, notably the U.S. and
4 the United Kingdom and particularly in regards to
5 policy, the industry's, I guess, emergence was ordained
6 by George W. Bush's passage of the Energy Policy Act of
7 2005 which exempted fracking from the Safe Drinking
8 Water Act of 1974 and the Clean Water Act of 1972. That
9 was also colloquially known as the Halliburton loop hole
10 and Dick Cheney was probably chuffed although, perhaps,
11 he should have been handcuffed.

12 More recently the UK government has even
13 attempted to dilute the ancient law of trespass so
14 companies can frack under peoples homes without consent.
15 And it seems again -- and the reason I say that because
16 the international dimensions, notwithstanding that Shay
17 might be out near Chinchilla and out near Tara and out
18 near all of those areas, make no mistake that the advent
19 and rapid expansion of the destructive consequences of
20 fracking is effecting democracy and human rights
21 globally and the solution needs to be found globally.

22 And, again, that's why we're so pleased and
23 excited and honored that the Permanent Peoples' Tribunal
24 has taken this opportunity to hear this petition.

25 Now the impacts, of course, are well-known and

1 have been provided evidence in all of the sub-cases,
2 especially Shay's incredible and comprehensive
3 presentations and all of the work that she's put in over
4 the past many years and looking at the Health impacts in
5 sub-case 1;

6 Infrastructure impacts sub-case 2;

7 Climate Change Environmental Impact sub-case 3;

8 Participation in Government or lack thereof in
9 sub-case 4;

10 Social and Cultural Impacts in sub-case 5.

11 Then Dr. McCararon's evidence and many, many
12 being years of research in the impacts, significant
13 debilitating impacts on human health and those impacts
14 on local communities and especially the abject failures
15 by governments and the responsible authorities to
16 assess, monitor, measure and protect against the very
17 adverse and sometimes unknown health impacts of all of
18 the constituents and citizens and non-citizens of
19 Australia including, of course, the rights of children
20 the most vulnerable, the rights of women, of course the
21 rights of men, of course the rights of people with
22 disabilities, indigenous people and all of the noted
23 consistently vulnerable populations of demographics that
24 are noted consistently in our International Human Rights
25 Law and certain in all of those documents I outlined.

1 We then, of course, hear from the amazing Dr.
2 Lloyd-Smith on her evidence about the toxic footprint of
3 the industry in terms of its contributions to, I guess,
4 end of pipeline pollutions as well as in terms of
5 plastics and creating a dirty unsustainable toxic
6 international industry whose products, as well as the
7 by-products, as well as the fugitive emissions, are just
8 creating a very significant time -- global time bomb of
9 toxicity.

10 And Dr. Lloyd-Smith also discussed in detail,
11 and coming from an organization that represents
12 concerned communities in some hundred of countries and
13 academics and experts, about the air, soil and water
14 contamination by the fracking industry. And, of course,
15 the blood and urine contamination by this industry.

16 And the most concerning evidence, of course
17 about the significant unknowns. The companies, these
18 multi-national companies have not only turned democracy
19 on its head but they've actually turned the
20 international architecture of International Human Rights
21 Law on its heads in this sense, and even the common law
22 at the heart of the western liberal democratic legal
23 system and the Judeo-Christian, you know, philosophical
24 model that underpins our legal system is this sacrosanct
25 respect for private property of human being and rights

1 of human beings.

2 You can look at the 10 Commandants. You can
3 look at all the different, you know, instruments that
4 formed religions as I talked about them that kind of
5 distillations and developments and evolutions of them
6 down to the present day and how they've formed
7 everything in our kind of existential outlook on planet
8 earth.

9 Human rights have never been attributed to
10 non-human entities. And I'm talking about corporations
11 here. So it seems absolutely remarkable from Dr.
12 Lloyd-Smith's evidence, and particularly that anecdote
13 about Halliburton talking about commercial and
14 confidence that the product rights of corporations are
15 being prioritized very highly over that of human beings
16 when, you know, even if broader human rights are not
17 quite the foundation of our democratic systems and even
18 our modern kind of corporate capitalists systems, the
19 fact that private rights of humans are being sacrificed
20 for the private rights of corporations is hugely
21 concerning and, again, has that very, very potent global
22 impact.

23 So universal fundamental human rights,
24 including the right to safe, clean, healthy and
25 sustainable environment, whether it's expressed in

1 national or international law or in national and sub-
2 national constitutions are often insufficiently brought
3 to bear or protected by standard state based enforcement
4 mechanisms.

5 The failure of states to respect and enforce
6 environment rights can open the door for intervention by
7 non-states actors such as this Tribunal.

8 The decisions and actions by this Tribunal,
9 less influenced by the pressures of national politics
10 and economic interests can robustly articulate and stand
11 up for the environmental human rights standards when
12 states and international bodies fail to do so. This
13 session is replete with evidence as to that.

14 In March of 2016 the Sisters of Mercy
15 delivered a joint statement with Australian landholders
16 at the United Nations Human Rights Council addressed to
17 the Special Rapporteur on Human Rights And The
18 environment stating, "From Australia to the U.S. to
19 Argentina our communities report violations related to a
20 safe, clean, healthy and sustainable environment."

21 In late 2016 the UN Special Rapporteur on the
22 Situation Of Human Rights Defenders visited Australia
23 and met with anti-fracktivists and anti-frack
24 campaigners and community members. I think it's
25 important to note that people aren't anti. People want

1 to protect their communities, their pro-sustainability,
2 their pro-basic health rights. And they condemn the
3 anti-protest legislation that our Shay referred to
4 targeting environmental activists which would contravene
5 Australia's international obligations.

6 I think it's very important on the
7 international context, our platform of international
8 law, that the Tribunal also consider and look further
9 into, and I'm happy to provide a supplementary
10 submissions on this if required, the movement for a
11 codification of the international crime of ecocide to be
12 amended into the 1998 Rome statute on the International
13 Criminal Court.

14 And that has been the subject of quite a big
15 movement in fact, little known about, not really made
16 visible. Perhaps a note for another petition for the
17 Permanent Peoples' Tribunal, who knows. But it's been
18 considered for a long time by the UN and it's been seen
19 as very controversial and it's yet disappearing and
20 keeps kind of coming up and getting a gasp of breath.

21 In September 2016 the International Criminal
22 Court's chief prosecutor issued a policy paper widening
23 the court's remit to focus on environmental crimes.

24 Further action has been taken in the court-
25 rooms of the world but mostly gaining little fruit as

1 anthropocentric legal systems are increasingly proving
2 impotent to the challenges of vast environmental
3 destruction.

4 I also think it's very important to bear in
5 mind whilst everything I say may be considered, perhaps,
6 unnecessarily hyperbolic or even hyperbolic --
7 actually, I would withdraw that and I'll state it as
8 this.

9 Even though the way that I describe what I see
10 happening may be construed as hyperbolic I would
11 encourage the tribunal and the judges, respectfully, to
12 really look beyond this seemingly innocuous pictures of
13 little gas valves and invisible gas and things that you
14 don't see and pictures of the countryside and cross
15 woven tapestries of, you know, gas wells that I think
16 to, in some eyes, and certainly in some non-expert eyes
17 and layperson's eyes may seem innocuous but, the reality
18 is this is a proven deadly industry and it's important
19 that -- and I'll say even though I'm a slime hole in my
20 other life and I, perhaps, have had some tendencies to
21 go into the hyperbolic I would encourage the Tribunal to
22 look at a strict conservative black letter reading of
23 international human rights law and even domestic law
24 which doesn't even engage in international human rights
25 law in Queensland, Australia in many ways.

1 And that, even of itself, even in the
2 strictest most conservative black letter reading of the
3 law all of the sub-cases, evidence of flagrant breaches
4 of the rule of law and of democratic, you know,
5 principles. So in that regard the movement against the
6 fracking industry represents a veritable final frontier
7 and fight to save the integrity of our democracies from
8 the clutches of unrelated corporate power.

9 One could perhaps describe it as a lawless
10 lacunae or a gas land Guantanamo where the dismissive
11 attitudes of politicians and government representatives
12 that Shay described have really put us in this no
13 person's land of lawlessness.

14 The rule of law doesn't seem to need to be
15 considered. They have all of these kind of pantomime
16 inquiries after the fact usually and, you know,
17 thankfully in some of the states and territories we've
18 had success in upholding those moratoriums but those
19 moratoriums are very, very, fragile and are delicately
20 in place.

21 So, I mean, it may even be the case and it's
22 always easy to look back on history as we learn from
23 history that the governments have already sold out
24 democracy to the highest bidder and lost control. It
25 certainly seems like that from the evidence.

1 And if that is the case then it's time to put
2 all of this evidence on the record, which is why we're
3 here, and it's time for people, community members,
4 community advocates, everyone, to wrestle back control.

5 We've all heard the term and the adage power
6 corrupts. Absolutely. As much as we might want to love
7 and trust all of our political representatives,
8 unfortunately, there is a well-established historical
9 fact that concentrations of power in a ruling of late
10 without regulation tends to result in corruption,
11 nepotism and human rights violations, even in Australia
12 and Queensland as detailed in the evidence provided.

13 Politics, it has been said is "The arena where
14 conscience and power meets and will be meeting until the
15 end of time."

16 However it has been noted that "Conscience so
17 often fails poorly in such encounters." That we
18 celebrate the occasion where power is more than a tip of
19 the hat, such as drafting the adoption of the Universal
20 Declaration Of Human Rights and all of the international
21 human rights laws that have emanated from there.

22 While it's easy to be cynical and dismissive
23 of the UN as not having any teeth or not, you know,
24 being able to encourage and influence governments I
25 think it's important to note that even having that

1 consensus there were 48 nations that adopted the
2 Declaration Of Human Rights in 1948 and there were 56
3 nations in the "international community" at the time.
4 Eight abstentions. No one voted against.

5 Fast forward many years to 1993 and the Vienna
6 Conference on Human Rights passed the Vienna Declaration
7 Program Of Action which was endorsed by over 170 nations
8 reaffirming the Principles of the Universal Declaration
9 of Human Rights.

10 So there's absolutely this kind of very, very
11 stark duality between the aspirations of human kind for
12 a better world and then the kind of vulnerabilities of
13 human nature to greed and corruption and those kind of
14 things.

15 So democracy is not a static state. It is a
16 continuum of socio-political interaction requiring
17 constant vigilance by civil society to ensure that the
18 lines of acceptable civil power are properly and
19 responsibly held and discharged by the executive,
20 legislative and judicial arms of government.

21 Human rights are exactly the same. Rights
22 exist and arise infinitely and naturally in every human
23 being by virtue of being human. However, in the words
24 of our former federal attorney general George Brandis,
25 "I do not think rights are conferred by the state. I

1 think rights need to be protected by the state but they
2 are not conferred by the state."

3 This is why it's so crucial that human rights
4 be legally protected and enforceable through the courts,
5 in Queensland, Australia and around the world.

6 Laws are implemented to create standards by
7 which we judge and regulate our own behavior and that of
8 others, behavior that we consider as socially acceptable
9 and in the best of interests of not only one another but
10 also our children and future generations.

11 The current gaping deficit in regulating
12 fracking is the consequence of a significant lack of
13 political will to act in our best interest.

14 What Australia urgently needs is a human
15 rights act framework at both federal and state levels to
16 be implemented and utilized as a legislative framework
17 through which we implement laws that regulate fracking
18 as well as enhancing existing laws for environmental
19 impact assessments, health assessments, social and
20 cultural assessments, et cetera.

21 Laws that will properly protect the rights of
22 citizens from arbitrary interference by the state and
23 private corporations and laws that will proactively
24 protect the integrity of our democracy, the rule of law,
25 the air environment and the rights of future

1 generations.

2 And I'll requote Shay here because I think
3 this is a particularly powerful summary of our position
4 to the Tribunal. "We have no rights and no remedies.
5 We need an independent and impartial judiciary, good
6 democratic institutions and democratic processes that
7 are themselves embodiment of various rights."

8 Now, in closing, I want to come to giving our
9 submissions on what we want the Tribunal to do and our
10 recommendations to the Tribunal in its considerations of
11 formulating it's advisory opinion on the four central
12 questions to this petition.

13 I also want to preface that I would, and we
14 would, like to really encourage the Tribunal that when
15 it comes to its deliberations to consider whether -- or
16 at least to consider the efficacy and utility in sending
17 those recommendations to the prime minister of
18 Australia, to the opposition minister of Australia, to
19 the minister of the Environment And Energy of Australia,
20 to the Queensland prime minister, to the Environmental
21 Minister of Queensland, Leeanne Enoch, to the media, to
22 all premiers in Australia, including those would who
23 have, up until now, done the right thing and maintained
24 the moratorium and to all environmental ministers
25 throughout Australia, because I think it will have a

1 huge impact and I think, and I know from my interactions
2 with politicians, that if they have something to grab
3 hold of to justify a conscious and conscientious moral
4 and legal position, such as the consensus of an
5 international tribunal, that will really help and assist
6 the advocacy in Australia.

7 So, No. 1, we would respectfully request a
8 Declaration Of The Human Rights Dimensions Of Fracking.
9 Consider a number of risk impacts and contentious issues
10 relating to the fracking activities. And that all of
11 that that should be weighed before allowing any
12 hydraulic fracking operation goes forward.

13 Apologies. That was not particularly
14 articulate but in terms of enhancing preliminary
15 assessments to assess the human rights dimensions of
16 fracking.

17 No. 2. A declaration that the human rights of
18 numerous and various landholders have been violated by
19 the Australian government, the Queensland government and
20 private companies as detailed in the case studies
21 outlined.

22 No. 3. That without delay and as
23 expeditiously as possible the Australian government
24 urgently introduce, (A) a Federal Human Rights Act which
25 includes express rights to the enjoyment of a safe,

1 clean, healthy and sustainable environment in adherence
2 to the 2018 Primary Principles On Human Rights And The
3 environment.

4 No. 2. A national plan of action for the 2011
5 United Nations Guiding Principles On Business and Human
6 Rights, which include specific provisions of fracking
7 companies and their interaction with landholders, the
8 rights of landholders against private companies and the
9 state including with regards to access to information
10 and access to justice.

11 No. 4. That we have without delay as
12 expeditiously as possible a recommendation that every
13 state and territory government throughout Australia
14 urgently introduce a human rights act or human rights
15 framework which includes express rights to the enjoyment
16 of a safe, clean, healthy and sustainable environment in
17 adherence with the framework principles.

18 No. 5. That without delay and as
19 expeditiously as possible the Australia government and
20 every state and territory government implement the 2018
21 framework principles on human rights and the
22 environment, especially and specifically all of the
23 principles referred to the case studies by Shay's
24 submissions.

25 Framework Principle 2. The state should

1 respect, protect and fulfill human rights in order to
2 ensure a safe, healthy and sustainable environment.

3 Framework Principle 3. States should prohibit
4 discrimination to ensure equal and effective protection
5 against discrimination in relation to the enjoyment of a
6 safe, clean, healthy and sustainable environment.

7 Framework Principle 5. States should respect
8 and protect the rights to freedom of expression,
9 association and peaceful assembly in relation to the
10 environmental matters.

11 Framework Principle 8. To avoid undertaking
12 or authorizing actions with environmental impacts that
13 interfere with the full enjoyment of human rights.
14 States should require the prior assessment of the
15 possible environmental impacts of proposed projects and
16 policies, including their potential effects on the
17 enjoyment of human rights.

18 And I just want to pick up a couple of lines
19 from the commentary of Framework Principle 8 especially
20 with regard to business enterprises. Should conduct
21 human right impact assessments in accordance with
22 guiding principles on business and human rights, which
23 provide that businesses "should identify and assist any
24 actual or potential adverse human rights impacts with
25 which they may be involved either through their own

1 activities or as a result of their business
2 relationships.

3 Include "meaningful consultation with
4 potentially affected groups and other relevant
5 stakeholders."

6 "Integrate the findings from the impact
7 assessments across relevant internal functions and
8 processes and take appropriate action." And that is
9 referable to Guiding Principles 18 and 19 of the Guiding
10 Principles of Business On Human Rights.

11 And I think actually a separate recommendation
12 that the Tribunal recommends that all business
13 enterprises in Australia must conduct human rights
14 impact assessments including with the Guiding Principles
15 On Business And Human Rights with those companies in any
16 way involved in the fracking industry or the supply
17 chains of the fracking industry.

18 Framework Principle 9. States should provide
19 full and facilitate public participation in decision
20 making related to the environment and take the views of
21 the public into account in their decision-making
22 process.

23 Framework Principle 10. States should provide
24 for access to effective remedies for violations of human
25 rights and domestic laws relating to the environment.

1 Framework Principle 12. 1 and 12 Shay also
2 mentioned. Obviously we covered the field. We want all
3 the framework principles but I'm just picking out ones
4 that are particularly relevant.

5 And Framework Principle 14 is in relation to
6 vulnerable peoples, including children, women, people
7 with disability, indigenous peoples, et cetera.

8 And I would particularly like to give an
9 acknowledgment and a shout out to a former client of
10 mine, John Jenkin and his family. He had two children
11 with disability who, unfortunately, were stuck right in
12 the heart of the gas industry and all of its toxic
13 pollution for about a decade before finally being able
14 to move.

15 Moving on to the 6th recommendation. That
16 without delay and expeditiously as possible the federal
17 Australian government urgently implement all the
18 outstanding recommendations of UN treaty bodies and
19 special rapporteurs including, but not limited to the
20 following: The Human Rights Committee;

21 The Committee On Economic And Social And
22 Cultural Rights,

23 The Committee On The Elimination of
24 Discrimination Against Woman;

25 The Committee Against Torture;

1 The Committee On The Elimination Of Racial
2 Discrimination;

3 The Committee On The Rights Of The Child;

4 The Committee On Rights Of Persons With
5 Disabilities;

6 The UN Special Rapporteur On Indigenous
7 People;

8 The UN Special Rapporteur On Health;

9 The UN Special Rapporteur On The Situation Of
10 Human Rights Defenders.

11 And I would specifically ask the Tribunal to
12 consider making that declaration with regards to all of
13 the recommendations that the Special Rapporteur On Human
14 Rights Defenders make in his report on his country visit
15 to Australia earlier this year.

16 And I won't read through them all now because
17 I'm probably out of time but I think that is all.

18 Thank you very much everyone and I look
19 forward to watching the remainder of the Tribunal.
20 Thank you.

21 MS. SHAY DOUGALL: Thanks. Any questions,
22 Gill?

23 MR. GILL BOEHRINGER: No. That was an
24 absolutely wonderful presentation. I've read the 30
25 page -- 33 page document -- actually 34 but there's

1 actually not much on the 34.

2 What bothers me is how do I get a hold of all
3 the information that I've been exposed to now,
4 particularly since I was, apparently, the only judge
5 able to make this session?

6 I like to work with hard -- hard copies. So
7 I mean it's just overwhelming the work that has gone
8 into it. It was so impressive. I mean I've sat on a lot
9 of tribunals and this was tops.

10 So, yeah, that's my basic question. I've got
11 some other questions but, I mean, there's so much there.

12 MS. SHAY DOUGALL: So you're asking for
13 access to hard copies of the evidence. I mean we've got
14 all of the evidence we provided is hosted on the web
15 sites.

16 MR. GILL BOEHRINGER: The evidence -- I
17 have this web site although it seems to be different
18 every time somebody mentions the web site they give a
19 different name to it.

20 MS. SHAY DOUGALL: No, no, it's our web
21 site.

22 MR. GILL BOEHRINGER: From the viewers,
23 yeah, I have that. But the evidence is fine and we need
24 that. A lot of it is similar to what we heard from the
25 Ohio folks and probably will from Charleston but

1 different but similar.

2 MS. SHAY DOUGALL: Yes.

3 MR. GILL BOEHRINGER: But it's --
4 there's just so much in the power point presentations
5 and in Benedict's two submissions.

6 MS. SHAY DOUGALL: Oh yeah, I can give you
7 hard copies of that.

8 MR. GILL BOEHRINGER: If I want to sit
9 down with the rest of the judges and discuss these
10 matters we need that kind of information as well as the
11 evidence. So it's kind of -- with analysis and
12 recommendations that we need.

13 MS. SHAY DOUGALL: So do you want me to
14 e-mail you copies of those presentations, which I can
15 do.

16 MR. GILL BOEHRINGER: Yeah.

17 MS. SHAY DOUGALL: Would that fullfil
18 your need? And Benedict can send you his.

19 MR. GILL BOEHRINGER: He's already
20 agreed. I have chatted with him a little bit. We're old
21 friends.

22 MS. SHAY DOUGALL: I'm more than happy to
23 send you those power point presentations.

24 MR. GILL BOEHRINGER: Okay.

25 MS. SHAY DOUGALL: And anything else that

1 you need I can send, yeah. Is that what you need?

2 MR. GILL BOEHRINGER: Yeah.

3 MS. SHAY DOUGALL: No worries.

4 Absolutely. Actually I've already made sure that Emily
5 Grubby has copies of all of them.

6 MR. GILL BOEHRINGER: Okay. So.

7 MS. SHAY DOUGALL: But I'll just include
8 you. I'll ask Emily how to go about making sure that
9 you have access to that data. And make sure -- or I
10 can just give you access to a drop box or whatever.

11 MR. GILL BOEHRINGER: Well, yeah, I need
12 it by e-mail.

13 MS. SHAY DOUGALL: Okay. I can e-mail you
14 to the -- see, they're quite big. I'll upload them to
15 the web site and --

16 MR. BENEDICT COYNE: If you e-mail -- if
17 you share the drop box it will go to your e-mail, Gill,
18 and you can just press on it and going into a drop box
19 is the same as going to an e-mail address. It's
20 effectively the same.

21 You might have to set up a drop box but it's
22 just like setting up an e-mail.

23 MS. SHAY DOUGALL: I'll just post it on
24 the web site.

25 MR. GILL BOEHRINGER: The least

1 involvement with technology the better as far as I'm
2 concerned.

3 MS. SHAY DOUGALL: No worries. I will
4 deal with that.

5 MR. BENEDICT COYNE: We'll send it by
6 carrier pigeon from Chinchilla.

7 MS. SHAY DOUGALL: I'll get that
8 organized, Gill, no worries.

9 Did you have any other questions?

10 MR. GILL BOEHRINGER: No. Well, one is a
11 very simple one.

12 Who were the two people in 1932 who prophesied
13 all of this?

14 MS. SHAY DOUGALL: Bell and -- geez, I
15 can't remember.

16 MR. GILL BOEHRINGER: If you have a
17 reference send it to me.

18 MS. SHAY DOUGALL: Yeah, I will. I'll
19 send you the reference. No worries.

20 MR. GILL BOEHRINGER: Of course, Carl
21 Marx predicted most of what's happening today even
22 before 1932.

23 The other thing I'm not exactly sure what the
24 context was, and this is just a comment and, you know,
25 with respect as we say, it's not a criticism really, but

1 lately I've been thinking of the use of the word
2 "shareholders" and I've seen some commentary about that
3 and it seems to me that that's a very benign way of
4 referring to corporate capital and, you know, what is
5 good for the shareholders and we're all shareholders.
6 It's good for the country blah, blah, blah.

7 But, in fact, not all shareholders are equal
8 and we know that there's a small group that dominate
9 corporate capital. And the corpor -- you know,
10 shareholders, many of them are very nice. Some of my
11 best friends. But the corporations, as you've
12 demonstrated, are not very nice. And those who control
13 the corporations are shareholders but they're the ones
14 who have most of the shares.

15 So just as kind of an ideological suggestion
16 about, you know, educating the public as we're all
17 trying do I think we need to be careful of that word and
18 how we use it.

19 MS. SHAY DOUGALL: Fair enough.

20 MR. GILL BOEHRINGER: Kind of disguises
21 what's going on.

22 MS. SHAY DOUGALL: Yeah. Absolutely. I
23 get you.

24 MR. GILL BOEHRINGER: It's too fuzzy and
25 warm towards the real shareholders.

1 MS. SHAY DOUGALL: Got you. I got you.
2 Thank you for that feedback.

3 MR. GILL BOEHRINGER: Yeah, yeah. Sure.
4 Okay. I'm going to bed now. I've been up since about
5 ten hours ago.

6 MS. SHAY DOUGALL: I'm sorry and I so
7 apologize for the technical difficulties but, Gill,
8 thank you so much for being here and lending us your
9 ears.

10 MR. BENEDICT COYNE: Thank you, Gill.

11 MR. GILL BOEHRINGER: Thank you.

12 [youtube.com/watch?v=CY4YB_tR6dE]

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1 KEYNOTE ADDRESS

2 MAY 14, 2018 7:00-8:30

3
4 MS. CARLY LETTERO: Before we get started I
5 would just like to remind you to silence your phones and
6 also ask that you not take photos this evening during
7 the keynote.

8 And before I tell you a little bit about the
9 Tribunal and introduce Sandra Steingraber I would like
10 to begin by acknowledging that Corvallis is located in
11 the traditional territory of the Chepenefu or the Mary's
12 Rivers Band of the Kalapuya. And after the Kalapuya
13 Treaty in 1855 Kalapuya people were forcibly removed to
14 what are now the Grand Ronde and Siletz reservations.

15 Jan Michael Looking Wolf is an enrolled member
16 of the Kalapuya Confederated Tribes of Grand Ronde and
17 he's also a world renowned Native American flute player.
18 When he heard about Sandra Steingraber's work and the
19 Tribunal he offered to compose a song for this evening
20 along with Dana Reason who is a composer and musician
21 and good friend of the Spring Creek Project.

22 And so we've invited Jan and musicians to
23 debut this new song this evening and they have
24 generously offered to donate all the proceeds of this
25 song, which they've already mastered, to help with the
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1 fight against fracking.

2 The song doesn't have a name yet so I invite
3 you, while you're listening to it, to imagine what you
4 might name it and then tomorrow on social media we'll
5 ask for your suggestions and pick one of them. So I
6 would like to welcome our musicians [Applause].

7 MR. JAN MICHAEL LOOKING WOLF: How is
8 everybody doing? Good?

9 The song is a beautiful song but it's actually
10 an hour and a half long. So most of tonight will be
11 this song.

12 I just want to say my name is Jan Michael and
13 here I'm here with Dana and Ryan Biesack and Keith
14 Summers. And, Carly, it's an honor to be here for this
15 event. We really enjoyed writing this song and
16 recording it.

17 And, you know, I am half Irish. My mom is
18 5-ft tall and she's almost full-blooded Irish and my
19 dad's like 6'3 and he's native of this land.

20 Like she'd mentioned I'm Kalapuya, Santiam
21 Kalapuya. I actually speak my own language and I just
22 want to introduce this song by saying that for us the
23 inspiration was water.

24 Water for all people of the world is so
25 important. We're not the only indigenous people here.
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1 I mean we're all indigenous. You all have indigenous
2 ancestors who came from a thing called oral tradition.
3 That means there wasn't a written language.

4 So we all go back to time immemorial from an
5 indigenous person who really understood and respected
6 how to properly use water. Water is so important.

7 Just as I've introduced this song there's been
8 two to three children who aren't with us now because
9 they didn't have clean water. But we're here tonight
10 and it's beautiful and tonight we play this song for
11 them, we play this song for Carly and we play this song
12 for the cause. Thank you.

13 [Song performance] [Applause].

14 MS. CARLY LETTERO: When Jan and I were
15 corresponding about that song he wrote in an e-mail
16 thank you for your commitment to Mother Earth and all
17 who stand on her, swim in her water and fly in her sky.

18 And I thought that was such a beautiful thank
19 you and I would like to extend that same thank you to
20 all of our musicians this evening.

21 How many of you got a chance to go upstairs
22 and check out the Pop Up Art Gallery? Awesome.

23 Well, this show, Unsilenced: Art And Sounds of
24 Resistance, will be open after we wrap up here until
25 about 8:30. And so I invite you to check it out after
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1 the keynote if you haven't already.

2 They are going to breakdown a few things here
3 while I keep us going.

4 There are posters and sound submissions from
5 Corvallis and from across the U.S. in the gallery
6 upstairs and there is a listening room integrated into
7 the gallery. And I would like to thank Jason Fick and
8 Dana Reason and Allison Johnson and Mike Gamble and
9 Melody Owen for conceptualizing and collaborating on
10 that project.

11 I'd also like to thank Melody Owen, who is a
12 student in the Environmental Arts and Humanities
13 graduate program for curating the poster show and
14 curating the exhibit that was right around the corner in
15 this wonderful little gallery. If you haven't seen it
16 yet this CEI's Art Works Gallery and that was hanging a
17 week before this evening.

18 I would also like to thank our local
19 incredible bookstore, Grassroots Books & Music and
20 Sierra is here with books. She'll be here after the
21 keynote and Sandra will be right here signing and so,
22 hopefully, we'll have a nice flow there.

23 I would like to thank the Ceres Trust for
24 helping to bring Sandra Steingraber this evening to
25 Corvallis.

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1 For many people the concept of a Tribunal is
2 vaguely familiar and so I thought I might begin by just
3 introducing it a little bit.

4 In the very late 1960's and early 1970's a man
5 named Lelio Basso testified at tribunals about human
6 rights violations in Vietnam and in Latin American. And
7 after those tribunals he thought it would be a really
8 good idea to establish a Permanent Peoples' Tribunal.
9 And his vision was that a Permanent Peoples' Tribunal
10 would serve as an instrument and also a platform to give
11 recognition and visibility and voice to people suffering
12 violations of their fundamental human rights.

13 And so nearly 40-years later the Permanent
14 Peoples' Tribunal, which is based in Rome, has held 44
15 sessions all over the world. Most recently in London on
16 Myanmar's crimes against the Rohingya and Chetnians
17 peoples.

18 So anyone in the world can propose a session
19 to the Permanent Peoples' Tribunal and that's exactly
20 what a very small group of people did about four years
21 ago. In early 2014 Tom Kerns and Anna Grear and Damian
22 Short came together to petition the Permanent Peoples'
23 Tribunal to take on fracking and climate change.

24 And that petition convinced the Permanent
25 Peoples' Tribunal that there were potentially grave
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1 violations of human rights happening because of fracking
2 and climate change and so they decided to devote the
3 45th Tribunal to that topic.

4 It's been a really busy couple of years since
5 then. Four pre-tribunals were conducted, two in Ohio,
6 one in Virginia and one in Australia. More than 200
7 witnesses have testified. There have been 17 Amicus
8 Briefs submitted by 14 attorneys and 20 non-
9 governmental organizations in seven countries on five
10 continents.

11 All of those people, in some way or another,
12 are scheduled to testify and speak this week before a
13 panel of 10 judges who are from six different countries.

14 And this session of the tribunal is historic
15 for a number of reasons. The Permanent Peoples'
16 Tribunal has had sessions on environmental issues in the
17 past, including in Chernobyl or about Chernobyl and
18 Bhopal but this is the first time that they're taking on
19 an environmental issue that is as wide-reaching, that
20 can affect everyone of us who lives on earth now and in
21 the future.

22 This session is also historic because it
23 expands the scope of the Permanent Peoples' Tribunal for
24 the very first time to include arguments about the
25 rights of nature in addition to the rights of humans.
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1 And for the first time the entire Tribunal is
2 on-line, which is an inclusive format that the Tribunal
3 is excited to try out because it gives people from
4 around the world the opportunity to testify and also to
5 follow along.

6 And so it's really been an honor for the
7 Spring Creek Project to co-organize the Tribunal because
8 it so closely aligns with our commitment to working on
9 the most urgent and daunting environmental issues of our
10 time.

11 And the format is something new for Spring
12 Creek Project but at its core the Tribunal is about
13 story telling. The Tribunal offers people from around
14 the world the opportunity to tell their stories. It's
15 courageous story telling and the Spring Creek Project is
16 really proud to support it.

17 And so throughout the week attorneys will take
18 these courageous stories and along with scientific
19 findings they are going to weave them into arguments
20 that they are going to present before this international
21 panel of judges that has been appointed by the Permanent
22 Peoples' Tribunal.

23 And then after the Tribunal the judges are
24 going to convene, probably for a few months, and write a
25 judicial opinion about if and how fracking constitutes a
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1 breach of human rights. And that judicial opinion then
2 can be used by peoples and communities around the world
3 to change the conversation about fracking and climate
4 change and thus change the policies and laws and norms.

5 And in this way the Tribunal offers an
6 international stage for story telling to be
7 transformational. And that is exactly what Spring Creek
8 Project is dedicated to doing to telling stories that
9 have the power to shift the trajectory of environmental
10 devastation toward a future that is just and restorative
11 for all living beings.

12 And so throughout the week each session of the
13 Tribunal is going to be available on Spring Creek
14 Project's youtube page and Facebook page.

15 I also just learned that the Unitarian
16 Universalist Congregation is going to be showing a
17 viewing of the tribunal. And so if you want to sit with
18 folks and watch it they're going to be open every day
19 and you're welcome there.

20 Spring Creek Project has also been hosting a
21 series of lectures called the Bedrock Lectures on Human
22 Rights and Climate Change for the last 16 weeks leading
23 up to the Tribunal and those are available on our web
24 site and youtube page.

25 If you would like to learn more about Spring
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1 Creek Project I invite to join our mailing list in the
2 lobby.

3 Sandra Steingraber is often quoted for saying
4 that we are all members of a great human orchestra and
5 it is now time to play the Save The World Symphony. You
6 do not have to play a solo but you have to know what
7 your instrument is. What instrument you hold and find
8 your place in the score.

9 And this evening and the Tribunal are possible
10 because so many people have found their place in the
11 score.

12 Over the last few years dozens of people have
13 volunteered thousands of hours behind the scenes to make
14 this Tribunal happen. And I especially want to thank
15 Tom Kerns, who was one of the three people who
16 originally petitioned the Permanent Peoples' Tribunal,
17 for really his unwavering dedication to making this
18 happen for the last four years. It simply wouldn't have
19 happened without his willingness to step out of his
20 comfort zone again and again and to just forge ahead.

21 I also want to thank Kathleen Dean Moore who
22 many of you know is a great writer and philosopher.
23 She's also a great connector and she first brought the
24 idea of the Tribunal to Spring Creek Project.

25 I want to thank Gianni Tognoni, who is the
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1 Secretary General of the Tribunal and has been with us
2 every step of the way and also Simona Fraudatario who is
3 the Coordinator of the Tribunal in Rome.

4 And special thanks to the graduate students in
5 the Environmental Arts and Humanities Program who have
6 helped conceptualize and run the Tribunal in the months
7 leading up to it, really the year leading up to it, and
8 also this week.

9 And finally a really deep thanks to my Spring
10 Creek Project staff, Shelly Stonebrook and Emily Grubby.
11 It's a small daily miracle to work with people who are
12 so hopeful and good and joyful. So thanks for every
13 detail.

14 Sandra Steingraber is the really the perfect
15 person to Keynote the opening session of the Tribunal
16 because she has been a courageous story teller for
17 decades. She's an ecologist, a cancer survivor and an
18 author who explores the links between human rights and
19 the environment.

20 Her work focuses on chemical contamination,
21 climate change and fracking. She's the award winning
22 author of three books including the acclaimed Living
23 Downstream, Having Faith and Raising Elijah.

24 She's been featured in two documentaries,
25 Living Downstream and very recently Unfractured.
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1 She's received many honors for her work as a
2 science writer, including in 2011 a Heinz Award. And
3 that award came with a \$100,000.00 cash price that she
4 donated to the anti-fracking movement.

5 And then a year later she then become the
6 cofounder of New Yorkers Against Fracking, which is a
7 state-wide coalition of more than 280 grassroots
8 organizations. And she cofounded Concerned Health
9 Professionals of New York and serves as a science
10 advisor to Americans Against Fracking.

11 Her work has been featured all over the place,
12 in many publications, and she's earned what I think are
13 some of my favorite nick names for a writer because of
14 that. Rolling Stone has called her the Toxic Avenger.
15 And Sojourner Magazine has called her a "poet with a
16 knife". She's been named Woman Of The Year by Ms.
17 Magazine and Person Of The Year by Tree Hugger and one
18 of 25 visionaries who are changing the world by the Utne
19 Reader.

20 She's a recipient of the biennial Rachel
21 Carson Leadership Award and she recently edited the
22 book, Rachel Carson: Silent Spring and other Writings on
23 the Environment, which is a really beautiful edition that
24 was added to the Library of America this year. It just
25 came out but you'll want to check it out when you can.
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1 She is a contributing essayist and editor at
2 Orion Magazine and a distinguished scholar and resident
3 at Ithaca College in New York.

4 So please join me in welcoming Sandra
5 Steingraber. [Applause].

6 DR. SANDRA STEINGRABER: Thank you for
7 that amazing introduction. A spot for all my audio
8 visual aids up here.

9 What an honor to serve as the opening Keynote
10 Speaker for the historic Permanent Peoples' Tribunal
11 Session on Human Rights, Fracking And Climate Change.

12 This is a convocation many years in the
13 making. Bravo to our hosts the Spring Creek Project and
14 Oregon State University here in Corvallis for bringing
15 us together in this elegant White Side Theater and by
16 live-streaming around the world.

17 As with so many good ideas this week long
18 series of hearings was inspired by the actions of an
19 extraordinary individual, the philosopher and ethicist
20 Dr. Tom Kerns who I hold in highest esteem.

21 Thank you, Tom [Applause].

22 As you've heard the Permanent Peoples'
23 Tribunal is an august international forum. Its origins
24 story is as an investigation of human rights breaches
25 during the war in Vietnam.

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1 Since then its hearings have examined
2 abridgments of human rights standards in Bhopal, India,
3 in the Ukranian city of Chernobyl and most recently
4 among the Rohingya and Chetnian refugees of Myanmar.

5 Today we've begun an exploration into the
6 potential human rights violations of a newish technology
7 called unconventional high volume hydraulic fracturing
8 combined with horizontal drilling, so called fracking
9 for short.

10 Fracking is what the industry calls it and
11 fracking is what the enemies of that industry both call
12 it.

13 Fracking is a technology developed at the end
14 of the 20th century in sparsely populated western
15 regions of the United States using public money from
16 taxpayers.

17 In a line fracking turns fresh water into a
18 poisonous club to smash apart shale bedrock in order to
19 extract otherwise unattainable bubbles of oil or natural
20 gas, methane, trapped inside of that rock.

21 Fracking has since spread east, west, north
22 and south, including to the densely populated regions of
23 the northeast where I live and to Southern California
24 and to the bread basket of midwestern agricultural
25 regions.

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1 A dramatic increase in fracking over the past
2 decade in the United States has pushed oil and gas
3 extraction operations into heavily populated areas. At
4 least 6% of the US population, 17.6 million Americans
5 now live within a mile of an active oil or gas well. A
6 number that includes 1.4 million children and 1.1
7 million elderly people. At least 8.6 million people are
8 served by a drinking water source located less than a
9 mile from a well pad.

10 These facts alone, along with emerging
11 evidence revealing that fracking sites and associated
12 fracking infrastructure are disproportionately sited in
13 non-white, low income and indigenous communities, both
14 in the United States and in countries like Argentina,
15 Mexico and Canada where fracking has been exported,
16 means that it is right and necessary to understand the
17 potential for human exposures and accompanying adverse
18 impacts, not only as an issue of public health but
19 fundamentally as an issue of human rights.

20 My frame for this Keynote tonight is the
21 biologist, Rachel Carson, whose 1962 book Silent Spring,
22 about the unintended consequences of pesticides like
23 DDT, sparked a revolution in environmental consciousness
24 and is rightly credited as a founding force of American
25 environmentalism.

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1 It was the second great honor of my life this
2 year to edit this new collection of Rachel Carson's
3 environmentalist writings for Library of America,
4 including Silent Spring but also some never before
5 published letters and speeches.

6 And I should say that Library of America
7 exists to canonize iconic American writers and pledges
8 when they collect the writings of an American author and
9 reissue them that they will be kept in print forever,
10 eternally.

11 So it's like watching an actor receive their
12 star on the Hollywood Walk Of Fame to see a Library of
13 America collection. It's long overdue that Rachel Carson
14 should receive her star but here it is and I had the
15 great honor and privilege of being able to edit this
16 collection this year.

17 In these writings, in this book Carson makes
18 clear that the environmental crisis is first and
19 foremost a crisis of human rights. And it's that
20 element of her writing that I want to foreground and
21 embrace for our purposes tonight.

22 Carson writes, "If the Bill Of Rights contains
23 no guarantee that a citizen shall be secure against
24 lethal poisons distributed by either private individuals
25 or by public officials it is surely only because our
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1 forefathers, despite their considerable wisdom and
2 foresight, could conceive of no such problem."

3 And she went on in lyrical descriptive prose
4 to trace the invisible drift of pesticides from the
5 atmosphere into our rivers, aquifers, breast milk, egg
6 shells of song birds and into, finally, the subcellular
7 machinery of our own bodies creating genetic injuries
8 and blazing trails for cancer, birth defects and altered
9 development.

10 Her panoramic language that takes us from crop
11 dusters into groundwater and into the nucleus of cells
12 is an artistic exploration in which language becomes a
13 cinematic camera showing us the connections in the
14 natural world that are otherwise invisible to us.

15 So I want to take a Carsonesque approach
16 tonight and speak to you first as a creative writer and
17 use language as a camera to take you down into the dark
18 heart of the planet, into the bedrock that lies beneath
19 our feet and I want to rewrite for you, as a landscape,
20 that this bedrock of our nation is not a void, a
21 lifeless place of inertia darkness with oil and gas
22 pocked inside the rock but, rather, it is a living
23 ecosystem, a subterranean coral reef, if you will, that
24 is teeming with life, a habitat that is animate and
25 beautiful and is connected to the carbon cycle by
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1 metabolizing organisms who live there and thus is
2 connected to us here at the sunlit surface.

3 Rachel Carson reminds us that wars waged
4 against the web of life will sooner or later transform
5 the cells of our own bodies into battle fields. And
6 this is also true when we turn the weapons of
7 destruction against our nations bedrock.

8 So let's begin here.

9 400 million years ago shallow seas overlay
10 parts of the North American continent. One of them was
11 in the part of the world that I live in the northeast
12 and the shallow ocean that extended from approximately
13 where the Catskill Mountain Range now is all the way to
14 the middle of Ohio.

15 And I, who live in the Finger Lakes region of
16 upstate New York, would have lived along its northern
17 banks of the sea. The southern reach went all the way
18 into West Virginia. The ocean floor became a graveyard
19 of the organisms who lived here.

20 And remember 400 million years ago was before
21 fur, before back bones, before three and four chambered
22 hearts, before breasts, before eyeballs, before fins and
23 flippers. The organisms we're talking about who lived
24 here were sea lilies, squid, diatoms and plankton. And
25 when they died they fell to the bottom of the sea and
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1 that ocean began to fill with silt because it was
2 surrounded by mountains and as the mountains eroded they
3 turned into dust. And dust changed its name when it
4 falls into the water and then we call it silt.

5 Mountains are full of entire periodic charts
6 of elements but as these mountain ranges eroded the
7 elements drifted with the silt into the bottom of the
8 ocean. These are things like barium, strontium,
9 uranium, lead, mercury. So these elements became part
10 of the floor of these shallow seas.

11 So the organisms died and they fell to the
12 ground, the bottom of the ocean by gravity but, because
13 of earth's atmosphere wasn't as oxygenated 400 million
14 years ago as it is now, there were not yet land plants.
15 The organisms didn't have enough oxygen to completely
16 decompose. So, instead, they turned into bubbles of
17 methane, which is carbon with four hydrogens or a
18 heavier hydrocarbon molecule or something that we would
19 call petroleum or oil.

20 So not just across the northeast but also in
21 North Dakota, in California, in Oklahoma, in Texas these
22 similar oceans existed at similar times and these
23 phenomenon went on.

24 So eventually then these corpses were covered
25 by the silt that fell upon them and they were buried and
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1 eventually then the whole ocean floor petrified and
2 turned from silt into shale. And these organisms were
3 then trapped as bubbles of oil or natural gas inside the
4 rock itself. And they've stayed there like that for 400
5 million years. Those hydrocarbon bubbles of oil and gas
6 are the quarry of fracking.

7 But these ancient ocean floors that became our
8 shale bedrock are not just a graveyard. They are also a
9 living ecosystem. They are inhabited by living
10 organisms now. Some are bacteria but many others occupy
11 an ancient domain of life called archaea. And these
12 organisms feed on the hydrocarbons that are down there.
13 They also, some of them, feed on radioactive decay.
14 They're strange. They have, some of them, arsenic
15 instead of phosphorus in their DNA.

16 And now I'm just going to speak to my fellow
17 biologists in the room and the rest of you can kind of
18 float with this for a minute.

19 They lack electron transport systems, which is
20 very unusual for organisms. We don't see that in living
21 things who live here on the earth's surface. And the
22 way they can avoid oxidate stress without an electron
23 transport system is that they actually send electrons
24 out into the surrounding rock.

25 They're organized into colonies in order to do
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1 this and they use nanowires to send across themselves a
2 large number of electrons and, thus, they alter the rock
3 and change it from one element to another.

4 So I'm going to pause here for a minute and
5 make kind of a theological or philosophical query. What
6 I'm saying is that the biologic is the creator of the
7 abiotic. These organisms are down there a mile below
8 our feet making rock, altering it and reshaping it and
9 turning it into something else.

10 And altogether geologists believe that these
11 deep life organisms by a biomass actually exceed the
12 biomass of living things here on the sunlit surface of
13 our planet.

14 That's why I say we need to think of our
15 bedrock as kind of a subterranean coral reef, another
16 world down there that we may not know much about but
17 whose destruction and poisoning may have consequences
18 for us.

19 So fracking uses water, 2 to 20 million
20 gallons per frack job and sends it down into that shale
21 by drilling straight down into it and then turn the
22 drill bit sideways and tunneling like a robotic mole for
23 another mile or more.

24 And first we send down explosives into that
25 tunnel to start fracturing the shale but what really
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1 widens those cracks is water. So fresh drinking water
2 is then sent down the hole.

3 Water is not compressible under high pressure
4 and you can imagine what kind of pressures are required
5 because the lithostatic pressure of the earth pressing
6 down on the shale a mile or more of substrate above the
7 shale bedrock has to -- in order to blow that up down
8 there, water has to be under immense amounts of pressure.

9 And if it were only water that was used as the
10 agent for fracking it wouldn't work because as soon as
11 you release the pressure to let the gas flow out all of
12 the fractures that you create you turn the bedrock into
13 shards at this point. They would all close up again as
14 the weight of the earth presses down upon them. So
15 instead sand is added to fracking fluid, and not just
16 any kind of sand, but silica sand. Because the grains
17 of silica sand are shaped in such a way that they resist
18 crushing under immense pressure.

19 So really the water is used to create the
20 fractures but also to shoot the sand grains into the
21 cracks created and like tiny door stops they hold open
22 those spaces so the bubble of oil or gas can then escape
23 and go up the bore hole after the pressure is released.

24 But in order to get sand down the hole and
25 around the bend without settling out and clogging the
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1 pipe you need to thicken that water with jelling agents
2 to move the sand around the bend and shoot it into the
3 cracks. So jelling agents are added to fracking fluid
4 along with things like friction reducers and anti-
5 scaling agents.

6 But those living organisms, those bacteria and
7 those archaeas that are down there at that depth, will
8 feed on those gelling agents and they'll grow inside the
9 pipes and interfere with the flow of gas. And so
10 powerful biocides are added like glutaraldehyde to
11 fracking fluid, which is why it's so toxic, because we
12 have to engage in a mass extermination campaign, an
13 underground pesticides spraying program of the bedrock
14 in order for fracking to work.

15 And some of the water that is used to liberate
16 the bubbles of oil and gas remains trapped within the
17 fractures zone and, as such, has now been permanently
18 removed from the hydrologic cycle forever entombed among
19 the fractured shards.

20 And I want to pause here a moment and ask
21 another philosophical question about humans making water
22 disappear. We've never done that before to actually
23 remove water from the hydrologic cycle, ground water
24 that is the mother of rivers, that flow to the sea, that
25 evaporate into clouds, that fall as rain or snow and
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1 rise again as mist and fog, we've never done that
2 before.

3 Fresh water is only 1% of all the water
4 available on earth. Most of it, 98% of it is sea water,
5 2% of the earth's water is fresh water, and a half of
6 that is frozen at the poles. So that only leaves 1% of
7 water to be part of the living cycle of which we are all
8 65% water by weight. So by weight we are 2/3rd's rain
9 drops.

10 And so what does it mean that we're making
11 water disappear in a time of a climate crisis when lack
12 of availability of fresh water is getting more insecure.

13 The water used to fracture shale will never
14 again flow as a river, never again rise as mist, never
15 again rise as sap, never become nectar attracting bees,
16 never again blood plasma or breast milk or tears or
17 cerebral spinal fluid or the breath of our exhaled lungs
18 on a cold winter day or never the snow flakes on that
19 day.

20 Some of the water travels back up to the
21 surface, that's called flowback fluid, and it contains
22 not only the chemical additives that were used to turn
23 the water into fracking fluid but also now it contains
24 brine, heavy metals, radioactive elements, all those
25 things that were deposited by the eroding of ancient
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1 mountain ranges that are now inside the shale. Toxic
2 elements that wouldn't hurt anyone as long as they're
3 trapped down below but now we are going to bring them up
4 to the surface.

5 The result is a massive amount of poisonous
6 liquid waste and we have a problem with no solution
7 because no technology exists to turn fracking waste back
8 into drinkable water. Its safe containment is for
9 eternity. It could be reused to frack another well but
10 not unless it's highly diluted because the more you use
11 it the more salty and toxic and corrosive it becomes.

12 So the practice is to inject it in other deep
13 wells where it has been definitively linked to earth-
14 quakes because fracking fluid contains anti-friction
15 agents.

16 Remember a fracking bore hole is only about 5-
17 inches or so in diameter and to shoot that vast amounts
18 of water with that kind of pressure you need to reduce
19 the friction. So you make fracking fluid very
20 slippery. But if you then inject it back down in to the
21 earth it lubricates fault lines and allows rock
22 formations to slip past each other and that is how
23 earthquakes are generated. We have absolute proof about
24 this link.

25 So this raises to me another ethical question
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1 about generational inequity. How is it right that this
2 generation of people alive now can liquidate the bedrock
3 and enjoy the profits from the oil and gas that we blow
4 the bedrock up to extract and then produce toxic waste
5 which must be curated eternally by our children and
6 grandchildren who will receive none of the profits.

7 But I want to widen the lens now and take an
8 even a bigger view of fracking because it really doesn't
9 start with the drill bit screwing into the ground. It
10 starts in the upper midwest with the mining of fracked
11 sand.

12 Frack sand mining has now become the No. 1
13 export of the state of Wisconsin, more than cheese.
14 Wisconsin is exporting itself and it's changing its
15 landscape to do that. The coolies and hills and bluffs
16 of Wisconsin are disappearing. They're made of
17 sandstone and that sandstone is made of grains of silica
18 sand that are in high demand for fracking.

19 So we have all these frack sand mining
20 operations going on in Minnesota and Iowa and Wisconsin
21 and in my part of the world in down state Illinois where
22 I grew up.

23 Silica sand makes silica dust and silica dust,
24 like asbestos, is linked to lung cancer. It's also
25 linked to silicosis. So although the people in the
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1 upper midwest live far from the fracking fields their
2 bedrock is being extracted and blown apart to be carted
3 off to the place in the world where I now live, to be
4 shoved into the ground, to hold open the cracks in the
5 destroyed bedrock of the northeast or taken to the
6 fracking fields in the Bakken shale of North Dakota or
7 Colorado.

8 And then where does the gas go or the oil go
9 after it comes out the ground?

10 Well, there is a massive amount of
11 infrastructure involved to take that oil and gas from
12 the point of its extraction to wherever the burner tip
13 is. And that takes the form of pipelines and compressor
14 stations and hundreds of underground and above ground
15 gas and oil storage facilities.

16 And here in the northwest LNG facilities where
17 natural gas, through the energy intensive process of
18 cryogenics, is super-chilled so it can be loaded on to
19 tankers and taken to places where pipelines can't run,
20 such as across the ocean.

21 And, of course, the story doesn't end there
22 because methane leaks at every step of this process from
23 the moment the drill bit goes into the ground and
24 contacts the shale methane is pouring out of the hole.

25 It pours out of the valves of every single pipeline, of
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1 every single compressor station along the way.

2 And the result is that methane is being loaded
3 into the atmosphere. Methane 86 times more powerful
4 than carbon dioxide at being able to trap heat in our
5 atmosphere. More methane leaks from fracking operations
6 than we previously appreciated, which means natural gas
7 via fracking is not any cleaner for the climate than
8 coal, and it may be worse.

9 Methane emissions are 20 to 60% higher than
10 previously thought. The ongoing surge in methane levels
11 are now driving climate impacts and a sharp uptick in
12 global methane levels since 2006 is largely attributable
13 to fossil fuel extraction processes, notably fracking.

14 So let's pause here for a minute and consider
15 these molecules of methane in the atmosphere and remind
16 ourselves that carbon, when we talk about decarbonizing
17 and loading the atmosphere with carbon, carbon is not
18 the first name for carbon dioxide.

19 Carbon comes in two flavors, carbon dioxide
20 and methane. And these are two naturally occurring
21 components of our earth that actually make life on earth
22 possible. Let's just pause for a moment and consider
23 that.

24 So methane comes from dead things. Carbon
25 dioxide is our exhaled breath of all living things. And
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1 both of these molecules have the ability, when struck by
2 thermal radiation, which is heat, to vibrate. So when
3 methane and carbon dioxide are in our atmosphere and
4 then the earth's surface turns away from the sun at
5 night the light from the sun, the light energy entirely
6 vanishes but the heat energy does not entirely vanish,
7 if it did we would all -- it would be like the Disney
8 movie Frozen. Our oceans would turn into ice rinks
9 every night. Our blood plasma would freeze stiff.

10 That doesn't happen because two molecules,
11 methane and CO₂ when the sun's heat energy bounces off
12 the surface of the earth and bounces back into the
13 atmosphere and encounters a molecule of CO₂ or methane,
14 those molecules begin to vibrate and their vibration
15 traps the heat. That's what we mean when say it's a
16 greenhouse heat trapping gas.

17 So these vibrational molecules, all dancing
18 all night long up in the sky, prevent us from dying
19 every night. So they're the living's exhaled breath and
20 the dead. The living and the dead conspire together to
21 make life possible on earth. So it's good that we have
22 greenhouse gases.

23 And, by the way, of the two molecules, CO₂
24 lasts longer in our atmosphere than methane. Methane is
25 more potent at trapping heat but it will fall apart
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1 after about a decade whereas CO₂ goes on trapping heat
2 for a century. Which means your exhaled breath will out
3 live you. You will be dead and gone but your breathing,
4 your whole lifetime of breathing, has changed the
5 chemistry of the atmosphere and those molecules of your
6 exhaled breath, representing all the things that you did
7 to metabolize all your life, will go on trapping heat
8 for the people and all the living organisms, all of our
9 relatives, that come after us.

10 And, of course you know, through the miracle
11 of photosynthesis, that some of that CO₂ will be taken
12 out of the atmosphere by our friends the plants, who
13 take them through their stomata of their leaves --
14 remember that in 7th grade, the stomata -- and combine
15 them with sunlight and water from the earth up through
16 the roots and through the miracle of photosynthesis spin
17 that into sugar and form the beginning of the food
18 chain.

19 So for all of the earth's history that
20 photosynthesis and the exhaled breath of all the animals
21 have existed in a kind of balance but 150 years ago when
22 we exhumed the cemeteries of Devonian to animals and
23 plants and this unholy trinity of fossil fuels, oil,
24 coal and gas, and we lit those bodies on fire in the
25 crematoria that we call power plants, we loaded up our
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1 atmosphere with 40% more CO₂ than pre-industrial levels
2 and almost tripled the amount of methane.

3 So now at night we have many more dancing
4 vibrating molecules and it's like a blanket that we
5 can't kick off. And the consequences, as you know,
6 involve melting ice caps, rising seas and, of course,
7 the acidification of the ocean because CO₂ turns into
8 carbonic acid when it falls into ocean water.

9 Our plankton stocks are now in trouble because
10 of rising acidity levels and also because of the rising
11 surface temperatures of the ocean. Phytoplankton
12 provide us half of the oxygen in our atmosphere, land
13 plants provide the other half, and so 1 out of every 2
14 breaths that we breathe is brought to us by the world's
15 plankton. And if the plankton are in trouble, my
16 friends, we are in trouble as well.

17 And if you're hearing this science for the
18 first time then that is a failure of my field. If you
19 hear about the falling Dow industrial stocks but not
20 about the plankton stocks and how they're doing when you
21 turn on your cell phone every morning or you read the
22 ticker in Times Square, ask why we have a public
23 conversation about economic stocks but not about
24 ecological stocks? And why aren't scientists having
25 public conversations with us about these issues?
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1 So I've talked to you now as a creative writer
2 and that was my best attempt to use language to create a
3 visual picture for you, both down in this landscape that
4 no one has seen, not even the frackers who are
5 destroying it, and up in the upper reaches of our
6 atmosphere where gases trap heat for us.

7 And now I want to switch things up a bit and
8 talk to you as an activist and tell the story of how we
9 defeated the shale gas army in New York state and won a
10 statewide ban on fracking in 2014. [Applause].

11 We did that.

12 So in 2009 I was invited back to Cornell
13 University where I'd previously been on the faculty to
14 give a talk on the public health implications of
15 fracking. And I was surprised by the invitation because
16 I didn't know much about fracking then and I didn't
17 realize the toxic chemicals that were used.

18 And when I discovered they included things
19 like glutaraldehyde and benzene, and that formaldehyde
20 was often released, those are chemicals I know very well
21 from my earlier work. So I went to work investigating it
22 and I was stunned and shocked by what I learned.

23 And in the summer of 2011 I went across the
24 United States to look at places in the west where
25 fracking was actually happening to begin to kind of do
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1 some field work on what this actually looked like and
2 what I should be thinking about.

3 I took my kids with me and we were camping the
4 whole time. So we called it sort of like camping with
5 drill rigs. And it was when I was in Utah interviewing
6 people in the Redrock community of Utah about proposed
7 fracking operations that I got two phone calls. One was
8 to say that the student, Tim DeChristopher, was about to
9 be sentenced for his action as a civil disobedient in
10 attempting to stop fracking in the area where I was
11 actually studying. He was going to be sentenced in a
12 federal courtroom in Salt Lake City and I was asked to
13 come and speak there outside the courtroom while he was
14 being sentenced. So I did. And it was my first
15 experience with civil disobedience.

16 So Tim was sentenced for his peaceful actions
17 that actually did succeed in stopping fracking. He was
18 sentenced to two years in federal prison and he was
19 hauled out of the courtroom by federal marshals in
20 handcuffs and manacles.

21 And then everyone in that area filled the
22 streets during rush hour and simply sat down. And in my
23 mind there was one image that I couldn't shake and it
24 was an image of a young woman holding a sign that said,
25 "Climate Justice Now" who sat down on the tracks of the
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1 light rail commuter train and then here came the train
2 full of commuters and it had to slow and stop. She held
3 her sign.

4 And on the side of the first car of that
5 train, that street car, was a public service
6 announcement by the American Cancer Society that had a
7 pink ribbon and a slogan that said "Just Get A
8 Mammogram."

9 And I thought well, here it is, my life in
10 public health. Just get a mammogram versus climate
11 justice now. We can either detect problems after
12 they've already arisen or we can try to prevent them.

13 The next day I was back in the field and I got
14 a phone call from Theresa Heinz Kerry letting me know
15 that I was the lucky recipient of this year's Heinz
16 Award which came with this \$100,000.00 check.

17 Had I not just been through what I'd been
18 through the day before I might have thought, oh, what a
19 great windfall. I can use this to do my research.
20 That's what scholars and writers mostly do when these
21 things happen, lucky things happen.

22 But, instead, I decided I wanted to do climate
23 justice now, not just get a mammogram, and I wanted to
24 use the money not just to study fracking but to stop it.

25 [Applause].
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1 I had just heard Tim DeChristopher say to a
2 judge "I don't want -- I'm not asking for mercy. I'm
3 asking you to join us. This is what love looks like."

4 So I went back to my unfractured state of New
5 York and I let it be known that I wanted to somehow
6 unite all of these local groups that were springing up
7 all over trying to stop fracking into a mighty
8 state-wide coalition. I didn't know how to do that.
9 I'm just kind of a nerdy biologist.

10 But there were some people who had some
11 political skills and they included groups like Frack
12 Action, Catskill Mountain Keepers, United For Action,
13 Food And Water Watch. And so there were kind of five
14 groups plus me, this crazy biologist with a check, and
15 we all kind of pitched in and we started New Yorkers
16 Against Fracking.

17 We were only these handful of groups at the
18 beginning but more and more groups joined us and by the
19 time we banned fracking in 2014 there were more than 400
20 groups as part of our coalition. And they included
21 Businesses Against Fracking which, itself, was a
22 coalition of a thousand different businesses. Faith
23 Leaders Against Fracking, more than 500 churches and
24 synagogues, and so on.

25 And so we changed the public opinion on
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1 fracking and we took the governor's base away from him.
2 So it now was a bigger problem for him to diss us than
3 it was to diss the oil and gas industry.

4 And as this mighty social movement began
5 unfolding I was able to retreat and do what I do more
6 comfortably, which is to analyze data. That is how I
7 became a cofounder of Concerned Health Professionals of
8 New York. We became the scientists in residence to the
9 anti-fracking movement. And we began to analyze the
10 data, to translate the data into plain and simple
11 English and not only bring it before our state
12 legislatures in testimony and write memoranda for our
13 governor, and our commissioner of health and our
14 commissioner of the environment, but also take it to
15 people.

16 Myself and my colleagues in the sciences and
17 medicine spent the better part of two years speaking
18 every Friday and Saturday night in a church basement
19 somewhere, in a Rotary Club, in a junior high school
20 auditorium, in a town hall, in a public library and we
21 gave our Fracking 101 PowerPoint presentation.

22 When we started there were only 65 studies in
23 the peer reviewed published literature about the risks
24 and harms of fracking. Our goal was to keep the
25 moratorium that we had going. Our feeling was that a
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1 moratorium was just a ban with a deadline. And our
2 hunch was that if we could stop fracking for long enough
3 the data would come in and make it look unthinkable.
4 And that was our strategy.

5 And as we went we were operating on a moving
6 stream of data. By the time we banned fracking in
7 December 2014, and the governor did announce a ban on
8 the basis that fracking was a demonstrable public health
9 risk, with risks both known and unknown, there were 400
10 studies in the peer reviewed literature. Now there are
11 1,300 studies in the peer reviewed literature.

12 So we, and Concerned Health Professionals of
13 New York, continued to edit and bring out new editions
14 of our compendium, which has the very sexy title
15 Compendium of Scientific Medical and Media Findings
16 Demonstrating Risk and Harms of Unconventional Gas and
17 Oil Extraction.

18 [Applause].

19 So Concerned Health Professionals of New York
20 partnering with Physicians For Social Responsibility,
21 who won the Nobel prize, right, for insisting that
22 nuclear war was unregulatable and needed simply to be
23 abolished, so they were our natural partners in making
24 the same case about fracking.

25 Our first edition of this was so slight we
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1 could staple it and mail it to the governor. Now you
2 can see with 1,300 studies all peer reviewed and
3 footnoted it's quite a mighty document. And now we keep
4 bringing out these editions every year to help other
5 states and other nations to provide them good data for
6 their own fight.

7 But I guess I want to close this part of my
8 talk off by saying, yes, science won a ban on fracking
9 in New York state but science alone did not win. If
10 science alone could make good public policy we would
11 have solved the climate crisis and we would all be using
12 solar power now, right. We had good science on climate
13 at least 20 years ago, if not before.

14 But science together with activism was our
15 winning combination. Activism and social change created
16 the ability for science to speak so that the governor
17 could announce that, yes, science -- that the science
18 on fracking was troubling. There were public health
19 risks and this become the way forward for our state.

20 And so now we're engaged in a process where
21 we're trying to allow the governor to wear the mantel of
22 climate hero. Turn our state into an incubator and
23 laboratory for renewable energy.

24 This is the governor who saw sea water
25 sloshing through our subway system after the 2012
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1 hurricane Sandy. So we want him to play that role for
2 us.

3 At the same time, even though we banned
4 fracking, we haven't yet banned fracking infrastructure.
5 So New York state is still used as a staging ground for
6 pipelines, compressor stations, natural gas power plants
7 and gas storage depots are still being built-out.

8 My work involves fighting those too. And when
9 we fought against the gas storage facility that took
10 over the salt caverns underneath Seneca Lake, which is
11 where I live and a source of drinking water for 100,000
12 people -- so I'll back up and say a Houston based gas
13 company bought five miles of prime lake front property,
14 not because it enjoyed the view or loves our wineries,
15 but wanted to get access to the holes in the ground left
16 over by a century of salt mining and use those holes as
17 a gas station for the products of fracking before -- so
18 the price could go up before it could put it into
19 pipelines and send it to east coast markets.

20 Storing gas in what is called interbedded salt
21 and shale formations is one of the most dangerous ways
22 to store gas and has led to fatalities in other states.

23 So we thought that was a bad idea and we
24 attempted to do, for that fight, for what we were doing
25 with the fracking fight, which is to do really good
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1 science on the hydrology of using salt caverns to store
2 compressed gas, the flow of ground water, how our lake
3 could become salinated, what would happen to the
4 wineries, what would happen to air quality with the
5 flare stacks and all the associated infrastructure, but
6 we failed.

7 In this case the decider was not our state but
8 rather the Federal Energy Regulatory Commission who
9 simply said, after all of our testimony and all of the
10 work we had done, we're simply not looking at that and
11 went ahead and approved the project.

12 So then began a civil disobedience campaign.
13 I decided if you wouldn't listen to my data as a
14 biologist then you will listen to my mother's body. I
15 gave birth just down the road from this facility in my
16 son goes to summer camp not far away and there is no
17 good evacuation plan. So I'll place my mother's body in
18 between the truck with the drill head and the place
19 where the truck with the drill head wants to go and the
20 driveway of this facility.

21 Over two and a half years 650 people felt the
22 same. So we had 650 arrests. And then the company
23 decided to cancel its gas storage expansion plans.

24 [Applause]

25 There is something about 93-year old great-
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1 grandmothers blocking your driveway that makes for
2 really bad press. And I should say that that campaign
3 involved a lot more than civil disobedience. It involved
4 municipal ordinances. It involved the wine business
5 coalition petitioning. A lot of things went on behind
6 the scenes. The cinematic part of it, the part for
7 which we got national/international media, were the
8 arrests.

9 Civil disobedience is a powerful thing and I
10 discovered I'm actually good at going to jail. I'm good
11 at going to jail because I'm a good cancer patient. I
12 know how to lie in an MRI machine motionless for 30
13 minutes. I know how to lie in bed with a Heparin lock
14 and an IV drip with a backless blue cotton gown. I know
15 how to push the IV drip down the hallway holding the
16 back of my blue cotton gown shut with the other hand.
17 And, thus, I'm good at shuffling up a set of stairs with
18 ankle manacles and handcuffs. I'm good at being in a
19 cell where the lights are on all night and the food is
20 terrible because it's just like being in a hospital.

21 A hospital has a call button but they never
22 answer it anyway. Jail cells don't but what's the
23 difference, right? Probably the most relaxing two
24 weeks I've ever spent.

25 So I want to ask you, What would you go to
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1 jail for? Would you go to jail for water, to protect
2 water, would you do that? Question for your
3 discernment.

4 Now lastly I want to speak to you as a
5 scientist. I've spoken to you as a writer. I have
6 spoken to you as an activist. Now I just want to tell
7 you some of the science of fracking and give you a
8 flavor of this compendium of ours which has been
9 submitted, by the way, as a testimony for the fracking
10 tribunal. And here is how we talk about fracking in
11 this document of ours.

12 Emerging trend No. 1. Growing evidence shows
13 that regulations are simply not capable of preventing
14 harm. Studies reveal inherent problems in the natural
15 gas extraction process such as well integrity, failures
16 caused by aging or the pressure of fracking itself and
17 in the waste disposal process.

18 These issues can lead to water contamination,
19 air pollution with carcinogens and other toxic
20 chemicals, earthquakes and a range of environmental and
21 other stressors inflicted on communities.

22 Some of fracking's many component parts, which
23 include the subterranean geological landscape itself,
24 are simply not controllable. Compounding the innate
25 unpredictability of the fracking process, the number of
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1 wells and their attendant infrastructure continue to
2 proliferate, creating burgeoning cumulative impacts.

3 The size of individual wells keeps growing
4 with the horizontal portions of a single well now
5 exceeding as far as two miles or more underground.
6 Fluid injections once typically three to five million
7 gallons per fracked well can now easily reach 20 million
8 gallons.

9 The injection of extreme volumes of fluids
10 creates significant deformations in the shale that are
11 translated upward a mile or more to the surface. Along
12 the way these pressure bulbs can impact in unpredictable
13 ways faults and fissures in the overlaying rock strata,
14 including strata that intersect fresh water aquifers.
15 Thus, pressure bulbs may mobilize contaminants left over
16 from previous drilling and fracking and mining
17 operations.

18 No set of regulations can obviate these
19 potential impacts to ground water. No set of
20 regulations can eliminate earthquake risks.

21 Well sites leak far more methane and toxic
22 vapors than previously understood and they continue to
23 leak long after they are decommissioned.

24 Abandoned wells are significant sources of
25 methane leakage into the atmosphere. Based on findings
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1 from New York and Pennsylvania they may exceed current
2 total leakage from oil and gas wells currently in
3 production.

4 Plugging abandoned wells does not always
5 reduce methane emissions and cement plugs themselves
6 deteriorate over time. Further, many abandoned wells
7 are unmapped and their locations unknown.

8 No federal or state agency routinely monitors
9 methane leakage from abandoned wells. Leakage rates
10 among abandoned wells are wildly variable. 4% of wells
11 nationwide are responsible for half of all methane
12 emissions from fracking operations. Predicting which
13 wells will become super-emitters is not possible.

14 Further much of this leakage is engineered
15 into the routine operation of fracking extraction,
16 processing and transport infrastructure as when vapors
17 are vented through release valves in order to regulate
18 pressure.

19 Here is another section. Emerging trend No.
20 4. Public health problems associated with drilling and
21 fracking include poor birth outcomes, reproductive and
22 respiratory impacts, cancer risks and occupational
23 health and safety problems.

24 Studies of mothers living near oil and gas
25 extraction operations consistently find impairments to
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1 infant health, including elevated risks for low birth
2 weight and pre-term birth.

3 A 2017 study that examined birth certificates
4 for 1.1 million infants born in Pennsylvania found poor
5 indicators of infant health and significantly lower
6 birth rates among babies born to mothers living near
7 fracking sites.

8 A 2015 study found a 40% increase in the risk
9 of pre-term birth among infants born to mothers who live
10 nearby drilling sites.

11 A 2014 Colorado study found elevated incidence
12 of neural tube defects and congenital heart defects.

13 New studies in Texas and Colorado found
14 associations with infant deaths, high risk pregnancies
15 and low birth weight.

16 A 2017 pilot study in British Columbia found
17 elevated levels of muconic acid, a marker of benzene
18 exposure in the urine of pregnant women living near
19 fracking sites.

20 An emerging body of evidence from both human
21 and animal studies shows harm to fertility and
22 reproductive success from exposure to oil and gas
23 operations, at least some of which may be linked to a
24 dozens of known endocrine disrupting chemicals used in
25 hydraulic fracturing.

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1 A 2017 Colorado study found a higher incidence
2 of leukemia among children and young adults living in
3 areas dense with oil and gas wells, while a Yale
4 University research team reported that carcinogens
5 involved in fracking operations had the potential to
6 contaminate both air and water in nearby communities in
7 ways that may increase the risk of childhood leukemia.
8 The Yale team identified 55 known or possible
9 carcinogens that may be released into the air and water
10 from fracking operations. Of these 20 are linked to
11 leukemia.

12 Other documented adverse health indicators
13 among residents living near drilling and fracking
14 operations variously include exacerbation of asthma,
15 increased risk of hospitalization, ambulance runs,
16 emergency room visits, self-reported respiratory
17 problems and rashes, motor vehicle fatalities, trauma,
18 drug abuse and gonorrhea.

19 Pennsylvania residents with the highest
20 exposure to active fracked gas wells were nearly twice
21 as likely to experience a combination of migraine
22 headache, chronic nasal and sinus symptoms and severe
23 fatigue. And it goes on.

24 So I have spoken to you as a scientist, as an
25 activist and as a writer. And to close us out I'm going
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1 to do kind of a multi-media presentation and I am going
2 to go backwards starting with science and then activism
3 and then end with poetry.

4 For all of those listening around the world
5 who may be on the front lines we hope they're useful to
6 you.

7 So now I am going to show you -- that was me
8 as a scientist -- now I'm going to show you the trailer
9 for a new documentary film called Unfractured, which
10 just won a big award, by the way, as the best
11 documentary in a film festival in Dallas, Texas, Earth
12 X, which is actually interestingly partly sponsored by
13 the oil and gas industry.

14 And so I think I am impressed with the
15 independent mindedness of the jurors and the money
16 received by the filmmaker prompted her to turn around
17 and donate the prize money to front line communities
18 fighting fracking so that they can bring the film to
19 their communities for free. So she's doing 50 free
20 screenings with this.

21 And this documentary film tells the story of
22 how we won the fracking fight in New York state and it's
23 told through my eyes. It's just one person in a large
24 opera of people. So I'm the kind of through-line of the
25 story.

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And during the time we were fighting fracking my husband suffered a series of strokes and is now disabled. I went to jail. And then there are our two children. So I was torn in a million pieces.

And at the same time I also traveled to Romania where a small impoverished community on the Moldavan border was fighting Chevron with all their hearts.

And then I was also a civil disobedient at Seneca Lake.

And I want to say that this film kind of braids together three stories, the fracking in New York, the story of the uprising in Romania, the story of civil disobedience at Seneca Lake, and in all three cases David beats Goliath and they end in victory for the people. So it's a film with a happy ending

[Applause].

So now, OK, I'm ready to show you.

[Playing of film and music].

And now I'm going to let poetry have the last word. In honor of the amazing music that we heard and the art that exists I would like to say biology and poetry are both about the mystery of being alive.

Biology likes to solve the mystery. Poetry simply says "Behold."

1 And Kathleen Dean Moore this is for you whose
2 writing that I've learned so much from. It's a poem for
3 the Marcellus. Marcellus is the name of my bedrock that
4 I live above. And Marcellus, by the way, was named
5 Marcellus because Marcellus is a Roman warrior who got
6 too overconfident. Was actually run through by a spear
7 on his own battlefield. And Marcellus also became, for
8 Shakespeare, a character in Hamlet. He's the one that
9 says, "There's something rotten in the state of
10 Denmark." That's his line.

11 There's also a line in here from Shakespeare
12 from Julius Caesar; "Oh pardon me thou bleeding piece of
13 earth that I am meek and gentle with these butchers."

14 That's iambic pentameter but the rest of it is
15 written in hip hop rhythm.

16 Marcellus below us.

17 Marcellus below us.

18 Marcellus, tell us who are you?

19 Older than fishes.

20 Older than spinal cord and bone and in the
21 green day of trees.

22 Older than pollen dust, than seeds, bedrock of
23 grief.

24 Subterranean coral reef.

25 Microbes and nanowires.

1 Electrically conductive hypersaline fires.

2 Marcellus our cellar.

3 Marcellus unlike us.

4 Fissured and fossiled sacrophagus of sea
5 lilies and squid.

6 Ego and Id.

7 The whole periodic table and you; uranium,
8 barium, radium, lead.

9 Marcellus home of the dead.

10 Toluene, mercury, benzene, brine, arsenic.

11 The River Styx 500-million years thick.

12 In you, Eurydice, Hades, Moloch, Charon's
13 boat. Hades, Moloch, ransom note.

14 Marcellus deserved the name given him who
15 waged war and gained fame for the sacking of
16 Syracuse with the Battle of Gaul only to lose to an
17 enemy and fall at home.

18 No exit plan.

19 Some say your succees was embellished.

20 General Marcellus tell us who called you the
21 sword of Rome?

22 Saudia Arabia below our feet.

23 A prolific monster says Wall Street.

24 A sure thing. A shale.

25 Play. Play. Play.

1 Place your bet.

2 Marcellus, a minor character who guides Hamlet
3 away from his father's ghost.

4 Here, sign this lease and let's make the most
5 of it.

6 Enter now Mark Anthony breaking bread with
7 Bobby Kennedy.

8 Jealous.

9 Et tu Marcellus.

10 Oh pardon me though bleeding piece of earth
11 that I am meek and gentle with these butchers.

12 Hades, Moloch, Charon's boat.

13 Oh pardon me though bleeding piece of Hades,
14 Moloch, ransome note.

15 Piece of earth that I am meek and gentle with
16 these butchers.

17 Marcellus who are we?

18 Drill, syringe, derrick vein.

19 Two junkies argue how many carbon atoms can
20 dance on the head of a pin?

21 Marcellus, quick, tell us.

22 I hear the trucks. They're not far.

23 The plan is to reduce you to rubble.

24 There is no Hubble telescope for you.

25 No 24-hour spill cam for us.

Are you a box inscribed with the name Pandora
or a scroll on which is written the names of us
all?

Holy the rock and the fissure and the salt and
the diatoms fall.

Holy the unfractured.

Holy the wall between you and us, Marcellus.

Holy the cave.

Holy the soluable.

Holy the hall.

Holy the unmapped and abandoned well.

Hell, I know you're down there.

Mom always said don't blow up the basement.

Hades, Moloch Charon's boat.

Hades, Moloch, ransom note.

Let me love you from a long way up.

Holy the water.

Holy the cup.

Thank you.

[Applause].

You guys know how to clap. Thank you.

So I've been given the high sign for a few
comments and questions and I can't see you very well.

Is there a way to put the house lights up in here.

MS. CARLY LETTERO: If we can get the
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1 house lights up and I have a mic. If you would like to
2 raise your hand I can come to you if you have a
3 question.

4 MS. ALLISON MILLER: Thank you and thank
5 you for a wonderful evening and incredible, incredible
6 gift you've given all of us tonight.

7 My name is Allison Miller and I am a sister of
8 Tony Flagg. He's a CEO for United Grain, which is a
9 wheat company right out of Vancouver and it's owned by
10 the Japanese and they grow wheat in the northwest and
11 they have a rail car system that is all their own.

12 And one day my brother called me and says I
13 was so excited. I wrote a contract with a fracking
14 company allowing them to use our grain cars to haul
15 their fracking sand while we're not hauling grain.

16 Were you aware of that? I was floored.

17 DR. SANDRA STEINGRABER: No, I didn't
18 know that. Thank you.

19 I mean fracking turns things inside out, not
20 just our bedrock, right? I mean I can tell you that in
21 2011 when I went through Texas at the beginning of my
22 study on fracking there was a terrible heat wave and a
23 drought that summer. It was 109 degrees as I drove
24 through the panhandle and there were fracking trucks
25 full of water going to the fracking sites even as the
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1 rest of the landscape they were driving through looked
2 like a moonscape of cracked earth with like dead cattle
3 and people had handwritten signs in their front yard
4 that said "I need water. You haul.. I pay." And yet
5 there was still water to take to the fracking sites.

6 So I think the reprioritization that fracking
7 has brought, you know, no grain, but sand. We're dying
8 from lack of water but there's water to blow a part the
9 beckerock. This is part of the human rights issue, the
10 abrogation that is fracking.

11 Thank you for telling us that.

12 What else?

13 AUDIENCE MEMBER: You're an amazing,
14 inspirational person and I've been just awed by you
15 tonight as I'm listening to you talk about fracking. I
16 work on nuclear history so I see a lot of resonance
17 between what you're saying about contamination and I'm
18 wondering if you connect -- the contamination that we're
19 seeing today does it start with nuclear weapons, that
20 allowing of radiation, that allowing of contamination?

21 It seems to have expanded and expanded from
22 that point but I just wondered what you thought about
23 those connections and because we're talking about
24 climate change and very often a solution to climate
25 change is given as nuclear power.

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1 DR. SANDRA STEINGRABER: Yeah, we can
2 talk about that a bit.

3 So that connection was certainly clear to
4 Rachel Carson, right. So she herself had her eyes
5 opened by the atomic age. And the way it was opened was
6 that it was a new idea in the 1950s that you could
7 detonate an above ground nuclear device three time zones
8 away and then the radioactive strontium in baby teeth
9 shed by children a few months later in the east coast
10 would go up.

11 And so now we understand how that is
12 connected. Radioactive strontium is released into the
13 upper stratosphere. It's carried by the prevailing
14 winds west to east. It sifts down into grass. The cows
15 eat the grass. Strontium follows calcium into bone and
16 into breast milk and so it ends up into the cows' milk,
17 children drink the milk, it ended up in their skeleton
18 including in their teeth. They shed them. They put
19 them under their pillows.

20 And there was an initiative at the time of
21 scientists who were collecting baby teeth that parents
22 would send in, the Tooth Fairy Project or something like
23 that, and they could see spikes in radioactivity among
24 children following, you know, the appropriate time lags,
25 following these explosions.

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1 And that changed Rachel Carson's thinking
2 because it was just a new idea that something that
3 happened half a continent away could change the ecology
4 here. And she began to apply that thinking to pesticide
5 drift.

6 In fact I'll just read you -- Rachel Carson,
7 by the way, was keeping two secrets. I'll probably need
8 reading glasses for this. She was keeping two secrets
9 while writing Silent Spring.

10 One, that she was dying of breast cancer and
11 she did not want her enemies in industry to know that
12 because she feared that her scientific objectivity would
13 be called into question. Her science would be impeached
14 and it would allow them to further discredit her.

15 And the other secret was that she loved a
16 woman whose name was Dorothy Freeman. And they wrote
17 love letters back and forth to each other. And Rachel
18 tried out her ideas on Dorothy. And one of them was to
19 tell Dorothy about how the atomic age had altered her
20 thinking.

21 And that's the passage that I have in mind to
22 just read to you because reading it she could -- I
23 mean, well, see what you think. It seems to me that she
24 could have written it today and it still has resonance
25 for us with climate. So she writes this.

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1 "I suppose my thinking began to be affected
2 soon after atomic science was firmly established. Some
3 of the thoughts that came to me were so unattractive
4 that I rejected them completely.

5 "It was comforting to suppose that the stream
6 of life would flow on through time in whatever course
7 that God had appointed it. And to suppose that however
8 the physical environment might mold life that life could
9 never assume the power to change drastically or even
10 destroy the physical world.

11 "These beliefs have almost been part of me
12 for as long as I have thought about such things. To
13 have them even vaguely threatened was so shocking that,
14 as I have said, I shut my mind. I refused to
15 acknowledge what I couldn't help seeing. But that does
16 no good and I have now opened my eyes and my mind and
17 may not like what I see but it does no good to ignore
18 it.

19 "So it seems time that someone wrote of life
20 and the light of the truth as it now appears to us."

21 So that's kind of what gave her the courage to
22 write Silent Spring.

23 And as for your other question we don't need
24 nuclear power to replace fossil fuels. I mean that's
25 really clear. That's really clear.

[Applause]

If you -- you don't need to take my word for it check out the Solutions Project. The Solutions Project.org, which is an initiative, an on-line initiative that kind of does for renewable energy what we tried to do with the compendium. In other words, take a lot of complicated science and make it really easy to understand.

And in the case of the Solutions Project it's an on-line initiative with all kinds of visuals. And so one of the scientists involved is my colleague Mark Jacobson, a physicist at Stanford. And so he has worked out a proposal, a blueprint for how each state of the Union could entirely switch over and decarbonize and get off fossil fuels and go completely renewable, including transportation, and how you would do it. How you would finance it. How long it would take. How many jobs would be created. So the economics are all there.

And my state of New York, for example, would rely quite a lot on offshore wind. I haven't looked at what the portfolio is for Oregon but I commend it to you to take a look.

Mark is very clear that you don't need nuclear to get there. So that's a lot of good news.

And that doesn't mean that we have to rely on
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1 batteries or things that haven't been quite -- that
2 aren't deployed yet. This is like on the shelf
3 technology that we have now that, of course, as we adapt
4 it it will get better as we go.

5 But, in other words, the good news is we don't
6 have to wait for technological breakthroughs.
7 Everything we need is right here and the economics all
8 work as well as the science.

9 So there is a lot of good news out there. So
10 it's our job, it's our life's work as the adults who
11 happen to be alive at this moment in history where we
12 have about ten years to get off of carbon before we hit
13 those runaway tipping points. And then no matter what
14 we do, you know, it's a runaway train. Then it becomes
15 a real tragedy. But we're not in that doom place yet.

16 So if we're not in it then it's ethically our
17 responsibility to make sure we don't -- you know, the
18 canoe doesn't go off the edge of the cliff. And so we
19 have to paddle as fast as we can.

20 So, again, I invite you all to think about
21 what you would go to jail for. What other skill sets do
22 you have that you can apply to this great historical
23 moment where we are going to divorce our economy from
24 its current ruinous dependency on fossil fuels.

25 And, I mean, the fossil fuel party is over.
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1 It's just that that those guys aren't leaving the stage,
2 right? They're not going to self-deport. And so we have
3 to get very creative at pushing them off and ushering
4 the renewable energy in.

5 And I think there are many kind of ideas for
6 how to do this but the Solutions Project is as good as
7 any place to start. If you're new to this I would just
8 Google that and see what you think.

9 MS. CARLY LETTERO: Thank you, Sandra, and
10 thanks to every one for coming this evening. Sandra is
11 going to be up here up front to sign books and Sierra is
12 going to be at that table from Grassroots to sell books.

13 The show is still upstairs for a little bit so
14 I invite you to check out the Pop Up Gallery if you
15 haven't done that.

16 Thanks for coming everyone and thank you.

17 DR. SANDRA STEINGRABER: You're welcome.

18 [Applause]

19
20 [youtube.com/watch?v=ReA79dX1Mdg]

1 EARTH LAW ALLIANCE

2 MAY 15, 2018 9:00-11:00

3
4 MS. LISA MEAD: So good morning, everyone. My
5 name is Lisa Mead. I'm a director of the Earth Law
6 Alliance and I'm based in Scotland in the UK. Together
7 with my colleague Dr. Michelle Maloney, who is the
8 convener of the Australian Earth Law Alliance we will be
9 making the case for Nature's Rights to the Tribunal.

10 Our submissions focuses primarily on Question
11 4 under review by the Tribunal. The question is, What
12 is the extent of responsibility and liability of states
13 and non-state actors, both legal and moral, for
14 violations of the rights of nature related to
15 environmental and climate harm caused by these
16 unconventional oil and gas extractions techniques?

17 We will argue that under our current
18 environmental laws in which nature is objectified and
19 treated as property to be exploited, in many cases,
20 damage is permitted rather than prevented.

21 We will argue that unconventional oil and gas
22 extraction violates the rights of nature to exist, to
23 thrive, to regenerate and to evolve. And that both
24 state and non-state actors are responsible, accountable
25 and liable for these violations.
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1 We will also argue that from a climate change
2 perspective alone unconventional oil and gas extraction
3 is an indefensible activity because it exacerbates
4 carbon dioxide emissions at a time when it is imperative
5 that we reduce them thereby violating the rights of all
6 beings to integral health.

7 We will call various expert witnesses and we
8 will present evidence showing that the rights of the
9 atmosphere, of water, of soil, of rock, of the climate
10 and of countless living beings with whom we share this
11 planet are being violated by unconventional oil and gas
12 extraction.

13 Given the constraints on our time we are only
14 able to give you a brief glimpse of the kind of harms
15 that are being inflicted on nature, however, we believe
16 that these examples are more than adequate to illustrate
17 the inherent risks of unconventional oil and gas
18 extraction and why it should not continue.

19 We believe that a shift in our legal system's
20 treatment of nature will help to shift the current
21 paradigm from nature's object to nature as subject of
22 the law.

23 We envision a legal system in which nature's
24 rights are as vital as human rights and where the two
25 are regarded as complimentary because health and humans
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1 rely on health in nature and in ecosystems.

2 We will make the case that in spite of our
3 scientific knowledge of the perils of climate change
4 state actors are continuing to enact laws and
5 regulations which authorize unconventional oil and gas
6 extraction for the benefit of non-state actors, that is
7 oil and gas corporations.

8 We will argue that the responsibility for the
9 damage done lies with state and non-state actors and
10 that they are responsible and, therefore, liable for
11 environmental and climate harm caused by unconventional
12 oil and gas extraction.

13 Our written submission delivered to the
14 Tribunal on the 30th of March of this year highlights
15 this and also contains further non-exhaustive evidence
16 of the kind of damage to nature that's been occurring.

17 Ultimately we are asserting that a fundamental
18 reassessment of our relationship with the living body of
19 earth is vital for nature's survival and thus for our
20 own survival.

21 And now moving to the foundations of our
22 arguments in support of the rights of nature. In
23 considering the rights of nature in relation to climate
24 change and unconventional oil and gas extraction it's
25 important to recognize that there is already recognition
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1 in a number of international instruments that nature has
2 the intrinsic right to exist, thus demonstrating that
3 over the last 40 years our collective thinking in
4 industrialized society has been shifting from a purely
5 anthropocentric and utilitarian perspective to a world
6 view that recognizes nature's intrinsic worth for its
7 own sake.

8 At present formal international law, that is
9 law created between nation states, does not yet
10 recognize the rights of nature. But legislation and
11 court cases exist around the world recognizing the
12 rights of the natural world. And a large number of
13 civil society agreements and statements advocate for the
14 rights of nature.

15 We draw on this emerging movement and the
16 statements and laws within it for our submission to the
17 Permanent Peoples' Tribunal. We also draw on the
18 Universal Declaration of the Rights of Mother Earth,
19 abbreviated as the UDRME, which is a powerful civil
20 society statement created and endorsed for more than
21 30,000 people from more than 100 countries who attended
22 the World Peoples Conference On Climate Change And The
23 Rights Of Mother Earth in Cochamamba, Bolivia in 2010.

24 As I already mentioned explicit recognition of
25 the rights of nature and of the sacred importance of the
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1 living world has being acknowledged in many
2 international statements and agreements.

3 For example, in 1982, 111 countries voted to
4 adopt the World Charter For Nature which recognizes that
5 every life form is unique warranting respect regardless
6 of its worth to humans.

7 The charter recognized that humankind is a
8 part of nature and life depends on the uninterrupted
9 functioning of natural systems.

10 Prior to that, in 1980, The International
11 Union For The Conservation Of Nature, the ICUN, had
12 recognized that every form of life warrants respect
13 independently of its worth to humans, to people.

14 Human development should not threaten the
15 integrity of nature or the survival of other species.

16 And in August 2016 the World Conservation
17 Congress of the ICUN went further and adopted Resolution
18 100, incorporating the rights of nature as the
19 organizational focal point in ICUNs decision-making.
20 These ICUN resolutions influenced global and national
21 conservation policy.

22 We also see the growing legal recognition of
23 the need for healthy ecosystems and also the need for
24 human duties to the environment with 140 countries to
25 date, including environmental protection of one kind or
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1 another in their constitutions and 86 of them explicitly
2 recognizing the human right to a healthy environment.

3 This is a good start but it does not go far
4 enough. And so, in light of the current failure of the
5 international legal system and of so many national legal
6 systems to recognize nature's intrinsic right to exist,
7 our submissions to the PPT therefore draws on the legal
8 principle set out in the Universal Declaration of the
9 Rights of Mother Earth.

10 And in order to articulate what the rights of
11 nature are we will also reference the growing body of
12 rights of nature and legal personhood laws around the
13 world.

14 My colleague, Michelle Maloney, will expand on
15 these freedom rights of nature developments in our
16 session tomorrow afternoon.

17 So today we've invited a number of expert
18 witnesses to join us in making the case for nature.
19 First we will hear from Cormac Cullinan, author of Wild
20 Law: A Manifesto For Earth Justice, who will talk more
21 about the principles of earth jurisprudence and why
22 fracking is a contravention of the Universal Declaration
23 of the Rights of Mother Earth and what earth
24 jurisprudence means in practice for action on climate
25 change and unconventional oil and gas extraction.

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1 Next we'll hear from Linda Sheehan, senior
2 counsel of the Leonardo DiCaprio Foundation. Linda will
3 look at the co-dependency of human rights and nature's
4 rights and the need for legal change. She'll also look
5 at the big picture of how fracking is exacerbating
6 climate change.

7 Thereafter we will begin to address some of
8 the substantive violations of nature's rights. First
9 looking at violations of the rights of animals and
10 plants and second violations to water. We will be
11 calling four expert witnesses today to provide testimony
12 on these issues.

13 So our first presenter, Cormac Cullinan, has
14 been a leading advocate for earth laws and rights of
15 nature for the last 18 years. Cormac is a director of
16 EnAct International, an environmental law and policy
17 consultancy based in South Africa.

18 Cormac is also an author and a climate justice
19 advocate. His 2002, Wild Law: A Manifesto For Earth
20 Justice, presents a framework for transforming legal
21 systems to align with the laws of nature and is a
22 clarion call for recognizing the rights of nature in
23 law.

24 In 2010 Cormac was invited to be a lead author
25 for the Universal Declaration of the Rights of Mother
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1 Earth, which is fundamental, as I said, to the case
2 we're making to this Tribunal.

3 He's been a keynote speaker for the rights of
4 nature at many events, including the 2011 UN Conference
5 On Climate Change in Durbin and the Rio Plus 20 Earth
6 Summit in 2012. And Cormac is an honorary research
7 associate at the University of Capetown.

8 So with great pleasure over to you, Cormac.

9 MR. CORMAC CULLINAN: Thank you, Lisa.

10 My name is Cormac Cullinan and I'm a member of
11 the Executive Committee Of The Global Alliance Of The
12 Rights Nature and have been an active advocate for earth
13 jurisprudence and the rights of nature for about 18-
14 years and I'm based in Capetown.

15 I've been asked to explain earth jurisprudence
16 and why this philosophy of law and specifically the
17 rights and duties specified in the Universal Declaration
18 of the Rights of Mother Earth are relevant to the
19 Tribunal's hearing on fracking.

20 Indeed I'll argue that they are more than
21 relevant. That they are fundamental to the decision
22 that the Tribunal is called upon to make in this case.

23 So, first of all, what is earth
24 jurisprudence?

25 Earth jurisprudence is a term that I coined to
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1 describe the philosophy of law that is ecocentric as
2 opposed to anthropocentric. In other words, a
3 jurisprudence based on the understanding that the
4 primary purpose of human legal systems must be to ensure
5 that human beings live and behave, not only as good
6 citizens of human communities but as good citizens of
7 the whole earth community.

8 In other words, for humanity to flourish and,
9 indeed, even to survive we must adapt our behavior to
10 the characteristics and constraints of our environment.

11 Since law is one of the most important tools
12 of structuring human societies and for regulating human
13 conduct it must follow that laws should be directed
14 towards this fundamental purpose. And I refer to laws
15 which reflect earth jurisprudence as wild laws.

16 So turning now to give you a clearer idea of
17 what is meant by earth jurisprudence I'll deal with some
18 of the fundamental principles of earth jurisprudence.

19 Perhaps the first is that the universe itself
20 is the primary law-giver, not human systems. In other
21 words, we are born into an ordered universe and the
22 earth's community, of which we form a part, is
23 constituted and defined by certain fundamental non-
24 negotiable laws or regularities, if you prefer, and
25 relationships.

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1 So these fundamental characteristics of the
2 natural world are referred to as the great
3 jurisprudence. In other words, this is the
4 jurisprudence, if you, like the system of order, the
5 fundamental principles which would inform specific earth
6 jurisprudence developed by different human communities
7 in specific places and times.

8 Now a failure to adapt our behavior to conform
9 to the preexisting natural order, whether by ignorance
10 or intention, is detrimental. We can see this quite
11 clearly with climate change.

12 It is quite clear that there is a point beyond
13 which the climate becomes unstable if you carry on
14 putting greenhouse gases into it. In other words,
15 whatever that point is, and there may be some arguments
16 about it, the existence of a certain concentration --
17 the fact that a certain concentration of greenhouse
18 gases will trigger instability in the climate and move
19 to a very different climate is indisputable and
20 non-negotiable.

21 If we choose not to recognize that fundamental
22 characteristics of the earth's system then, as we see
23 today, it will be highly detrimental to the human
24 species and, in fact, threatens our survival.

25 So the important point is that there are
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1 certain laws, if you like, which are original, that
2 predate human laws and with which we must conform
3 because they are non-negotiable.

4 So flowing from this earth jurisprudence
5 argues the earth's community and all the beings that
6 constitute it have certain fundamental rights, including
7 the right to exist, the right to habitat or a place to
8 be and the right to participate in the evolution of the
9 earth's community. Sometimes this is referred to as the
10 intrinsic rights of nature and ecosystems to exist, to
11 strive, to regenerate and to evolve.

12 Now this can be explained quite simply as that
13 which comes into being has the right to be. And in fact
14 earth jurisprudence is simply applying the same logic
15 that we use to justify human rights. If we exist by the
16 virtue of the fact that we exist as human beings we
17 claim to have intrinsic human rights and that is the
18 same argument that is being applied to the rights of all
19 that has come into existence.

20 Of course, as with any rights, these rights
21 are all limited by the rights of others. And so the
22 rights of any particular aspect or member of the earth's
23 community must be limited to the extent necessary to
24 maintain the integrity, balance and health of the
25 communities within which they exist.

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1 In other words, the rights of the whole must
2 take precedences over the rights of constituent parts of
3 it because the flourishing, the ability of any part of
4 the whole to exist will be lost if the whole is
5 degraded.

6 So human acts or laws that infringe these
7 fundamental rights and which violate these fundamental
8 relationships and principles that constitute the earth
9 community are constantly illegitimate and unlawful from
10 the perspective of earth jurisprudence. They would be
11 equivalent to finding that a government action is
12 unlawful because the official in question was acting
13 beyond his or her powers.

14 So we say that no member of the earth's
15 community is entitled to act contrary to these
16 fundamental principles which constitute the system of
17 order into which we are born.

18 So humans must, therefore, adapt their legal,
19 political, economic and social systems to be consistent
20 with the natural system of order and to guide humans to
21 live in accordance with it.

22 This means that human government systems must,
23 at all times, take account the interests of the whole
24 earth community and must first determine the lawfulness
25 of human conduct by whether or not it strengthens or
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1 weakens the relationships that constitute the earth's
2 community.

3 So, in this case, we would argue that
4 determining the lawfulness of unconventional means of
5 extracting oil and gas must be evaluated on the basis of
6 whether or not they strengthen or weaken the
7 relationships that constitutes the earth community.

8 Government systems must maintain a dynamic
9 balance between the rights of humans and those of other
10 members of the earth community on the basis of what is
11 best for the earth as a whole. They must promote
12 restorative justice, which focuses on restoring damaged
13 relationships, rather than punishment or retribution and
14 they must recognize all members of the earth's community
15 as subjects before the law with the right to the
16 protection of the law and to an effective remedy for
17 human acts that violate their fundamental rights.

18 I would like to turn now to the question of
19 why this Tribunal should apply the rights reflected in
20 the Universal Declaration of the Rights of Mother Earth.
21 There are many reasons but I'll focus on four.

22 The first is to cure the bias of existing
23 legal systems. If the Tribunal were merely to
24 administer and apply existing international law they
25 would be applying a legal system which is essentially
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1 caustic to the natural world.

2 By defining all of nature's property we have
3 become blinded to the reality of an animate world. A
4 community of life created by a myriad of relationships.
5 All of those relationships are invisible to the law if
6 we see everything that is not a human being or a
7 corporation as mere property.

8 So our current legal systems, and particularly
9 the international legal order, are embodied and flawed
10 in a misguidedly anthropocentric view. It is very
11 necessary to correct this and to apply a broader concept
12 of law if one is going to arrive at appropriate
13 conclusions in relation to matters such as this, which
14 concern the relationship between human beings and their
15 environment.

16 And this is reflected in the preamble to the
17 Universal Declaration of the Rights of Mother Earth
18 which mentions that in an interdependent living
19 community it is not possible to recognize the rights of
20 only human beings without causing an imbalance within
21 mother earth.

22 So in other words, if one ignores the rights
23 of other beings and applies only existing international
24 law one will be essentially embarking on a bias inquiry.

25 So it's necessary to cure the biased of existing legal
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1 systems.

2 The second reason for applying this is simply
3 as a matter of logic. Human beings are a branch on the
4 tree of life. It is illogical to simultaneously claim
5 the rights of life, dignity, et cetera, for the human
6 branch while denying the rights of the tree itself to
7 exist and to flourish. It simply doesn't make sense.

8 And this is also reflected in the Universal
9 Declaration which refers to, in the preamble, affirming
10 that to guarantee human rights it is necessary to
11 recognize and defend the rights of mother earth and all
12 beings in her.

13 So it is quite clear that logically it makes
14 no sense to pretend to deny the rights of the whole
15 while asserting the rights of a part of it.

16 The third reason is as a matter of justice or
17 equity. Now balance is fundamental to the concept of
18 justice. We see this in the personifications of justice
19 as a goddess holding scales. And while we place human
20 interests or rights in one hand, and there are no rights
21 of the rest of nature to place in the other hand, there
22 can be no balance and there can be no justice. And we
23 see this reflected in the absence of ecological balance
24 in the world today.

25 Human beings, by virtue of the fact that human
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1 rights and interests trump all other rights and there
2 are inadequate legal and institutional mechanisms for
3 seeking balance, we have ongoing degradation of the
4 planet which we see around us everywhere.

5 And the fourth and final reason why this
6 Tribunal must apply this approach is as a matter of
7 necessity or survival. As we all know climate change
8 represents an urgent and unprecedented and eminent
9 threat to almost all forms on life of earth and
10 certainly to human life.

11 The idea that, at this stage, opening up new
12 means of exploiting oil and gas, which will accelerate
13 climate change is clearly, in my view, not only a breach
14 of the fundamental rights enumerated in the Universal
15 Declaration of the Rights of Mother Earth but also
16 precipitating and accelerating the crisis we find
17 ourselves in.

18 So for a tribunal, at this point in human
19 history, to apply laws which do not recognize the rights
20 of nature as a whole would, in my view, be highly
21 irresponsible and inappropriate given the urgent
22 situation that we find ourselves in.

23 I would just like to briefly mention two other
24 points for the Tribunal to consider.

25 The first is the question of integral health
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1 which will be dealt with in other presentations as well.
2 This is a concept which is not well-known in the West
3 but it is a reminder that the health of one part of the
4 whole is derived from the health of the whole and
5 largely dependent on the health of the whole and equally
6 the health of the whole is a function of the health of
7 its constituent parts.

8 So if we are to assess the health of humanity,
9 for example, and the future prospects of humanity within
10 the context of the earth's community as a whole, we can
11 see that damaging other aspects of the earth's community
12 and the earth itself will inevitably reflect and damage
13 humanity.

14 So the concept of integral health and the
15 importance of maintaining integral health is fundamental
16 to this approach.

17 The other point I would like to mention is the
18 question of proportionality. Proportionality is a
19 principle well known in international law and in most
20 legal systems.

21 It generally involves a weighing of what are
22 the benefits of a particular course of action outweigh
23 the harm. And, essentially, whether they can be
24 justified.

25 Now in this particular situation it is
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1 necessary to consider whether the benefits which may
2 arise from unconventional means of extracting oil and
3 gas are, in any way, commensurate with the harm that
4 they cause.

5 In other words, you will hear evidence of the
6 very great harm that these methods will cause not only
7 to human beings but also to the earth itself, the
8 integrity and the structure of the earth to water
9 systems, to the atmosphere, to other species, et cetera.
10 And against that one must weigh the advantages. Can
11 such grievous harm be out-weighed by the advantages or
12 be justified, in any way, by the advantages.

13 The advantages, it seems to me, if they can be
14 called advantages, lie mainly in the accrual of profits
15 to a very small group of human beings.

16 So to end it all I would say to this Tribunal
17 that it is extraordinarily important that you base your
18 decisions not only on what is regarded as existing
19 international human rights law but also that you apply
20 the earth jurisprudence approach and look at the rights
21 and duties reflected in the Universal Declaration of the
22 Rights of Mother Earth and at the heart of this inquiry
23 is what is the right relationship between humanity and
24 earth?

25 Are these practices consistent with
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1 maintaining a relationship of respect and with
2 maintaining integral health of the whole and of humanity
3 and the other members of the earth community?

4 And my submission is that if the Tribunal
5 approaches this question from that point of view and
6 asks what is the right relationship that ought to be
7 upheld here there is only one possible conclusion.

8 Thank you.

9 MS. LISA MEAD: Thank you, Cormac. I just
10 wonder if any of the judges have any questions for
11 Cormac?

12 No? Okay. Then we'll move on to Linda.

13 So our next presentation is by Linda Sheehan.
14 Linda is senior counsel at the Leonardo DiCaprio
15 Foundation, or LDF as it's also known, where she manages
16 programs, advances solutions to climate change and
17 provides legal counsel.

18 Prior to LDF Linda was Executive Director of
19 Earth Law Center where she advocated for nature's
20 rights.

21 She also ran the California Coast Keeper
22 Alliance and the Pacific Region Office of Ocean
23 Conservancy where she successfully advanced initiatives
24 to benefit inland waterways and the oceans.

25 And for her efforts in fighting pollution of
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1 the Pacific and the streams and rivers that flow into it
2 Linda was recognized as a California coastal hero.

3 She holds a B.S. in Chemical Engineering from
4 MIT, a Master of Public Policy from UC Berekley's
5 Goldman's School and a JD from UC Berekely's law school.

6 So, Linda, over to you please.

7 MS. LINDA SHEEHAN: Thank you so much.

8 And greetings esteemed members of the Tribunal. I would
9 like to take this opportunity to dive a bit more deeply
10 into what Cormac Cullinan was just discussing right now
11 with some facts, and as I pull up my deck right now I
12 wanted to reiterate that, again, for the record, my name
13 is Linda Sheehan and I am with the Leonardo DiCaprio
14 Foundation and I have been a member of the Global
15 Alliance For The Rights Of Nature and based in the San
16 Francisco Bay Area.

17 I will leave this deck with Ms. Mead for the
18 tribunal judges but I wanted to provide it so we could
19 look at some additional facts and figures that
20 illustrate what Cormac was just discussing with regards
21 to the significance of considering rights of nature as
22 part of this Tribunal.

23 So as you just heard we are codependent with
24 the larger system of earth and our relationships with
25 all life are critical. And if we, as humans, assume
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1 that we have inherent rights because we exist so too
2 does nature. And violating human rights also, at the
3 same time, often results in violations of nature's
4 rights and vice versa. And we're seeing this in
5 particular happening with fracking where we see
6 co-violations of human rights, the rights of indigenous
7 people and nature's rights with the same action.

8 And this is the type of systemic consideration
9 that we need, as a society, to consider in order to be
10 effective in identifying problems and its solutions.

11 Nature's rights and human rights are
12 codependent as we heard. Decision makers are
13 considering, in a positive way, that human rights are
14 consistent with environmental health and as a result
15 over 100 countries worldwide have adopted laws,
16 constitutional provisions and court decisions that
17 recognize the human rights to a healthy environment.

18 This is a very positive step but, at the same
19 time, we need to recognize nature's own inherent rights
20 to exist, thrive and evolve.

21 So, as Cormac discussed, as you heard as well
22 from Ms. Mead earlier, we are asking the Tribunal to
23 consider laws that are grounded in the inherent rights
24 of the natural world. Currently what's happening is
25 that nature is being considered as property. It's a
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1 resource that is being used to accelerate short-term
2 profits and wealth for very few for a dwindling number
3 of people to the harm of the earth and the larger system
4 of life and human populations around the world.

5 So because humans consider nature to be
6 property in our economic and governing system it's by
7 definition, according to our economic system, degraded.
8 It's used and processed. And it's treated in a way that
9 allows it to be degraded, perhaps more slowly under
10 current environmental laws than it has been in the past,
11 but the trajectory is quite clear.

12 And because our larger and economic governing
13 systems presume that the human well being is dependent
14 upon seeing nature as property, such as the way the GDP
15 considers nature as an interest of destruction as a
16 positive benefit on our economic system and economic
17 balance sheet, governments will often side with private
18 industry in disputes over natural systems. So this is
19 something which needs to be considered as we're moving
20 forward with how we look at fracking in a larger sense.

21 So what are the types of challenges that we're
22 facing by not considering nature's rights, and what are
23 the types of strategies that we can see if we do
24 consider violations of nature's rights along with
25 violations of human rights and the rights of indigenous
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1 people as we're considering unconventional oil and gas
2 extraction?

3 Well, just a couple of quotes from people that
4 have -- hold a lot of respect in the larger community.
5 Scientists, hundreds of scientists from around the world
6 agree that unless we significantly make change then we
7 will see degradation in our very life support systems,
8 irretrievable damage.

9 And the World Bank, which not many people
10 would say is a bastion of environmental liberalism says,
11 "The dark current status quo is driving our eco system
12 into a state unknown in human experience."

13 And this is worrying people around the world,
14 not just tribunal judges and folks speaking on the
15 impacts of fracking, but larger decision makers and
16 they're looking for solutions, which is fortunate
17 because we can have a meaningful conversation.

18 Diving in again a little more deeply into the
19 types of issues that Cormac and Lisa raised, the rights
20 that have been violated, human rights, indigenous
21 peoples rights and natures rights, we can look at these
22 and start to parse these out.

23 Earth Law Center did two reports on this
24 looking at various types of co-violations around the
25 world of these types of rights and what we've learned
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1 from these types of examinations is that, again,
2 governments are often complicit along with industry or
3 alone that indigenous peoples are vastly over-
4 represented in terms of harm.

5 That human rights violations we're now seeing
6 include not just displacement such as from climate
7 change but imprisonment and even murder of defenders of
8 the environment. So we can see the larger government
9 system trying to hold control over this idea of nature
10 as property to the detriment of the communities.

11 Fossil fuel and mining extractions are the
12 types of harm that we're talking about today are
13 representative in well over a quarter, if not more, of
14 these type of co-violations and most of them strongly
15 associated with the type of biodiversity loss that
16 scientists and government decision makers are concerned
17 about.

18 And this is not something that is isolated to
19 particular parts of the world. Right here in the San
20 Francisco Bay Area just across the bay from where I am
21 right now in Richmond, California, it's the single
22 largest greenhouse emitter in California, which is the
23 Richmond Chevron refinery.

24 It releases toxins into the atmosphere. Local
25 children suffer asthma at more than double their
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1 national average and, as you can see from this photo,
2 there have been fires and explosions that have sent
3 thousands of people to the hospital with harms that are
4 rarely fully addressed.

5 So how do we start to think about addressing
6 those co-violations? You know, what to be thinking
7 about in a sensitive and systemic way? What does that
8 do for us in terms of identifying problems and
9 solutions?

10 And I would put to the Tribunal that by
11 creating governing systems that include both laws and
12 economic systems that respect and fully enforced humans
13 rights and nature's rights consistent with permanent
14 things, larger systems of law with jurisprudence, we
15 will ensure that we do that sustainably and thrive, both
16 humans and all life.

17 There are different ways that we can consider
18 this and many of these are already being implemented
19 around the world. This is recognized in the inherent
20 rights of nature, in civil society documents such as the
21 Universal Declaration of the Rights of Mother Earth,
22 creating court systems and laws to address rights of
23 nature, providing emergency protections to environmental
24 defenders and building nature's rights into human rights
25 instruments themselves and building human rights and
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1 nature rights into climate agreements, of all of these
2 are legal strategies that we would not have considered
3 if we'd not thought about nature's rights. That they
4 will ensure that we and the earth will thrive together.

5 So let's just look at a few examples of what
6 this looks like as a practical matter, both with respect
7 to fracking and also the associated impacts of fracking.

8 So we were talking about unconventional oil
9 and gas extraction of which fracking is one example.
10 And fracking and nature's rights go hand-in-hand. The
11 chemicals used in fracking operations, which you will be
12 hearing more about throughout this week, contaminate the
13 environment in a significant way and not just soil and
14 air and water but as species such as fish that depend on
15 that.

16 Fracking uses enormous amounts of water and
17 the actual fracking operations cause earthquakes,
18 disrupt river flows, aquifer flows and disrupts other
19 types of ecological productivities that healthy
20 relationships require to thrive.

21 The fracking operations themselves, of course,
22 release significant amounts of greenhouse gases
23 including methane exacerbating the problems before us.

24 So we hear that fracking creates clean gas but
25 that only looks at one tiny, tiny slice of a larger
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1 proportionality question that Cormac was raising
2 earlier. And, again, fracking implicates human rights
3 as well. And not just thinking about this human right
4 to health, which this talks about, but also the larger
5 suite of human rights.

6 Certainly we know that humans are being
7 impacted by toxins and water use that fracking
8 requires. And the UN itself recognizes that the human
9 rights to water, clean water for human basic needs, is
10 essential to the realization of all human rights. We
11 cannot live without clean water. And fracking is
12 directly attacking that.

13 But it's not just health related issues.
14 Those -- you know, such as those associated with water
15 and asthma related to air pollution. We also see a
16 direct assault on our democratic rights as well.

17 Communities that have peacefully protested
18 have been met with violence and intimidation and
19 arrest. And locally enacted laws ban fracking because
20 communities realize these harms that are coming their
21 way have been overturned by oil and gas lobbyists in
22 state legislatures such as in Texas.

23 These are the types of all-out democratic
24 rights assaults that we're seeing happening with
25 fracking. But, again, these need to be considered in a
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1 larger context of how we consider our relationship with
2 nature and if we considered that fracking would be
3 something that we would not let them to be considering
4 as something that is relevant to our engery's future.

5 Just looking at fracking we talk a lot about
6 the direct impact of fracking and looking at the
7 extraction and the deposit of fracking waste water. But
8 fracking has much larger systemic impacts. And, again,
9 if we're looking more systemically at nature and human
10 relationships then we'll start to more readily see these
11 types of impacts that we have missed. And, again, that
12 will affect the benefit cost to the community equation
13 we were hearing about earlier.

14 So the fracking boom that is a release of
15 cheap shale gas in the United States and elsewhere is
16 reporting massive new investments in creating plastic.
17 Over 160 billion so far is being spent or planned to be
18 spent on active projects, planned projects, that are
19 going in to the ground. By 2023, just over the next
20 few years, that will lock in plastic production for
21 decades. And, again, this is specifically because of
22 the availability of these sources of fossil fuels.

23 And, again, stepping back and looking at this
24 larger equation, what are the benefits to the larger
25 system of rights, including human and what the costs?
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1 We know what the costs are and we're learning
2 more about them as we look at these larger systemic
3 problems. The benefits are just to a smaller and
4 smaller number of people.

5 Nature's rights, of course, in plastics are
6 clearly impacted. We know more each day about the
7 amount of plastic, particularly in the oceans, and that
8 species, birds, sea mammals, sea turtles, consider
9 plastic as food and will starve as a result. Obviously,
10 clearly, impacting their inherent rights.

11 New research that is coming out shortly is
12 demonstrating that plastic is degrading the environment,
13 including the ocean, and are producing significance
14 levels of greenhouse gases themselves. So yet another
15 source of impact associated with fracking and plastic
16 production that we had not thought about before,
17 greenhouses associated with plastic degradation.

18 Plastics also breakdown into micro-plastics
19 which phytoplankton and other small creatures are
20 consuming as food as well and it's been found entrapped
21 in arctic ice.

22 One other point related to microplastics is
23 that they themselves are enhanced in terms of their
24 toxicity because toxin and contaminants in the ocean
25 readily attach themselves to the microplastic and the
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1 particles where they become even more contaminated food
2 for organisms.

3 Plastic also affect human rights. We know
4 that seafood eaters are consuming thousands of pieces of
5 plastic annually. The plastic is regularly found in
6 seafood and it's not just in the UK. There's been
7 studies in California that show a significant amount of
8 plastic in seafood that are caught in inland fish that
9 are caught and eaten by people.

10 European officials are calling for a
11 significant amount of research on this as well as
12 research into the impact of plastics in drinking water,
13 both tap water and particularly bottled water, which
14 people think of as safer which it, in fact, is not.

15 The plastics are also now being found in soils
16 and we're looking at the impact of that on plant
17 production. And, of course, we know a significant
18 amount of interference with certain plastics with
19 reproductive hormones.

20 So these larger problems are being generated
21 and exacerbated by what is considered to be cheap oil
22 and gas created by fracking. And now as we look at
23 these larger impacts on nature and the effects that
24 nature and humans have together because we are
25 codependent we're seeing that this cost-benefits
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1 equation is vastly incorrect.

2 That we need to look at the more holistic
3 picture and have a better sense of how we want to be
4 able to move forward in a way that is safe and healthy
5 for communities, both human and natural communities
6 around the world, and allow for resilience and
7 flourishing.

8 So if we want, as many of our colleagues want,
9 a plastic free thriving future for people and planet we
10 need to transition away from these types of
11 unconventional oil and gas extraction techniques that
12 are supporting even more plastic production.

13 And these examples that are just the tip of
14 the iceberg they illustrate, again, that earth rights
15 must be fundamental to any solutions that we look at.

16 And I put to the Tribunal that without
17 considering nature's rights we miss a significant amount
18 of this analysis and the resulting conclusions that we
19 have will be altered and flawed. So I encourage you to
20 consider that we must protect human rights by also
21 protecting and safeguarding the rights of earth.

22 Thank you. And I welcome any questions that
23 you may have.

24 MS. LINDA MEAD: Thank you, Linda.

25 There are no questions then we'll move on.
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1 But thank you for that illuminating talk,
2 Linda. I very much appreciate you joining us.

3 So next we move on to look at the some of the
4 evidence that harms are occurring to animals as a result
5 of unconventional oil and gas extractions.

6 We have two witnesses providing testimony on
7 this and I would like to call the first of these two
8 witnesses, Dr. Michelle Bamberger, who is a vet and
9 researcher.

10 Over the last eight years Dr. Bamberger has
11 been investigating the links between unconventional
12 fossil fuel extraction and animal and human health.
13 Doctor Bamberger received her Doctor of Veterinary
14 Medicine from Cornell University and a Master's in
15 Pharmacology from Hahnemann University Medical College.

16 She serves on the advisory board of Physicians
17 Scientists And Engineers For Healthy Energy and is
18 co-author of the book The Real Cost Of Fracking: How
19 America's Shale Gas Boom Is Threatening Our Families,
20 Pets And Foods.

21 Doctor Bamberger and Dr. Robert Oswald have
22 also conducted two independent peer reviewed studies
23 looking at animal and human health and how it is
24 impacted by living in close proximity to fracked wells.

25 I'll provide the titles and references for
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1 these and other papers we refer today to the Tribunal
2 judges in a separate document and Dr. Bamberger will
3 describe the scope and findings of these studies for you
4 now.

5 So over to you Michelle.

6 DR. MICHELLE BAMBERGER: Thank you, Lisa.

7 So I'll just repeat. My name is Michelle
8 Bamberger and I am a veterinarian in Ithaca, New York.
9 I have been studying the health impact of fossil fuel
10 extraction with my co-author and husband Robert Oswald,
11 since 2010. We started doing this after several high
12 profile livestock cases were not reported in the
13 scientific literature.

14 Our first case report study, Impacts Of Gas
15 Drilling On Human And Animal Health, was published in
16 2012 in New Solutions. The question we asked in our
17 first study was, Does unconventional oil and gas
18 extraction cause health impacts?

19 We wanted to include livestock and companion
20 animals because we thought they might be acting as
21 sentinels due to their higher rates of breeding, shorter
22 generation times and higher exposure.

23 We had 24 cases from six states. Those states
24 were Pennsylvania, New York, Ohio, Louisiana, Texas and
25 Colorado. And most of those cases came from
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1 Pennsylvania.

2 We had nine food animal cases, 12 companion
3 animal cases and three wildlife cases. Eighteen of
4 these cases were unconventional wells. Seven of those
5 were conventional and one of the cases we had had both
6 conventional and unconventional wells on their property.

7 For each case we collected drilling
8 information which included locations of nearby gas and
9 injection wells, impoundments, compressor stations,
10 pipelines, processing stations and dates of drilling,
11 completion, production and processing.

12 We also collected air, soil and water testing
13 results and we also looked at the veterinary and human
14 health records for everyone involved in this each case.
15 From this information we made a timeline of events for
16 each case and from that timeline we identified roots of
17 exposure and commonly reported medical problems.

18 Our second case reports study, Long Term
19 Impacts Of Unconventional Drilling Operations On Human
20 And Animal Health was publish in 2015.

21 The questions we asked in our second study
22 were, Do health impacts change over time and does
23 location matter?

24 We followed these cases over time because of
25 low dose and long term health effects of many of the
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1 chemicals associated with unconventional extraction,
2 especially those chemicals known as endocrine disruptors
3 and immune suppressants.

4 The cases were sorted by industrial activities
5 compared to activity at the time of the original
6 interview. We had 21 cases at this time from five
7 states, Pennsylvania, New York, Colorado, Arkansas and
8 North Dakota. Seven of these cases were food animals,
9 11 were companion animals and three were wildlife.
10 Eighteen of the cases were unconventional and which had
11 17 gas and we had one tight oil. We had two cases with
12 shallow vertical gas wells and two cases with deep
13 vertical gas wells. The follow-up period for this study
14 was 25- months.

15 In our first study we found that the major
16 health impacts to food and companion animals was in the
17 area of reproduction. Mostly what we saw were failure
18 to breed, abortions, still births and failure to cycle.
19 We found that humans were mostly impacted by burning
20 eyes, nose and throat, headaches, GI problems, nose
21 bleeds and rashes.

22 We had natural control and experimental groups
23 in cases where farmers kept part of the herd on one
24 pasture and the rest on another pasture.

25 One case I'd like to mention is where a part
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1 of the herd was exposed when the liner of a waste water
2 impoundment was allegedly slit and the fluid drained
3 into the pasture and the pond that was used as a source
4 of water for the cows.

5 Of those exposed to the waste water some died
6 and there was a high incident of stillborn and stunted
7 calves. The remainder of the herd were held in another
8 pasture and did not have access to the waste water.
9 They showed no health or growth problems.

10 In another case part of a herd was exposed to
11 a creek into which waste water was allegedly dumped with
12 the remaining cattle kept in other pastures without
13 access to the creek. Of the cattle that were exposed to
14 the creek water approximately one-third died and
15 approximately one quarter failed to breed. Of the
16 cattle that were not exposed there were no unusual
17 health problems and only one cow failed to breed.

18 In our second study we had nine of 21 cases
19 where drilling operations were currently decreased
20 compared to activity at the time of the original
21 interview. In eight of nine of these cases all health
22 impacts associated with the start of drilling operations
23 decreased in owners and their animals.

24 In areas where activity either remained the
25 same or increased there were no significant differences
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1 in health impacts except in one case. It was a case
2 where a woman bred dogs as well as horses and the health
3 impacts in the animals more than doubled.

4 In cases where people moved away from
5 industrialized areas all symptoms that had previously
6 been associated with the start of drilling operations
7 decreased in both the owners and the animals they
8 brought with them.

9 The main routes for exposure are ingestion and
10 inhalation. Ingestion exposure occurs when ground water
11 or surface water becomes contaminated and when fracking,
12 drilling and waste water fluids spill.

13 Inhalation exposure occurs when chemicals
14 released during extraction, processing, production,
15 distribution and frack sand mining as well became
16 airborne.

17 Exposure to contaminated feed stuffs and food
18 products may potentially occur because most of
19 unconventional extraction happens in agricultural areas
20 and food animals may be concentrating toxicants in meat,
21 milk and additives.

22 I believe that the biggest health risk to
23 animals posed by unconventional oil and gas extraction
24 is exposure to chemical toxicants in the air and water
25 that impact both the reproductive and respiratory
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1 systems.

2 I do not believe that the impacts of
3 unconventional oil and gas extraction can be eliminated
4 due to three major reasons.

5 The first reason is that the nature of the
6 process is very complex and it involves many chemicals
7 and risky procedures and has been reported already that
8 they contaminate air, water and soil.

9 The second reason is that non-disclosure
10 agreements prevent health researchers, like myself and
11 my husband, from finding out exactly what happened.

12 And the third reason is perhaps maybe the most
13 important of all is that chemical testing should include
14 all substances used in the drilling process as well as
15 all substances expected to be brought to the surface
16 with the gas. The problem is that traditional chemical
17 testing has serious limitations.

18 So what are these limitations? The first one
19 is that the chemicals must first be identified and then
20 test developed for analysis. That sounds like a simple
21 thing to do but it is very difficult to develop a test
22 to analyze some of these chemicals.

23 The second thing is that detection levels are
24 often above concentrations that are active in the body.

25 Third reason is we don't know the safe
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1 concentration for most chemicals. We don't know the
2 effect of mixtures of chemicals and the levels of
3 contamination are not stable. We found this ourselves
4 with some testing that we've done with air and water
5 where we've gone and measured air and water levels of
6 chemicals. Gone back a year later and did it again and
7 was vastly different. And often times it doesn't
8 correlate with the amount of activity in the area. So
9 these things are very fluid.

10 I believe that unconventional oil and gas
11 extraction should be banned because it is an
12 uncontrolled health experiment on an enormous scale and
13 even if it were completely safe and risk free fossil
14 fuel should be kept in the ground because of climate
15 change.

16 Thank you.

17 MS. LISA MEAD: Thank you, Michelle.

18 Do any of the judges have question for
19 Michelle?

20 Michelle, I just wanted to ask you. So when
21 we spoke last week you talked about animal or feed and
22 how there was a problem with feed. And I would love it
23 if you would explain that, how fracking impacts upon the
24 feed.

25 DR. MICHELLE MALONEY: Yeah. Sure.
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1 I think to get a real understanding of that
2 you almost have to be out in the field. So many people
3 and not just those who are up here in New York in the
4 southern part of the state, but just cross the border
5 and where you are and that is absolutely true. So that
6 was part of our education ourselves is to go and see
7 it.

8 And I was shocked to see that the cows were
9 grazing around well pads. The crops are planted around
10 these waste water or production water systems.

11 And I'll never forget the one we visited in
12 Pennsylvania where the vent was actually opened and it
13 should not have been completely open like it was. And it
14 was obviously venting in the air. It was the sort of
15 air you could see where you could see the chemicals.

16 I don't know if you've ever seen that as a
17 backdrop. I guess they get defracked sometimes. And
18 there was the corn and squash all around.

19 And the person that was involved on that case
20 I specifically asked her about those crops and where
21 they were sold. And she said, you know, that's
22 interesting about those crops is that they're considered
23 organic.

24 And that gives us another -- that is another
25 whole lecture is how that the organic certifiers are
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1 really not touching fracking issues. Not touching
2 whether it's -- you've got fracking next door to you or
3 not. They're really concerned about the pesticides and
4 that sort of thing but when it comes to fracking right
5 now, to the best of my knowledge, it's not out there.

6 So as I was telling you, Lisa, last week as
7 far as proving this specifically these tests are
8 probably the most expensive to do because we are looking
9 at analysis of the chemical toxin in the animal tissues
10 themselves and then we are talking about transferring
11 them.

12 And also how do the crops gets contaminated?
13 How does it go back into the animals?

14 These tests are expensive so, to the best of
15 my knowledge, no one has done this sort of testing that
16 should be done. And that's why I said the word
17 potentially.

18 But once you would see that you would want to
19 know where those crops were sold because you would want
20 to avoid those crops. You would not want your children
21 or anyone to eat anything coming out of those area.
22 And, unfortunately, that's where most of the fracking is
23 occurring in agricultural areas.

24 MS. LISA MEAD: Thank you.

25 And I had to step away for like one minute but
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1 I would like for to you explain the example of the herd
2 that had -- it was like half of the herd was exposed to
3 fracking water or some kind of toxic --

4 DR. MICHELLE MALONEY: There were two
5 cases that I talked about, Lisa. First there were more.

6 What I said initially was that there were
7 several cases that got us involved and one of those
8 cases actually is we could look at a split herd.

9 The herd was in the pasture but because of
10 where the exposure occurred only part of the herd was
11 exposed. And so that was the most dramatic case that
12 we've had.

13 And that case happened in April 2009 in
14 Louisiana. And that was the case that probably everyone
15 will remember once I say this but 17 out of a herd of 40
16 beef cattle died within a hour after exposure to fracked
17 fluid.

18 This was a mistake on the part of the company.
19 They were filling or doing something with the fracked
20 fluid. It leaked out in to the pasture ground, under
21 the fence, the cows started drinking it and within a
22 hour almost half of herd was dead.

23 So, you know, that was a real dramatic case.
24 The rest of the herd that wasn't exposed, again to the
25 best of my knowledge, was fine. But, again, that was
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1 the most dramatic.

2 The other cases that I did mention, Lisa, when
3 you stepped away one was the case -- they were both
4 waste water related -- one was a case where there was
5 major reproductive problems. The other was a case where
6 a death and also a failure to breed. It was
7 reproduction there too.

8 The first case was also stunting and failure
9 to thrive. I didn't mention that as a problem.
10 Reproduction was, by far, the major one but also was
11 stunting and growth problems in livestock.

12 MS. LISA MEAD: Thank you for explaining
13 that. And, as I said, I will make these research papers
14 available to the judges. And I really recommend that
15 you look at the depth in which Michelle and her husband
16 have gone from putting together the research.

17 So we should move on to our next witness. And
18 this is a video testimony relating to the impacts on
19 animals and plants. And it's by Dr. David Paul
20 interviewed by Michelle Maloney just in the last few
21 days.

22 Doctor Paul is a senior lecturer and post-
23 graduate research coordinator in the School of Physical
24 Environmental and Mathematical Sciences at the
25 University of New South Wales in Australia. His
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1 research interests range from bio-geography, wildlife
2 ecology and geomorphology through to remote sensing and
3 geographical information systems or GIS as it's also
4 known.

5 Doctor Paul is actively involved in research
6 on threatened species with a particular focus on medium-
7 sized ground dwelling mammals. His other current and
8 recent research projects include monitoring
9 environmental impacts and geomorphic processes using
10 remote sensing and GIS.

11 So if I share my screen I'll be able to play
12 this video for you.

13 DR. MICHELLE MALONEY: Hello, David
14 Paul. Thank you for joining us at the Permanent
15 Peoples' Tribunal.

16 Can you please tell the tribunal your name,
17 your profession and qualifications and any
18 organizational affiliations that you have?

19 A. My name is David Paul. I have a research
20 master's degree from the University of New England.
21 I've spent my professional career working for different
22 sectors, including industry and government and
23 community, in relation to environmental assessment and
24 impact assessment issues on biodiversity.

25 And I'm, currently for the last few years,
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1 I've mainly focused on assisting communities, informing
2 them about how they can have their voices in terms of
3 resisting unwanted fossil fuels projects in their areas.

4 Most of my work has been in New South Wales or
5 Queensland is another area where I've worked
6 extensively.

7 Q. And do you work for a university or do you
8 have your own consulting business?

9 A. I have my own consulting business. Currently
10 it's called Ethical Ecology and all work I do is for
11 communities.

12 Q. Thank you. David.

13 So you mentioned that the work you do is in
14 New South Wales and Queensland. That's two states
15 within Australia. Can you talk a little about the
16 research you've carried out regarding the impacts of
17 unconventional oil and gas extraction on plants and
18 animals in those jurisdictions?

19 A. So I have spent much of -- in my professional
20 career gathering data and analyzing data and working out
21 how to best manage lifestyle impacts such as coal and
22 gas but I think -- felt that mine -- I could do better
23 for the community by being outside that circle because
24 of the limitations that were being placed on
25 professionals working in that sector.

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1 So what I found is that what we don't know is
2 more than what we know. And this is a scary thing. So
3 there has been research undertaken, for example, on the
4 impact of air pollution such a volatile organic
5 compounds and other foreign particle matter on
6 agricultural systems and on human health but there
7 hasn't really been any kind of assessment or that kind
8 of thing on native fauna and flora. So that's the
9 really the big question mark.

10 Q. In what way is the leaking methane or other
11 gases affecting aquatic systems? Can you give some
12 examples?

13 A. So what we see in the Condamine River, and
14 this was first noticed years ago, was bubbling methane.
15 Now there has been some controversy about the origin of
16 that methane but it's obvious that it didn't start
17 happening until the coal industry, the coal seam gas
18 industry, was well established in the area.

19 It's a bit of coincidence that we have very
20 intrusive impacts on ground water aquifers and then --
21 and then to see the effects on the river. Now they've
22 only gotten worse and apparently the bubbling is
23 spreading to the other parts of that particular system.
24 The Condamine area is very heavily impacted, obviously,
25 of the Queensland mining industry.

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1 Q. And given that the Condamine River flows
2 through very arid areas footage has been seen and shown
3 in other places that the methane has been able to catch
4 fire.

5 What kind of impact do you think that has on
6 local plants and animals that rely on water or coming to
7 the water hole to drink?

8 Have you guys had, in your research, any sort
9 of specific examples of plants or animals affected by
10 this gas?

11 A. As I said there hasn't been any studies,
12 direct studies, done on the impacts of the effect
13 methane contamination has on native animals.

14 So this is what I'm saying really is my
15 message to the Tribunal is that we don't know what we're
16 doing and we've given approval for all these things to
17 occur and impacts of widespread significance. Well over
18 a million hectares of land is now affected and just in
19 that Surat Basin alone just in the photo area that we
20 looked at. But that is not including the Bowen Basin and
21 that's not including areas in South Wales and the
22 Northern Territory where the plants grow.

23 Q. There's one basin, the Surat Basin affected by
24 a million acres you said is affected by coal seam gas
25 development.

1 A. Hectares. Hectares.

2 Q. That is under research now?

3 A. So when I say a million hectares I mean the
4 size of the tenements. And actually they're allowed to
5 go anywhere inside those tenements except international
6 parks. So any -- [indiscernible] because they seem to
7 like to -- seems like the pattern for development has
8 been in the remnant of woodland and bush areas first
9 even if they are forest, state forest, which is public
10 land, they are allowed to go there first where the
11 community sort of impact is less and then spread out on
12 across the landscape and they're playing for the same
13 team sometimes.

14 But what I have found out is that the impacts
15 on biodiversity are also significant. So we've not only
16 had the ground water we've the got surface water and
17 we've got the terrestrial biodiversity is being impacted
18 as well.

19 Now the big oil belt in Queensland is one of
20 the most over-affected bioregions as a hot spot of
21 biodiversity because of past activity and clearing. And
22 now we have issues with ongoing drought and climate
23 change.

24 You know, we shouldn't be clearing more
25 country in this bioregion if at all possible. And what
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1 I noticed in some of what they're doing, the fracking in
2 the remnant areas, they're fragmenting, they're reducing
3 the resilience of those areas. They're opening them up
4 to feral predators and then they're also removing little
5 small patches of endangered bushland. And they're
6 removing them because once they're around certain size
7 limits then they don't appear to matter any more
8 according to our government authorizes.

9 Q. So now we're talking very specifically about
10 the impact of the developments as the gas industry
11 becomes viable in a place. Can you talk about that?

12 When you say they're opening up areas of land
13 and they're decreasing biodiversity connectivity can you
14 talk very specifically when they come into an area do
15 they cut down trees, do they clear the spaces for their
16 oil drilling pads or can you be specific about their
17 impact.

18 Q. Well, the main impacts are the infrastructure
19 development of pipelines, roadways, connecting road
20 ways, particularly through bushland and the well pads
21 built. And then we have the processing plants. We have
22 the water treatment facilities. We have other small
23 water wells and things like that and so the overall
24 impact.

25 So say you've got a field of like a thousand
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1 wells, for example, that's a huge -- that's a huge area
2 of impact and what they haven't considered is the
3 indirect impact. And this industry this is where the
4 whole thing is falling down in terms of impact
5 assessment because they just haven't been able to really
6 adequately account for indirect impact.

7 So the industry likes to say our direct
8 impacts are so small but they're not really taking into
9 account the indirect impacts.

10 And the way that our consent authorizes have
11 constructed the approvals they're not really required to
12 take into account indirect impact to any significant
13 degree.

14 Now these include air pollution, they include
15 off-site water pollution, they include on-site water
16 pollution, light pollution. Noise goes on all night at
17 each of the well -- each of the well pads. At each of
18 the plants they generate a huge amount of noise.

19 The light pollution is important. If we have
20 light at night that interferes with how animals and
21 plants undertake their kind of behavioral patterns.

22 Q. Particularly our Australian mammals are
23 nocturnal. We have entire swathes in our country that's
24 being affected by light and noise that would -- you
25 know, you would think someone could look into the
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1 evidence of interruption to species activity.

2 A. Absolutely no account of any of this is taken
3 into account. And also we have impacts from feral
4 predators and weed invasion.

5 And why do I say that?

6 Because when they go into these random bush-
7 land areas and they're putting like a network of roads
8 and tracks connecting well sites everywhere that's
9 increasing -- actually effectively what you're doing is
10 increasing your actual area that the feral predator is
11 able to more effectively hunting.

12 Q. In Australia what animals are you talking
13 about with feral predators?

14 A. Foxes and cats mostly.

15 Q. Yeah. Thank you. And we're almost out of
16 time. Just one last question.

17 You stressed very clearly that this area, the
18 impact on native plants and animals, is very much under-
19 researched. Are you aware of any initiatives in
20 Australia to change that situation to require greater
21 baseline studies or environmental impact assessments or
22 anything else that might actually show us what's
23 happening to our precious plants and animals through
24 there industrial process?

25 A. Well no. And that's where the industry has
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1 fallen down because they haven't really taken into
2 account the big picture. You know what I mean?

3 It's all each project's on its own. And the
4 cumulative impact, you know, we've let go but Cryo, to
5 their credit, in 2016 did look at the impact of coal
6 seam gas and did lament about the lack of information
7 that was on the table for industry to go ahead
8 particularly in the Brigalow Belt region.

9 Q. The Australian government funded scientific
10 organization in 2016 has a report stating that
11 significant research still needs to be taking place. We
12 might get a copy of that report for the Tribunal.

13 And we'll have to wrap up now but thank you so
14 much for your time, David, and for explaining that
15 basically this industry's impact on plants and animals
16 is underresearched, is not understood, but is already
17 showing signs, particularly through bubbling methane, in
18 rivers of having an impact.

19 So thank you very much, David.

20 MS. LISA MEAD: Okay. So we'll move on to
21 look at impacts on water more specifically.

22 And just to say the reason Michelle can't join
23 us or interviewees can't join us today is because it's
24 about 3:00 a.m. in Australia and Brisbane right now so
25 it's a little bit harsh. So these are recorded
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1 interviews.

2 The next witness for violation of water is
3 Gavin Mudd. Gavin Mudd is an Associate Professor in
4 the Department Of Environmental Engineering at RMIT
5 University in Australia.

6 He was awarded a Ph.D. in Environmental
7 Engineering in 2001 from the Victoria University of
8 technology. Gavin's research interests include
9 environmental impacts, management mine wastes, acid mine
10 drainage, sustainability frameworks, life-cycle
11 assessment modeling and mine rehabilitation.

12 In 2007 Gavin Mudd completed a report on
13 Australia's mining industry entitled The Sustainability
14 Of Mining In Australia. Key Production Trends And Their
15 Environmental Implications For The Future.

16 So this is, as I say, also a recording. I
17 will share my screen again and play the video for you.

18 DR. MICHELLE MALONEY: Gavin Mudd, thank
19 you so much for joining us.

20 Can you please tell the Tribunal your name,
21 profession, organization and where you're based?

22 A. My name is Associate Professor Gavin Mudd.
23 I'm based at RMIT University here in Melbourne,
24 Australia and I specialize in environmental engineering
25 and I'm also chair of the Mineral Policy Institute as
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1 well, a NGO that worked on mining issues.

2 Q. Thank you. Can you please outline the
3 research that you've been carrying out regarding the
4 impacts of unconventional oil and gas expansion on
5 waterways and ground water?

6 A. The research we've also been doing, I guess,
7 is really looking into what are the key trends and
8 what's the regulation around activities, not just coal
9 seam gas in particular.

10 And so what do we know, what we don't know,
11 where is the facts, where is the subject claims and
12 actually what is the evidence really showing us? And
13 often what is the lack of evidence stopping us from
14 actually understanding?

15 So that's where a lot of our research has been
16 focused and I guess it's actually showing that, yes, we
17 can certainly explain the impacts in the Surat Basin on
18 things like ground water systems such as the aquifers
19 that farmers use but also the Condamine River and
20 because of the connection between ground water and
21 surface water that the impacts that coal seam gas have
22 on ground water is translating to impacts on farmers
23 fields and methane gas bubbling up through the Condamine
24 River.

25 So you can certainly explain CSG is a very
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1 plausible and I think the most likely explanation of
2 those impacts.

3 Q. So if you were to summarize some of the key
4 findings of your research can you give us an overview of
5 what you're finding, the impacts of gas extraction are
6 on the ground water and surface water?

7 A. I think that one of the things that I think I
8 still find most stunning from the research work that
9 we've done is that we're not even monitoring for methane
10 in the coal seam gas fields in Queensland.

11 Now if you're mining uranium you mine for
12 uranium. If you're operating a gold mine, of course,
13 you're watching for cyanide because cyanide is one of
14 the chemicals you use to extract gold.

15 So if you're operating an airport you're
16 extremely concerned about wind strength and direction
17 and plane safety and pilot training and so on. There is
18 a lots of things you just take for granted because
19 that's how you make an industry or a sector safe.

20 So when you look at coal seam gas I find it
21 stunning that one of the things that we've shown in our
22 research and done from a master's student of mine and
23 his thesis -- he graduated a few years ago now -- has
24 shown is that they're still not monitoring methane.

25 They're not even required to monitor methane.

1 And even during the environmental impact
2 assessment process where projects were seeking approval
3 the extent of methane studies in all of those reports is
4 extraordinarily infinitesimally small. And so what that
5 means is that we don't have the scientific data to
6 properly answer these questions thoroughly. And so
7 we're left with some of this piecemeal picture and so
8 on.

9 So it's a real problem. It's a huge gap. I
10 think that it's something that's poorly appreciated.

11 The other thing I guess we found is that when
12 you do look at some of the available data just on the
13 ground water levels and looking at the trends in ground
14 water and so on is that, yes, you can actually
15 understand that there are very big impacts. And when
16 you're looking at the volumes of CSG water that are now
17 extracted to extract that gas, the volumes of water
18 often far exceed, like 10-fold or more, the amount of
19 licensed extraction that some farmers have.

20 So when you're looking at the impact on
21 groundwater if you've got one industry taking 10 times
22 more than another industry the odds of probability
23 suggest that it's the bigger industry that is probably
24 causing the greater impacts on ground water.

25 So I think there's still a long way to go to
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1 actually get government and industry to properly
2 monitoring the way that would be scientifically
3 reasonable.

4 So lots of bubbles and lots of aquifer in lots
5 of places sampled frequently and so that way we can
6 start to get a proper picture of what's really going on.
7 And I think the more and more we do that I think the
8 sharper and sharper our understanding will be of the
9 impacts of the coal seam gas, for example.

10 Q. So in terms of methane fugitive emissions and
11 other activities can you talk more specifically about
12 your concerns?

13 Is it the quality of water or are you
14 concerned more about the fact that we hear that water
15 levels are dropping in bores and other ground water
16 supplies?

17 Can you talk about some of the specific
18 impacts [indiscernible]?

19 A. For coal seam gas there's probably a few
20 different impacts that we really need to be concerned
21 about. One is the sheer volume of water that is
22 extracted and everything that's in that water, whether
23 that be salts, heavy metals or radionuclides or organics
24 such as petroleum hydrocarbons that are derived from the
25 coal and so on. So water quality is a big issue,
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1 obviously, with extracted water from coal seam gas
2 activity.

3 And then how you manage that water on the
4 surface and the rate. And then the superstructures that
5 you need to contain all that water and force treatment
6 and then use or disposal or discharge of the
7 environmental or whatever is actually done on that
8 particular site. So water quality is a big issue.

9 The other one is that drop in groundwater
10 pressure by extracting all of that water means that
11 you're mobilizing methane. And so you're mobilizing
12 methane on a geological scale effectively now in the
13 Surat Basin in Queensland. And that methane will find
14 the easiest pathway to get to the surface. That pathway
15 may be a farmer's bore. It may be an old coal
16 exploration bore that hasn't sealed properly. It may
17 also be a fracture zone or a fault line.

18 And if that fracture zone or a fault line
19 leaks to something like the Condamine River of course
20 you get bubbling in the Condamine River.

21 So, to me, I think it's quite plausible and I
22 think actually quite probable that the impacts we're
23 seeing on the Condamine and on our farmers and so on in
24 this massive rise in methane emissions coming through
25 the system are causally related to what's happening with
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1 CSG.

2 So now we need to account for that. And the
3 fact we're not monitoring for methane means we're not
4 accounting for it properly. We're just do a very coarse
5 assessment and the studies that are being done do not
6 answer these questions anywhere near to the scientific
7 rigor that we need. So I think that, to me, is a really
8 big issue.

9 And then, of course, the other thing that
10 falls within all of that farmers are losing their bores.
11 And so that's something that needs to be accounted for.
12 And so to make good provisions don't really work when
13 the same aquifer are all being impacted. So you replace
14 one damaged aquifer with the next one and that's damaged
15 too.

16 So even though legally companies are required
17 to make good there are problems in how they actually
18 work in practice because it's just not that easy. So
19 you've got a system that's damaged and it's problematic.

20 Q. That actually leads very well into the next
21 question which is do you think the impacts of fracking
22 or unconventional gas extraction of our waterways and
23 groundwater can be negated or eliminated in the
24 industry?

25 A. Well, I think if you look at what we do in
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1 other areas like the science industry that deal with
2 contaminated petro stations sites and groundwater,
3 defense sites, chemicals sites, even old mining sites,
4 where we have to go in and work out how to remediate to
5 clean up.

6 There's a lot of technology out there that can
7 do this but it hinges on having really good data on the
8 extent of the contamination. Someone has to pay for
9 this. And the fact that we're actually prepared to
10 address that and so on.

11 Now some of the risk of coal seam gas we don't
12 know if we can really reverse this very easily or not.
13 And we look at the efforts we've gone to in the systems
14 like the Great Artesian Basin where it's taken decades
15 to reverse some of that pressure decline. We wonder --
16 it's not going to be easy.

17 If these impacts continue, with coal seam gas
18 in particular, one wonders how you can reverse not only
19 just a pressure declined but also decline water quality
20 and the methane mobilization, if you will. That's the
21 big issue.

22 Now with respect to shale gas the impact will
23 mainly revolve around well integrity, so making sure the
24 wells are constructed properly and sealed properly and
25 so on.

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1 And then the other big issue with shale gas
2 is, of course, the reinjection of the waste water. So
3 that has been shown, in some places, to be a significant
4 cause of earthquake risk, especially in Oklahoma.

5 So in that way we can change our practices and
6 we can improve our design and so on but at the end of
7 the day we have to compare those sorts of risk with the
8 same risks for delivering energy or peak services, et
9 cetera, that gas delivers such as -- or electricity, I
10 guess, is the main use of that gas.

11 And so how does your release of energy compare
12 to that? I think, in my mind, when you look at all of
13 the technical studies that are out there that compare
14 renewable energy to fracking or the shale gas or the
15 extraction of methane from coal seam gas, renewable
16 energy wins hands down every time.

17 Q. My final question is, in your opinion, given
18 our current understanding of the impacts of the gas
19 industry, do you think it should be banned in any
20 jurisdictions in Australia or elsewhere?

21 A. Absolutely. I think there is quite a
22 justifiable case that it should be banned on multiple
23 grounds.

24 One is the environmental risk to the ground
25 water and surface water but primarily it's actually the
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1 main risk revolves around climate change. And we know
2 from a climate change point of view that for every
3 dollar we're investing in fossil fuels that's a dollar
4 that we're not investing in renewables.

5 And so if we're really about dealing with
6 issues around climate change then investing more in
7 fossil fuels, whether it's shale gas, coal seam gas,
8 underground coal gasification or whatever, don't address
9 that at all.

10 So I think that there's multiple grounds on
11 which we can say, justifiably say, there is a strong
12 case to ban fracking and coal seam gas but,
13 unfortunately, that's not what our government or
14 industry leaders are delivering us. So we have to look
15 at how else we get there.

16 Now the great hope that I have is if you're
17 looking at where renewable energy is going it's becoming
18 incredibly cheap and it works. We add battery storage
19 into the system and we solve this intermittency problem.

20 We're seeing all of that technology roll out
21 now. And not just rolled out on a boutique scale but on
22 a large scale.

23 And so I think, in that way, that that is
24 something a source of great hope is that we know what
25 the solution is. We need to start, you know, continuing
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1 the investment in that and make sure that that's our
2 future direction and not a backwards step into more
3 fossil fuels.

4 DR. MICHELLE MALONEY: That's very good.
5 Thank you very much. And that's all we have time for.

6 So, Gavin, thank you so much for joining us.

7 DR. GAVIN MUDD: My pleasure.

8 MS. LISA MEAD: So even though they were
9 not physically present today I would like to thank Gavin
10 Mudd and Dr. David Paul for taking the time to provide
11 testimony to the tribunal.

12 And I would like to move on to our last
13 witness for today. We're shifting tack slightly to look
14 at how one community in the USA has used rights of
15 nature principles to try to protect their community's
16 water sources from unconventional oil and gas
17 extraction.

18 So I would like to introduce you to John
19 Olivas. John is based in Mora County, New Mexico. He
20 owns a hunting and fishing outfitters and also works for
21 the New Mexico Wilderness Alliance, a conservation
22 organization that aims to protect public land in New
23 Mexico.

24 In 2013, while John was an elected official,
25 Mora County became the first county in the USA to pass a
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1 local ordinance that essentially prohibited all mineral
2 extraction in their county. It's title was the Mora
3 County Community Water Rights And Local Self-Government
4 Ordinance.

5 Ultimately this ordinance was deemed invalid
6 on various grounds by a federal judge sitting in the
7 U.S. District Court for New Mexico, however, Mora
8 County's stance has had a galvanizing impact for other
9 local communities in the USA that subsequently adopted
10 rights of nature ordinances into their local laws in an
11 attempt to stop unconventional oil and gas extraction in
12 their localities as John will explain.

13 So over to you, John.

14 MR. JOHN OLIVAS: Thank you, Lisa.

15 Yeah, hi, my name is John Olivas. I am the
16 former chairman of the Mora County Commission here in
17 north central New Mexico. We took the stand of the
18 rights of nature, an ordinance that banned oil and gas
19 extraction here in our community.

20 When I was elected into this position there
21 were actually three things that we could have chose to
22 do around oil and gas coming into our community.

23 The first thing that we could have done was do
24 nothing and let oil and gas come into our community and
25 regulate themselves.

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1 The second thing that we could have done is we
2 could have regulated oil and gas and allowed them to
3 come into our community and, you know, contaminate
4 water, air, the environment to a certain degree under
5 certain regulations.

6 The third thing that we could have chose to do
7 was ban oil and gas within our community. And that was
8 the stance that we took back in 2013.

9 A group of community members went ahead and
10 drafted a community rights ordinance that instilled the
11 rights of nature behind it. So what we did is we went
12 ahead and drafted the ordinance. And the whole purpose
13 of the ordinance was to protect our ground water and our
14 surface water within our community.

15 Mora County here in north central New Mexico
16 is an agricultural based community. So water is
17 precious. We are in the dessert southwest of the United
18 States and water is a precious commodity. So when you
19 have industry who is coming into your community and
20 they're potentially threatening those sources there had
21 to be something done within our community.

22 What happened within the ordinance is oil and
23 gas came into our community. I think like Michelle had
24 mentioned earlier is oil and gas industry comes into
25 rural agricultural based communities and they begin to
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1 do their research.

2 Within Mora County back in 2006-2007 time
3 frame what they ended up doing is they ended up doing
4 all the research within our courthouse, our county
5 assessor's office and our county clerk's office and they
6 identified all the many property rights owners and those
7 individuals who owned mineral rights within our
8 community.

9 And what they ended up doing is they ended up
10 leasing 140,000 acres of mineral rights within Mora
11 County.

12 What problems that I think we, as a community
13 had with that was that oil and gas negotiated across the
14 kitchen table with these individuals and what they ended
15 doing is they ended up leasing these properties for 25
16 cents to a dollar an acre.

17 So you figure 140,000 acres were leased at
18 that rate and the idea of fracking coming into our
19 community having an impact on our water source was a big
20 deal.

21 So when we went ahead and went through the
22 Community Rights Ordinance pollution was a main factor.
23 There are some wells within our communities here in Mora
24 County that have actually gone dry over the year for
25 uses. So when you have the fracking industry coming in
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1 and putting wells through the system and depleting some
2 of the aquifers it was a huge impact to our community.

3 The problem that we had with industry coming
4 into these communities was they tend to have a
5 proprietary mix of chemicals that go into these well
6 injections and they do not tell you what is in this mix,
7 this proprietary mix of chemicals that go into your
8 aquifer. So they go ahead and do a fracking technique
9 and when they go ahead and inject the wells there's
10 roughly about 10% of the injection is these chemicals
11 that go into the system.

12 When they go ahead and do their fracking
13 technique they go ahead and extract a lot of this
14 waste. A lot of this waste is then taken out and it's
15 being on the surface. Some it is being reinjected into
16 retired wells that are within our community.

17 So when you have an impact to, you know,
18 water, clean air, our environment our landscape those
19 were some of the biggest issues that we had on the
20 rights of nature.

21 We also have here in northern New Mexico our
22 valley sits in a major water shed. We are here, in
23 northern New Mexico, one of the major -- actually one
24 of the first users of waters in north central New

25 Mexico. We're surrounded by a wilderness area and we
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1 are the first users of this water. So we have industry
2 that's coming in and having some impact to the -- to
3 the water. We will go ahead and, you know, stand up and
4 have those impacts.

5 On the Community Rights Ordinance that we
6 passed, if you date back to 2013 when it was first
7 initiated, we were one of the first communities, as Lisa
8 had mentioned, to ban oil and gas here in the United
9 States. So we went ahead and banned oil and gas.

10 We were the impetus for other communities
11 across the country who were able to move in a similar
12 direction. We have states like New York, Maryland who
13 actually have, on a state level, has went ahead and
14 banned oil and gas within the their borders.

15 We did it at a county level and it was a
16 major, major deal for industry. When we went ahead and
17 passed our Community Rights Ordinance we went ahead and
18 put this ordinance on the books. This ordinance was a
19 game changer for the oil and gas industry.

20 The oil and gas industry, as soon as they
21 found out that we'd put the ordinance on the books, they
22 went ahead and came after us. They went ahead and filed
23 a couple of federal lawsuits against the county. We
24 went ahead and fought these, the industry, within the
25 federal district court.

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1 So the problem that we had in our communities
2 was the social impacts that they had to our communities,
3 the infrastructure.

4 Mora County was a community that is pretty
5 poverty stricken. We do have an agricultural based
6 community. Here in the United States we were ranked as
7 probably one of the third poorest counties in the entire
8 country. So when Mora County went ahead and stood up to
9 oil and gas what we ended up doing was setting a
10 precedent that oil and gas did not want on the books so
11 that it was a game changer for industry.

12 So we went ahead and did something that no
13 other community was able to do. We went ahead and went
14 through the whole federal court system and it was ruled
15 invalid, as Lisa had mentioned, so we went ahead and
16 went through this process, currently, because our
17 ordinance was ruled invalid and it was repealed by
18 another -- a following commission they went ahead and
19 are instituting a regulatory ordinance.

20 But what's going on within the oil and gas
21 industry? Because the price of oil and gas is not
22 profitable for the community. As soon as the commodity
23 price for oil and gas is profitable oil and gas is going
24 to come into communities.

25 There are several communities, counties within
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1 New Mexico, that have regulated oil and gas. And it's
2 just a matter of time before oil and gas comes into
3 these communities when they're profitable to do so.

4 If the judges have any questions in regards to
5 what we we've done here in northern New Mexico you could
6 go ahead and pose any questions.

7 MR. GILL BOEHRINGER: Yes. Gill
8 Boehringer.

9 I must say I'm impressed and I'm thrilled to
10 hear the way you approached the industry and resisted
11 the greed of the companies. As a legal academic I'm
12 particularly interested in the process whereby the
13 ordinance was found invalid.

14 You said you went through the legal system,
15 the federal courts and then you -- well, can you
16 explain what the court said? Why was it invalid?

17 MR. JOHN OLIVAS: What they ended up
18 doing is they ended up suing Mora County based on the
19 1st, 5th and 14th Amendment of the Constitution.

20 So what they did is within our ordinance we
21 went ahead and declared that corporations were not
22 people. That was one of the issues that we had.

23 The second component that we had within the
24 ordinance is that, you know, myself as an elected
25 official I knew I wasn't going to be there for the long
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1 term so what we ended up doing is we ended up putting a
2 section within the ordinance that stated if the
3 ordinance was going to be repealed it had to have a
4 unanimous vote by the three commissioners that we have
5 within our country and it had to pass 2/3rds vote by the
6 people through referendum.

7 The State of New Mexico what they ended up
8 doing is because we're not an incorporated community
9 they were going to sue us if we were going to put this
10 on the ballot.

11 I was voted by the people and I beat an
12 incumbent to get into my election and when the secretary
13 of state mentioned that we could not put this referendum
14 on the ballot it just made no sense because there's
15 three commissioners who actually set policy for the
16 county and having a referendum on the ballot to let the
17 people choose if oil and gas was going to come in or not
18 was the issue.

19 So those were some of the two main points that
20 we had within our ordinance that were struck down by the
21 federal district judge.

22 MR. GILL BOEHRINGER: Well, it was a good
23 effort and you really have something to be proud of.
24 And it must be a really good feeling that others are
25 going down the same route.

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1 MR. JOHN OLIVAS: Yes, most definitely.
2 You know, there's many small communities.

3 You hear of the stories at the state level of,
4 you know, states like Maryland and New York are doing
5 but there are many communities across the country,
6 there's even communities in Texas that have taken a
7 similar stance.

8 And Oklahoma, we all know what's going on in
9 Oklahoma with all the earthquakes that are happening as
10 a result of some of the fracking that's taking place.
11 That's happening here in northern New Mexico in -- you
12 know, 100 miles from us there is earthquakes that are
13 happening within New Mexico as well due to the fracking
14 process.

15 MR. GILL BOEHRINGER: And lastly you
16 mentioned the commissioners, having seen what happened
17 to the ordinance are now taking, I think the second
18 choice that you mentioned, regulation. And from what you
19 say it would appear that attempting to regulate the
20 companies just hasn't worked and that there are now
21 really bad serious impacts from the fracking, is that
22 right?

23 MR. JOHN OLIVAS: Yeah. Well, here in
24 New Mexico there is an oil and gas industry, an
25 association that actually monitors and regulate oil and
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1 gas across the state of New Mexico.

2 If you do some of the research there's spills
3 all the time. There's depletions that are happening
4 within the aquifer. And what's going on is that the
5 current county commission is setting a regulatory
6 ordinance that is supposedly supposed to be so
7 restrictive that oil and gas will not come in.

8 In my opinion, once the oil and gas industry
9 is profitable they're coming.

10 MR. GILL BOEHRINGER: Yes. I'm sure
11 you're right. Thanks very much and good luck.

12 MR. JOHN OLIVAS: Thank you so much for
13 your time.

14 MS. LISA MEAD: Thank you very much, John.
15 I appreciate you joining us today.

16 And just to say that tomorrow Mari Margil,
17 from the Community Environmental Legal Defense Fund will
18 be talking more about these local ordinances in the
19 USA. So there will be a chance to ask her questions
20 about some of the technicalities of them.

21 And I understand that the judgment in -- the
22 federal judge that presided over the case in New Mexico
23 was a 199 page judgement that came out from that
24 particular case.

25 MR. GILL BOEHRINGER: Well, at least they
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1 made them work.

2 MS. LISA MEAD: It's time for us to sum up
3 today's session. So just to recap and just going back
4 briefly to the **CORRECTION NEEDED** â. What does this
5 document seek to do?

6 Well, essentially, it asserts the rights of
7 all of the earth's community to exist and to thrive and
8 to evolve. And it represents the agreed values of
9 thousands upon thousands of members of civil society and
10 represents the core legal principles and growing
11 cultural norms of the Rights Of Nature Movement.

12 And since its adoption in Cochamamba, Bolivia
13 with over -- now over 850,000 individuals have signed
14 the Rights Of Mother Earth petition, which is calling
15 for the UN to adopt a Universal Declaration of the
16 Rights of Mother Earth.

17 And we argue that based on the evidence that
18 we're presenting, both here and in our earlier written
19 submissions to the PPT, that various articles of the
20 Universal Declaration of the Rights of Mother Earth are
21 being violated by the unconventional oil and gas
22 extraction.

23 And so to recap briefly on some of the
24 evidence that we've presented today we heard from Linda
25 Sheehan about the vast area of land in the USA affected
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1 by unconventional oil and gas extraction and she
2 mentioned that there are 680,000 known waste water wells
3 across the US and they contain over 1600 chemicals, many
4 of which have never been tested.

5 And Linda also explained how cheap shale gas
6 is leading to a boom in plastics production just at a
7 time when we're understanding that the damaging affects
8 of plastic on nature and trying to reduce the plastics
9 in the environment.

10 And then from Michelle Bamberger, a
11 veterinarian and researcher also from the USA, we
12 learned about her studies on the impacts of fracking on
13 farm and domestic animals and how they are suffering
14 from reproductive and respiratory issues with one
15 notable case she mentioned, a large group of animals
16 suddenly dying after drinking contaminated fracked water
17 within a hour of drinking it.

18 And in our written submission we've also noted
19 the cases in Canada where hundreds of migrating birds
20 had to be euthanized after landing in toxic shale oil
21 tailing ponds which are corresponding an area of some 98
22 square miles in Alberta.

23 And so, David Paul, an ecologist in Australia
24 who researches threatened species, from him we heard
25 that there have not been any direct studies done on the
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1 impacts of methane contamination on native animals,
2 however, with over one million hectares being affected
3 by a fracking -- not fracking, but coal seam gas
4 extraction in the Surat Basin in eastern Australia
5 alone, which is where David Paul and his colleagues
6 focused, then you add to that this unconventional gas
7 extraction in the Bowen Basin, the Cooper Basin and
8 areas of New South Wales and possibly the Northern
9 Territories about to be exploited, this is a huge area
10 of land with biodiversity being affected.

11 So he also informed us that the impacts of
12 coal seam gas extraction on biodiversity are
13 significant.

14 For example, the Brigalow Belt in Queensland
15 is a hot spot for biodiversity, one of the most over-
16 affected regions which has a lot to do with past
17 activities and clearing of land and now due to ongoing
18 drought and climate change.

19 And from what Dr. Paul, what he's witnessed,
20 is that they have started to clear remnant areas to
21 prepare them for unconventional gas operations and in
22 doing so they're fragmenting them consequently reducing
23 the resilience of those areas and opening up them up to
24 things like feral predators and invasive weeds.

25 He talked about the main impacts from the
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1 infrastructure developments from the construction of
2 pipelines, roadways, processing plants, water treatments
3 facilities and other depots for water storage.

4 And he talked about having a field -- if you
5 have a thousand wells that's a massive area of impact on
6 nature. And the fact that they've not really considered
7 the indirect impact on nature just because of the way
8 the approvals are given they're not really required.

9 The companies are not actually required to take into
10 account the indirect impact which include air pollution,
11 on-site and off-site water pollution, light pollution
12 affecting the patterns of nocturnal animals potentially
13 with huge light pollution in these areas. And also huge
14 amounts of noise going on all through the day and night.

15 Our last witness, or second to last witness I
16 should say, Dr. Gavin Mudd who specializes in
17 environmental engineering in Australia, has researched
18 the impacts of coal seam gas on waterways and ground
19 water in the Surat Basin and also in the Condamine
20 River.

21 He has shown that there is insufficient
22 research to understand if or how any of the damaged
23 aquifers or waterways can, in fact, ever be repaired.

24 And testimony from both David Paul and Gavin Mudd show
25 the extreme lack of baseline data so the picture of how
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1 things have changed since the gas industry began
2 operations doesn't exist either by biodiversity or water
3 systems.

4 When rivers catch fire, as the Condamine River
5 has done because of methane bubbling up into the water
6 system, then something is clearly very wrong. The
7 rights of nature have been violated. Most worryingly no
8 one knows if the ecosystems in question can be restored.

9 So we assert that the evidence demonstrates
10 that the fundamental rights of native plants and animals
11 and livestock animals to exist, to thrive and to evolve
12 are being violated by unconventional oil and gas
13 extraction.

14 And in terms of rivers, aquifers and water-
15 ways we asserts that the evidence we've heard today and
16 the evidence contained in our written submissions show
17 that the fundamental rights of rivers, aquifers and
18 waterways have been violated in North America, Australia
19 and other jurisdictions, where unconventional oil and
20 gas extraction takes place.

21 Given the intrinsic rights of waterways to
22 flow, to be healthy, to support life and to continue
23 their evolutionary journey and based on the Universal
24 Declaration of the Rights of Mother Earth we assert that
25 unconventional oil and gas extraction violates the
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1 following rights of rivers, waterways and the
2 biodiversity within the water ways in the following
3 specific ways.

4 So the violation of the Right To Continue
5 Their Vital Cycles And Processes Free From Human
6 Disruptions, Article 2.1(c) of the UDRME;

7 And the violation of the Right To Integral
8 Health, Article 2.1(g);

9 and violation of the Right To Be Free From
10 Contamination, Pollution And Toxic Or Radioactive Waste,
11 which is Article 2.1(h).

12 And we would like to invite the Tribunal to
13 consider this evidence and what we are asserting.

14 And tomorrow we will continue with looking
15 more specifically at seismic impact, impacts on the
16 climate and my colleague Michelle Maloney will be
17 leading that particular session. I will also be present
18 and we will sum up together.

19 So thanking you kindly for your attention
20 today and looking forward to seeing you tomorrow in the
21 next session. Thank you.

22 MR. GILL BOEHRINGER: Thank you.

23 MS. LISA MEAD: And if you have any
24 questions we close -- well, we're almost on the button
25 but, yeah, there could be time for one question maybe.
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1 No?

2 Then we'll close. Wishing you the best rest
3 of the day or evening and we'll see you tomorrow.

4

5 [youtube.com/watch?v=pV3oUEaouQo]

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1 EARTHWORKS

2 MAY 15, 2018 11:00-12:00

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4 MR. BRUCE BAIZEL: Hello, honorable
5 judges of the Tribunal. I'm Bruce Baizel from
6 Earthworks. I'm legal counsel for our organization and
7 I'm also the director of our Energy Program. We have
8 about -- well, I think we're up to about 24 staff on
9 both energy and mining issues and with all of us based
10 in the US but we work in many countries. And I'll come
11 back to that in a moment.

12 I was admitted to the Bar in the US about 32
13 years ago and have been working full-time on oil and gas
14 issues for the last 15 years.

15 With me today is Nathalie Eddy. She was
16 admitted to the Bar in the United States 11-years ago.
17 She's worked on air law, climate change, indigenous
18 rights issues and transparency for the last 20 years.
19 And that included a stretch with the Colorado Attorney
20 Generals Office. We're both based in Colorado in the
21 US.

22 Our organization has worked in many countries,
23 both on mining and on energy issues and we usually do
24 that in partnership with community partners. We are a
25 civil society organization.
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1 Our oil and gas work began in the 1990s so we
2 have a couple of decades of experience with the impacts
3 all across the production chain, from exploration
4 through even some on the refining side and then export.

5 So that's the basis from which we submitted
6 our brief to you as the Tribunal. It was based upon
7 that experience.

8 In my remarks I want to give you a little bit
9 more context of why we arrived at the conclusions we did
10 in our Brief and then Nathalie will give you some of the
11 specifics for the exact reasoning and the evidence upon
12 which we reach those conclusions. That will be the
13 structure of the presentation here.

14 Certainly we welcome any questions that you
15 might have during the presentation or at the end.

16 So we began our work in the US due to
17 inquiries from communities saying they came and started
18 drilling next to my house. My well went bad. The
19 water turned black. Those kinds of issues. That's what
20 got us started.

21 And then about 10 years in we would start to
22 get some questions from people that would go along the
23 lines, they started drilling next to us and these
24 emissions came off the drilling rig, came across our
25 house and I started experiencing skin rashes, nose
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1 bleeds, sometimes loss of hair. Why is that happening?

2 So that brought us into the health impacts and that's
3 been nearly 16-years of that.

4 So we began looking asking the companies and
5 states regulators about information on chemicals that
6 might be used, what was in the drilling fluid but at
7 that time fracking originally was just vertical. There
8 was no horizontal fracking. And we got no information
9 back and the state regulators that we went to said we
10 don't think there's any problem there. We don't have
11 anything to offer you. No information.

12 So we had nothing to give to community
13 members, complete lack of what was in that fracking
14 fluid. Rule making hearings and so on.

15 Then the intensive shale development began in
16 Texas about 10 years, 11 years ago and now it's spread
17 in the US to the Marcellus, it's out here in Colorado,
18 it's down in New Mexico, it's up in North Dakota, it's
19 up in Alberta. And as you'll hear now down -- we've had
20 requests and been down to Mexico and Argentina as well.

21 And with that shale development we had
22 increased health complaints always and they seemed to be
23 very similar across shale basins which concerned us. So
24 about four years ago we were kind of running up against
25 a brick wall on getting good chemical information,
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1 trying to reform practices. And a technology put out by
2 a specific company, infrared technology, came on the
3 market and we knew we couldn't cover 100,000 different
4 oil and gas sites that are there on the North American
5 continent, let alone across the world.

6 And we also knew we couldn't be everywhere
7 that community members were. So we said let's try to
8 form some partnerships and we have this technology.
9 Let's see if we can't document some things.

10 So we started what we call Community
11 Empowerment Projects. We've done 97 trips, 15 states,
12 three countries, Canada, Mexico, Argentina, the US.
13 More than a thousand sites visited, 560 videos and so
14 on. And those numbers continue to grow.

15 So that's the basis on which we prepared the
16 Brief that we submitted to you. That's what you see
17 with the naked eye when you go to a site these days for
18 the most part. You don't see a black cloud usually,
19 although that's not always the case unfortunately.

20 So we take a photo with a regular camera and
21 then when you switch and go to the infrared here's what
22 you see at the same site. And what these cameras are
23 designed to do is capture a range of volatile organic
24 compounds, including methane, so it has relevance to
25 climate. And they are designed specifically for about
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1 24 of these VOCs.

2 And these are the cameras that the industry
3 uses when they're looking to find leaks. They're also
4 the cameras that state regulators use if they're looking
5 to do inspections. And we get the same training with
6 our operators.

7 I think at this point probably the best thing
8 to do is then to transition. That's what got us to the
9 point of saying everywhere we go we see these emissions
10 without exception. And so in terms of the queries of
11 the Tribunal I think at least, in my experience, and I
12 think as an organization, the question of what do you do
13 about this?

14 We have not seen a safe, from a human health
15 standpoint certainly and from a climate standpoint, we
16 have not seen a safe site in the shale places we've been
17 there. There are always emissions. There are always
18 leaks and spills.

19 So for us the question, the operative question
20 becomes what kind of remedy can you fashion them if you
21 can't do it safely. And that's our view.

22 Nathalie joined us to work with the
23 communities and with our camera operators and now she'll
24 continue with our presentation.

25 MS. NATHALIE EDDY: Great. Thanks Bruce
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1 and thank everybody for this opportunity to be here and
2 share with the Tribunal what we found.

3 I'm going to go ahead and open with a sort of
4 dramatic video. This is something we took with our
5 camera just a few months ago in the eastern US. We
6 weren't even looking to take a look at this facility and
7 stumbled across it.

8 And I share it because we think that if we
9 hadn't documented it we doubt that either the operator
10 or the state staff would have informed adjacent
11 communities of what was going on in terms of the volume
12 and type of emissions released.

13 So this first video is indicative, as Bruce
14 was saying, of the risks that fracking poses to a
15 healthy environment, to safe drinking water and to
16 timely information, plenty and accurate information to
17 impacted communities.

18 So what we have found and what we'll present
19 to you today is that fracking breaches three fundamental
20 human rights that are protected under international law;

21 The right to a healthy environment;

22 The right to safe drinking water;

23 And the right to know and to participate.

24 We're framing it in these terms and with these
25 three fundamental human rights that encompass many more
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1 human rights because this is how we hear from impacted
2 community members that their families or their homes or
3 their water is being impacted.

4 They're not articulating their impacts in the
5 express language of the international human rights that
6 are implicated by fracking.

7 So we have found that the right to a healthy
8 environment is breached by fracking. And first I think
9 it's important to remind ourselves of what this means or
10 what types of provisions we have to protect these rights
11 in international law. So under the International
12 Covenant On Civil And Political Rights the UN
13 Declaration On The Rights Of Indigenous Peoples we
14 recognize the right of everyone to the enjoyment of the
15 highest attainable standards of physical and mental
16 health.

17 So our evidence shows that is not what
18 fracking provides. And is not possible, as Bruce said,
19 to achieve that highest attainable standard of physical
20 and mental health in life as a result of fracking.

21 There are two pieces that we want to talk
22 about. The first is this growing body of peer reviewed
23 scientific research linking adverse health impacts to
24 the proximity of fracking. And then the 13plus years of
25 Earthworks field work, and this includes hundreds of
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1 community testimonials, many health impact assessments
2 in different parts of the United States. And then
3 documentation of emissions, including the FLIR videos,
4 some of which we've already shared with you.

5 So more than a decade after shale development
6 with this intensive fracking has really accelerated it's
7 still left to us as a civil society to respond to these
8 community health complaints and to try to understand
9 what is going on with these fracking activities, what
10 are the risks and what are communities being exposed
11 to.

12 The industry denied its use of chemicals or
13 responsibility and the state deferred to these
14 industries' denial and so we've been working with
15 academic researchers and health experts to develop this
16 research.

17 And the summary that we're sharing with you is
18 the work of Ph.D. scientists who we are working with
19 right now to litigate over additional future proposed
20 shale development.

21 So looking at the summary of the health expert
22 research we see that study after study is finding that
23 fracking impacts, respiratory issues, wheezing,
24 shortness of breath, neurological issues such as
25 headache and dizziness as well as skin, sensory, organ
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1 irritation and other affects.

2 There's also been some recent studies on the
3 impact on birth weights as well as infant health and
4 significantly the closer that families were located to
5 the fracking activities the greater the impacts. So
6 more impacted was the birth weight or the more impacted
7 was the infant's health. Specifically when they were
8 within one kilometer was the most extreme of the
9 impacts.

10 So moving from the scientific peer reviewed
11 research into some of the field work of Earthworks this
12 is what we see when we go into people's homes impacted
13 by fracking. We can see rashes and bloody noses. This
14 is what community members are sharing with us.

15 And in addition to these first hand
16 experiences and testimonials we're also conducting
17 health impact assessments in different areas in the US.

18 The first one we conducted in 2012 in the
19 Marcellus shale in Pennsylvania had three key results.
20 We found that contaminants that are associated with oil
21 and gas development are present in air and water in
22 areas where residents are experiencing health symptoms.

23 Consistent with such exposures we found there
24 is a strong likelihood that residents who are
25 experiencing a range of health problems would not be if
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1 widespread gas development were not occurring. And by
2 permitting this widespread gas development without fully
3 understanding its impacts to public health and using
4 that knowledge to justify regulatory inaction
5 Pennsylvania, in the state of Pennsylvania and other
6 states, are risking the public's health.

7 And then one of the key findings in that
8 impact assessment was that quote that you see at the top
9 that "When many people in many places where gas
10 developments are occurring have similar health
11 complaints something is clearly wrong." And we see that
12 consistency in the scientific research as well, that
13 peer reviewed research that we took a look at.

14 So a quick contrast to what we're seeing in
15 homes and the lives of community members are trying to
16 lead next to fracking.

17 And then we go from the home and we go to the
18 facility site. And this is a snapshot of the types of
19 disrepair, visible dirty emissions, spills and general
20 contamination that we encounter all the time at these
21 facilities. Often, you can see, in that upper left
22 photo right next door to someone's home.

23 So here is a testimonial from one of our
24 partners that I'll go ahead and play.

1 MS. JANE WORTHINGTON: I have custody of
2 my 12-year old granddaughter. Her name is Alexis and
3 Alexis has been bezene exposed. It has impacted our
4 entire life.

5 It happened, we believe, in 2011 she started
6 with asthmatic conditions and from there it went into
7 bloody noses. She has unusual and uncontrolled
8 bruising. She's had bulls eyes. She has joint
9 swelling. She has joint pain.

10 And in April of 2015 she was diagnosed with
11 damaged growth plates. And at that point the
12 pediatrician and the family doctor began to listen to
13 our concerns of bezene.

14 MS. NATHALIE EDDY: And so then jumping
15 to more recent health impact assessment we conducted in
16 Texas I'll run through some of the results we find and
17 the problems of impacts on community members living
18 close to fracking.

19 We found that 75% of the interviewees with
20 health issues reported neurological problems, such as
21 migraines, memory loss, forgetfulness, confusion or
22 lack of focus, silliness, numbness in extremities. 50%
23 reported respiratory problems and 89 expressed some
24 concern for their environmental impacts on their health.

25 And another testimonial from one of our dear
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1 friends of Earthworks who just passed away this year.

2 MS. HARRIET IRBY: At the commencement of
3 drilling operations in my area I had pneumonia. I had
4 to commence taking oxygen at night. Then, ever since
5 then, I have been hospitalized once a year with what's
6 called an exacerbation of COPD.

7 I've been breathing that for years and it's
8 literally killing me. My pulmonologist has told me I
9 will never get better. I will only get worse.

10 And at the present date he has dropped me as a
11 patient because he can't do anything more for me.

12 MS. NATHALIE EDDY: So this kind of
13 frustration from community members and searching for
14 ways to take action and not sure of next steps is
15 unfortunately common in our work.

16 Also last year we conducted air samples in
17 Texas and found a mixture of compounds all of which are
18 known to cause neurological, respiratory and
19 immunological problems.

20 They were benzene, which is a known carcinogen,
21 also classified as hazardous air pollutants. Hydrogen
22 sulfide, a neurotoxic gas and can be fatal.

23 Cyclohexane, that is an eye, skin and respiratory
24 irritant. And that can also affect the nervous system.

25 Napthalene which is hazardous to the liver, eyes and
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1 nervous system and n-hexane as well as mixed xylenes. So
2 a fairly incredibly toxic mix.

3 So in given that this -- and recognizing what
4 this growing body of knowledge as well as testimonials
5 and community experience we see that the fracking
6 activities are very clearly impacting communities.

7 They are denying them and breaching their
8 right to a healthy environment. And certainly making it
9 impossible for that standard of the enjoyment of the
10 highest attainable standard of physical and mental
11 health as recognized under international law is very
12 clearly breached.

13 And here are a few more snapshots of other
14 case studies conducted in Texas. This is a finding of
15 16 chemicals above the states' screening levels and 61%
16 of the residents are experiencing effects that match
17 those as to those associated with chemicals detected in
18 the air.

19 And another hot spot in Texas where 65
20 chemicals were detected on a high school band field.
21 And 501 emission events in one year from a single
22 facility. So more than one a day at this point.

23 So the compilation of what we're presenting,
24 the peer reviewed research, our field work that is
25 comprised of community testimonials, FLIR video and
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1 health impact assessments we see this breach again and
2 again of the right to a healthy environment.

3 And now I would like to address the next
4 fundamental right, which is the right to safe drinking
5 water. This is a right that is protected under several
6 international human rights instruments recognizing that
7 water is fundamental for all of our survival. We can
8 not live without water.

9 In 2005 Earthworks conducted a study to look
10 at the risks that fracking poses to drinking water and,
11 unfortunately, the findings and recommendations from 13
12 years ago still hold true. And drinking water, safe
13 drinking water remains threatened by fracking.

14 The two key findings were that fracking fluids
15 contain toxic chemicals linked to adverse human health
16 impacts such as cancer, kidney, brain, respiratory and
17 skin disorders, birth defects and other health
18 problems. And that fracking chemicals are directly
19 injected into drinking water aquifer.

20 So here is a testimonial from one of our
21 partners speaking about water quality issues.

22 MS. TERRI SHOEMAKER: We have a pipeline
23 running behind our property. We got a lot of run off
24 that came down into our pond and filled our pond with a
25 lot of sludge and oily powdery matter. We find residue
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1 on our vehicles. We do have a good bit of run off and
2 intestinal issues, shortness of breath and different
3 things.

4 MS. NATHALIE EDDY: And then finally I'd
5 like to look at this third broad category of human
6 rights which is the right to know and participate.

7 So we're coming full circle to where we
8 started and the situation first described in which
9 Earthworks was looking for that information and we
10 didn't have the research and we weren't yet connected to
11 the communities.

12 And industry refused to admit the depth and
13 scope of these dangers and also government failed to
14 control this industry to limit these impacts and these
15 damages.

16 This right includes a right to know, a right
17 to participate and a right to free prior informed
18 consent.

19 So this just in the last year communities in
20 Mexico and Argentina have reached out to Earthworks in
21 an effort to learn more about the fracking activities in
22 their communities.

23 So this photo here is a picture of the civil
24 society members who joined Earthworks in Veracruz,
25 Mexico. And then I would like to show the video, or a
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1 piece of the video, of what they found.

2 [Video presentation].

3 And this sort of template that you see here is
4 how we compile all of our videos in advance of
5 submitting our complaints so it's clear where the
6 facility is. The signage so we know which facility
7 we're talking about. Standard camera photos.

8 And then this is as we see zoom in we see this
9 community in Mexico discovered about the fracking
10 activities in their area. And you can see the extent of
11 the emissions, some of the exposed toxic fluids.

12 So why the camera is moving around is to
13 actually track just how far that trail of emissions is
14 coming out, what that plume looks like and that
15 indicates the volume and strength of those emissions.

16 I'll go ahead and pause that.

17 And then finally I want to close with another
18 testimonial of one of our partners just reminding us of
19 the significant repercussions of drilling and fracking
20 and how impossible it is to go back once it's happened.

21 MR. TIMOTHY CHITO: What has happened
22 isn't fixable, okay. You can't unfrack a well.

23 They've put these things in 800-feet, 300-
24 feet, 500-feet from peoples houses. How is the user
25 going to [indiscernible].

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1 Air quality, water quality, all this it's a
2 reality. It's here. It can't be fixed. These
3 regulators they don't have gas wells in their backyards.
4 If they did they would understand the point of people
5 like me.

6 MS. NATHALIE EDDY: So what we've seen in
7 this field is not the highest attainable standard of
8 physical and mental health, not safe drinking water and
9 a lack of information about the many risks of fracking
10 and the dangers to communities living in proximity.

11 So drawing on these findings and this growing
12 body of peer reviewed scientific research we find that
13 fracking denies communities their right to a healthy
14 environment, their right to safe drinking water and the
15 right to information and to participate.

16 Thank you.

17 Are there questions or discussions from
18 judges?

19 MR. FRANCESCO MARTONE: I have just a
20 quick question because these -- you also mentioned the
21 right to free prior informed consent, right, as one of
22 the potential international standards that you found
23 being violated.

24 My understanding is that that actually applies
25 mostly to indigenous peoples communities. So is there
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1 any case that you have been working on that involves
2 indigenous organic peoples communities, native or first
3 nations or whatever they call them, in different
4 countries and if so have you been noticing also the
5 capacity of those organizations and communities to
6 mobilize themselves or, you know, was there a difficulty
7 for them to -- further difficulty for them to access
8 information and access procedural rights?

9 MS. NATHALIE EDDY: Great. Thank you.

10 Bruce, are you able to unmute yourself? Do
11 you have some --

12 MR. BRUCE BAIZEL: I've worked on, with
13 Navaho communities in the US for many, many years and
14 currently we are -- in fact Nathalie was just out last
15 week with some communities in northeast Arizona where
16 it's both oil and helium that is being extracted from
17 the same field essentially.

18 And one of the things -- so this is the
19 second time we've had the camera out there and they
20 initially had signs warning that there was hydrogen
21 sulfide gas, one of the air toxins that Nathalie
22 mentioned that if you breathe a sufficient amount of it,
23 it will kill you.

24 The company took those signs down and has
25 refused to put them back up. And yet when we went out
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1 with both the camera and a meter in it the gas is still
2 there.

3 So the communities have not been able to get
4 tribal government to intervene and the companies
5 actually try to block access, even though it's
6 traditional usage grounds for livestock, grazing and
7 home sites for the Navahos living. This is sort of on
8 the side of a mountain, I guess would you say, and they
9 live -- in the winter they live down in the valley.
10 But their summer camps are up in this area. So that's
11 one instance.

12 And then in Argentina part of the invitation
13 came from a Mapuche community down there and they have
14 some existing oil and gas development in the area but
15 with the push to go to shale there is considerable
16 discussion among the federal government in Argentina
17 about expanding, even though that might put Argentina at
18 risk of not meeting it's Paris climate goals.

19 But specific to the impacts there the Mapuche
20 were given no information about the emissions coming off
21 those sites. And we haven't finished processing all the
22 videos or we could have included one here, but it's at
23 least as bad as we saw in Mexico.

24 And there's no -- no fencing around those
25 sites. You know, anybody can go right onto the sites so
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1 that you're right in the emissions. So we see the same
2 thing in both of those indigenous, sets of indigenous
3 communities where information is not provided, risks are
4 not communicated and to be honest the practice is,
5 unfortunately, no different than any other oil and gas
6 sites we've seen whether it's near indigenous
7 communities, whether it's near Spanish speaking
8 communities, whether it's near English speaking
9 communities.

10 MR. GILL BOEHRINGER: Bruce, I just
11 didn't get who originally put up those signs that were
12 taken down by the company?

13 MR. BRUCE BAIZEL: I believe the lease
14 rights were recently transferred. So now it's a new
15 company to the area but not the companies that
16 originally drilled those wells to produce and they're
17 building a processing plant for the helium actually.
18 They don't care that much about the oil these days.

19 So it's a new company that took the signs
20 down, new to the area, but they hold the leases.

21 MR. GILL BOEHRINGER: The previous company
22 had put up the sign?

23 MR. BRUCE BAIZEL: Yes. We have some
24 photographs of -- it's a white sign with red lettering
25 you know. Danger. Hydrogen sulfide gas.
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1 And we went back this time, Nathalie and Pete,
2 our operator, the community people said they've taken
3 those signs down. And they put berms across -- dirt
4 berms across the roads to try to keep people out because
5 a Navaho nation reporter had written a story about our
6 first trip out there and they got upset.

7 MR. GILL BOEHRINGER: Thanks.

8 DR. THOMAS KERNS: I have a question,
9 Bruce.

10 To me the deployment of this FLIR technology
11 where you're basically making the invisible visible I
12 would have guessed that it would have enormous impact,
13 or at least the potential for real impacts, on policy
14 making and bringing cases and so on. So I am curious
15 about what your experience has been.

16 You've been doing this for a few years now and
17 quite a few different communities and what kind of
18 effects has it had?

19 MR. BRUCE BAIZEL: Well, it's still new
20 to the regulatory agencies. Nathalie has a number of
21 stories where she has gone and dialogued with inspectors
22 for the agencies and they say well, we don't have those
23 cameras. Or can you show us your video because we can't
24 get out in the field because of budget reductions,
25 resistance from the companies.
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1 So it's been a very uneven entry into trying
2 to reduce emissions. I would say Colorado, as a state,
3 has a rule now in place for four years that if you see
4 emissions you fix them. It doesn't matter what level of
5 emission. If you see them you have to fix them.

6 We're still finding out whether they will
7 respond to the videos we submit but certainly if their
8 staff see emissions they require the company to fix
9 them. So we do think it is reducing emissions somewhat.

10 I would note that Colorado is still -- that
11 area of Colorado is still in non-attainment for ozone
12 and greenhouse gas emissions have not -- they're not
13 increasing as much but they are not decreasing from 1990
14 levels, 2005 levels.

15 So I would say it's at the margin that we're
16 seeing it make a difference in the aggregate. For
17 specific facilities it can make a huge difference,
18 absolutely.

19 You know, those -- the video from Mexico
20 those are tanks that the community members say they
21 bicycle by there. That's an easy fix. You can replace
22 those pressure valves.

23 And then people going by there on a daily
24 basis would not be subjected to those emissions. It
25 wouldn't get rid of all emissions but it could help with
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1 the acute short-term impacts. But that's very
2 localized.

3 You know, the US has close to a million oil
4 and gas sites. We've got three cameras. It is
5 spreading but it's slow and if you're looking at it from
6 a climate standpoint we don't have that time.

7 MS. NATHALIE EDDY: I would just add at
8 the community level in Red Valley we're working with
9 some of the Navaho members it has had a significant
10 impact. So we went there in January and those videos
11 were shown at chapter meetings and as a result two
12 different chapter houses passed resolutions calling for
13 more information about the impacts on health from the
14 oil and gas extraction going on.

15 And so I think you're right that seeing is
16 believing made a big difference in galvanizing that
17 community to take action.

18 One other piece of it is that the cameras are
19 costly. So they cost \$100,000.00 and they require very
20 specific training. And so we've also been in meetings
21 with the BLM field office last Friday, and this is true
22 of other regulatory agencies, they might have a camera
23 but no one left in the office who is certified to use it
24 now and so it's very underdeployed for various reasons.

25 And those are some examples.

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DR. THOMAS KERNS: Thank you.

[youtube.com/watch?v=GkUALkbdmgQ]

1 CLIMATE-FORCED MIGRATION IN ALASKA.

2 MAY 15, 2018 1:30-3:30

3
4 DR. ROBIN BRONEN: Hello. I'm Robin Bronen. I
5 want to extend to Alaska my deep gratitude to the people
6 and to Tom Kerns and Emily and Shelly and all the other
7 folks who have made this possible.

8 I am currently in Geneva where I have just
9 been attending the UN Framework Convention On Climate
10 Change Task Force Meeting On Climate Displacement where
11 the UNFCCC is trying to figure out how to avert,
12 minimize or prevent the displacement of people caused by
13 our climate crisis.

14 The displacement of people caused by climate
15 change is going to be the greatest human rights
16 challenge of our times and the indigenous peoples of
17 Alaska are some of the first peoples in the world who
18 are facing the excruciating choice of figuring out where
19 they will be able to go because they are no longer --
20 many of the communities along the coasts of Alaska are
21 no longer able to stay where they have lived for
22 millennia because it is no longer safe.

23 So I'm going to start by talking about the
24 climate crisis in the arctic and, hopefully, you have
25 heard of the term polar amplification.

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1 And what that means is that the arctic region
2 of the world is warming two to three times faster than
3 the rest of the planet. And in this slide I'm showing
4 here these are maps from the National Oceanic &
5 Atmospheric Administration in the United States and
6 these are two maps that were taken last winter. So
7 winter of 2016 and 2017.

8 And as you can see on these maps the red
9 signifies increased temperature anomalies and I believe
10 it's on the left side of the screen where you can see in
11 November of 2016 the temperatures on that day were 45
12 degrees above normal and fine over Greenland.

13 And then if you look on the right side of the
14 screen that map shows February of 2017, once again the
15 hot spot [indiscernible] and thawing over Greenland
16 where temperatures once again. And its ability to stay
17 cold [indiscernible] permanent rise. These temperature
18 anomalies on these two separate dates have continued.

19 So this past winters these temperatures of 45
20 degrees above the norm happened two to three times
21 during the winter of 2017 to 2018. And between January
22 first of this year and March 31st the temperatures
23 reached above freezing over Greenland for 61 hours.

24 And it's important to remember that at that
25 time of year the sun does not rise above the horizon.

1 So for 61 hours between January 1st and March 31st the
2 temperatures rose above freezing when the sun was not
3 rising above the horizon.

4 In Alaska the temperature increases have been
5 dramatic. So during the year of 2016 you can see that
6 in Barrow, now called Utqiagvik, the temperature was 7
7 degrees Fahrenheit above normal.

8 And it's important to remember when I'm
9 talking about these temperature increases that the UN
10 Framework Convention On Climate Change, the Paris
11 Agreement, their aspirational hope in regard to
12 temperature threshold are 1.5 degrees Celsius, which is
13 about 3 degrees, to 4 degrees Fahrenheit.

14 And as you can see in Alaska during the year
15 of 2016 we have already exceeded those temperature
16 anomalies. And then this past winter we truly crossed a
17 threshold where you can see that the temperatures at
18 the northern most part of the state where Utqiagvik and
19 Kotzebu are were 10 degrees Fahrenheit above normal,
20 which is between 4 and 5 degrees Celsius above the norm.

21 This past winter it was raining along much of
22 the coast of Alaska and these [indiscernible] and the
23 temperature increased. And one of the most impacts is
24 on the arctic sea ice extent.

25 For those of you who are concerned about the
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1 warming of the planet I encourage you to look at what is
2 happening with our arctic sea ice because we are
3 radically losing the ice that normally covers the arctic
4 ocean. And as you can see these decreases in arctic sea
5 ice have been going on now.

6 There was a record low in 2007 and then again
7 in 2012 and the during the last three years we have had
8 record maximum number low extends. Meaning that in
9 March when the -- when the arctic sea ice is at its
10 maximum extent it has been the lowest ever recorded.
11 Last year, in 2016 and then this year in 2017 was the
12 second lowest.

13 And the loss of arctic sea ice has a
14 tremendous impact on the communities that reside along
15 the north -- the west coast of Alaska because arctic
16 sea ice has been the natural barrier that has protected
17 the communities from the storms that normally come in
18 during the autumn and now winter season.

19 And these changes have an enormous impact on
20 peoples human rights. And the ways that human rights
21 are impacted are -- include everything from the right
22 to life, to the right to be able to practice cultural
23 traditions and the right to subsistence.

24 And so because of these dramatic impacts on
25 indigenous communities in Alaska several of the
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1 communities have made the decision that the relocation
2 of their entire community is the best way for them to
3 adapt into the future.

4 And so these same human rights principles that
5 are being violated because of our climate crisis we need
6 to be embedding these human rights principles into the
7 ability for communities to be able to determine how to
8 adapt and to be able to maintain the life styles and
9 their traditions, cultural traditions, that they hold
10 dear and that are deeply connected to the land on which
11 they live.

12 At the Alaskan Institute For Justice we are
13 currently working with 15 Alaskan native communities who
14 are faced with this really, really, difficult decision
15 about how to adapt to these radical changes to the
16 environment.

17 And as you can see from this map they are all
18 coastal communities. And the communities of Kivalina
19 and Shirshmaref are two of the communities in Alaska
20 that made the decision to relocate well over a decade
21 ago. And the enormous challenges, despite their
22 tremendous advocacy to actually implement what they have
23 determined to be their long term adaptation plan, has
24 been extremely difficult. So while they made the
25 decision back in the early 2000s to relocate they have
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1 still not been able to relocate.

2 And none of these communities that we're
3 working with are connected by road systems to other
4 parts of the state. So when storms come in on the coast
5 they have no places to evacuate to and without that
6 arctic sea ice the storms are having a dramatic impact
7 on their communities with flooding and winds and the
8 inundation that is caused by the storm surges.

9 So in looking at the way that climate crisis
10 is impacting the ability of communities to stay where
11 they are it's the combination of these extreme whether
12 events that are happening with greater frequency.

13 So one of the things that we are doing at the
14 Alaska Institute For Justice is we're working with these
15 communities to document the impacts of the storms. And
16 this past winter season between October of 2017 and
17 February of 2018 there were 42 storms that impacted
18 these communities and, again, without the arctic sea ice
19 they experienced tremendous flooding and erosion which
20 is causing the land on which they live to permanently
21 disappear.

22 So it's the combination of the extreme weather
23 events with the erosion and permafrost thawing that is
24 causing the land on which their dwellings are to no
25 longer be able to remain there.

1 So as I mentioned the storms this past winter
2 were extremely severe and as you can see from these
3 pictures there's open water. In Shishmaref where I just
4 showed the map, which is close to the Arctic Circle,
5 there is open water in January of this year which is
6 extremely unusual. Normally there are multi feet of ice
7 protecting the coast.

8 And on the left Weston Golovin in October you
9 can see the extreme flooding that was caused by a storm
10 that happened in October.

11 Again, in regard to what just happened this
12 past winter these storms are causing tremendous impact
13 in the communities. So the road that you can see on the
14 screen that you're looking at is a road that goes to the
15 landfill for the community and that's where the
16 community puts their solid waste. And without access to
17 that solid waste landfill it can cause a public health
18 crisis because of their inability to dispose of their
19 solid wastes in a safe manner.

20 The issue of the communities being eminently
21 threatened by flooding and erosion has been well
22 documented by federal and state government agencies for
23 well over a decade. And as you can see these are some
24 of the reports that have been written by the federal and
25 states governments.

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1 So back in 2003 the Government Accountability
2 Office did their first assessment of flooding and
3 erosion in Alaska native communities and at that time
4 they determined that there were four communities that
5 were seeking to relocate as their best long term
6 adaptation strategy and about 184 communities were being
7 threatened with flooding and erosion.

8 The US Government Accountability Office did an
9 update of their report in 2009 because despite finding
10 that the four communities at that time were seeking to
11 relocate none of them had yet relocated. And when they
12 updated the report in June 2009 the number of
13 communities that were seeking to relocate had quadrupled
14 from -- actually tripled from four to 12 communities
15 were seeking to relocate.

16 Governor Palin, she created the subcabinet on
17 climate change and the immediate action working group
18 worked really hard for about 18 months trying to problem
19 solve how state and federal government agencies could
20 work to facilitate the relocation of communities to
21 ensure that they had a long term adaptation strategy
22 that would protect their human rights.

23 So it's really important for me to explain
24 what I mean by planned relocation because it is
25 [indiscernible]. So first and foremost it is really
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1 important to understand that this is a decision of last
2 resort. That communities need to be protected in place
3 that is made at the community level.

4 Meaning that it needs to be not only voluntary
5 but it needs to be protecting the right to self-
6 determination. And if there's anything that you
7 remember from this presentation it is that the right to
8 self-determination must be embedded in any decisions
9 that are made in regard to where people are going to go
10 as sea level rise consumes the coasts of millions of
11 people all over the world.

12 The reason why the right to self-determination
13 is so important is because we have a horrific legacy of
14 government mandated relocations.

15 In Alaska the federal government forced the
16 relocation of the Unangan people during World War 2.
17 The Unangan people lived in the Aleutian chain in Alaska
18 and western Alaska and they were forcibly relocated to
19 the southeast part of the state. And as a consequence
20 of that relocation 10% of the population died.

21 At the end of World War 2 the federal
22 government brought Unangan people back to their homes
23 and they found that the American soldiers, who had
24 inhabited the island during the war, had looted and
25 destroyed a lot of their possessions.

1 We also have current examples of government
2 mandated relocations and it is when governments make the
3 decisions to implement a development project where the
4 government has made the decision that they want to, for
5 instance, build a dam and as a consequence of that the
6 people living where the dam will be are told that they
7 need to move from the lands on which they're living.

8 And in that process people talk about
9 participatory decision-making. And what has happened as
10 a consequence of those forced relocations is that people
11 have ties and the loss of their cultural connections.
12 And that consequence has been almost uniform in regard
13 to the relocations that have happened as a consequence
14 of development projects.

15 So this right to self-determination is
16 essential when we are talking about planned relocation
17 but climate displacement and population displacement in
18 general.

19 The other thing that is critically important
20 in understanding this is that when I'm talking about
21 planned relocation I'm talking about this as a disaster
22 risk production strategy. And what I mean by that is in
23 the context of the climate crisis we're going to be
24 experiencing more frequent and more intense extreme
25 weather events.

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1 And what is critically important is that
2 relocations occur while people are still living in the
3 places that they call home. Because if people are
4 displaced after an extreme weather event then they're no
5 longer able to really fully implement their right to
6 self-determination and be able to make all of the
7 decisions necessary in regard to protecting their human
8 rights in regard to livelihoods and how they want to
9 maintain their cultural connection to land.

10 And, as I've said, their human rights, peoples
11 human rights must be protected in this process.

12 So there are three major governance
13 challenges. And at this meeting that I've just been
14 attending at the UN Framework Convention On Climate
15 Change Task Force On Climate Displacement, one of the
16 things that I learned, which I knew but it was affirmed,
17 is we have no models.

18 So there are no national policies anywhere in
19 the world that tell us how to go about relocating an
20 entire community as a result of our climate crisis.

21 And so in the United States that is one of the
22 major issues. There is no government agency at a state
23 or federal government level that has the mandate or
24 funding to do a community wide relocation.

25 The Denali Commission was designated by
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1 President Obama in 2015 to be the lead federal agency in
2 Alaska to address the need for relocation to occur and
3 for several Alaska native communities. And at the time
4 that President Obama made that designation there was not
5 additional funding attached to it.

6 So the Denali Commission has done
7 extraordinary work with very limited resources. And
8 with the recent congressional budget cycle the Denali
9 Commission just got a substantial amount of funding
10 which they are going to use to facilitate the relocation
11 of one of the communities called Newtok that has been in
12 a relocation process now for about 20 years.

13 And of all the communities that are facing
14 relocation they are in the most dire situation because
15 they are not only experiencing storm surges because
16 they're close to the coast but the river they're next to
17 is moving and swallowing the land on which a lot of
18 homes are built.

19 The second issue, and this is actually the
20 much more difficult and complicated issue and this is
21 the issue that we are working with, the 15 Alaskan
22 native communities that I've previously mentioned and
23 trying to figure out. And so this issue is if we're
24 going to make sure that we protect peoples human rights,
25 that we're doing everything to support peoples right to
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1 self-determination, and if relocations occur prior to
2 population displacement then we need to figure out at
3 what point in time should a community think that
4 relocation is their best adaptation strategy.

5 And we have no models in regard to how to
6 figure this out and this is one of the most critical
7 issues that we are now focused on. And as I keep
8 repeating it's how can human rights be protected in this
9 process where we have no models or guidelines on how to
10 do it.

11 So as I mentioned President Obama took a
12 significant step when he released his reports on the
13 Task Force Climate Preparedness And Resilience and
14 acknowledged in that report that the -- it was critical
15 for the federal government to take a leadership role in
16 figuring out the complex challenges associated with
17 climate related displacement because, unfortunately,
18 Alaska is not the only place in the United States that
19 is faced with this issue now.

20 There are communities in the Louisiana and
21 Washington state, indigenous communities, that are also
22 faced right now with this really, really difficult issue
23 of trying to relocate their populations to safe and
24 higher ground.

25 But it's not only indigenous communities. We
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1 know from the research and work being done that cities
2 such as Miami and New York are also threatened by sea
3 level rise. And Miami, in particular, is particularly
4 vulnerable because the land on which that city rests is
5 porous. So sea walls are not going to be able to
6 protect the city from sea level rise because the ocean
7 is actually rising up from the ground.

8 And people are now -- agencies, government
9 agencies like the National Oceanic & Atmospheric
10 Administration in the United States is documenting what
11 they are calling Sunny Day Flooding, which is flooding
12 that is happening in cities along the east and south
13 coasts of the United States that are happening with high
14 tides. There are no storms that are occurring. It's
15 just regular high tides that are flooding the streets
16 and communities that are along the coast.

17 So President Obama's decision to recognize
18 that there was a significant institutional gap at the
19 federal level was a huge step forward. And the
20 unfortunate part of the change in administration is
21 despite his best efforts and the best efforts of his
22 administration they were not able to problem solve this
23 issue. And so we are still left with this huge
24 institutional gap in the United States as the climate
25 crisis accelerates.

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1 And so what I am now going to talk about are
2 solutions. Because it is critically important that we
3 start visioning how it is that we're going to protect
4 people faced with this existential crisis of where to go
5 as the land on which they live disappears.

6 And so I've come up with what I call an
7 adaptive governance framework where you always start
8 with protecting people in place. And the way that I
9 think of protection in place and human rights is if we
10 have the technology to protect places like lower
11 Manhattan from the sea level rise that's coming.

12 That that technology needs to be made
13 available to the peoples who live in the atolls in the
14 South Pacific and the Indian Ocean, the Marshall Islands
15 and Tuvalu, because that is what climate justice means
16 is giving the resources to those places so that people
17 do not need to leave the places that they love and call
18 home and that they're able to be protected in place.

19 So in this adaptive governance framework we
20 always start with protection in place. And,
21 unfortunately, also recognize that technology is not
22 going to be able to protect us because we do not know
23 how fast or how much sea level is going to rise.

24 And so the next piece in creating this
25 adaptive governance framework is figuring out what the
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1 indicators are that relocation needs to occur. And when
2 we think about planned relocation and think about this
3 as a long term process, meaning communities are not
4 going to be able to be relocated in a year or two years
5 if we're talking about protection of human rights and
6 the right to self-determination so communities are
7 leading the way and making all of the decisions, so we
8 need to figure out what those relocation indicators are
9 so that we can start a relocation process where
10 communities are leading the effort and they have the
11 technical assistance and support from state and federal
12 government agencies.

13 So the way that we are working with the 15
14 Alaska native tribes to actually operationalize this
15 adaptive governance framework and protect people's human
16 rights and it all starts with community based
17 environmental monitoring.

18 I would say that is the most important message
19 and along with human rights protections that I can share
20 with you. Because what we know from doing this work is
21 that the modeling and scenario planning is not helpful.

22 The modeling and scenario planning is at a
23 really high resolution. And we're talking about the
24 climate crisis and ecosystems specific responses to how
25 like, for instance, sea level rise is going to effect
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1 individual places.

2 It's critically important that we have on the
3 ground information about how that environmental change
4 is happening and that link that with how that
5 environmental change is impacting peoples health and
6 well-being.

7 The other reason why community based
8 monitoring is critically important is that hazards or
9 vulnerability [indiscernible] are by baseline data but
10 what we've seen and the work that we've done is those
11 hazard assessments or vulnerability assessments, they're
12 often done by outside consultants who come into
13 communities, do assessments and then leave and don't
14 leave the community with any ability to actually
15 continue to do the monitoring necessary to figure out
16 how the hazards that are identified, the environmental
17 change that's happening, is going to continue.

18 And the third reason why this is critically
19 important is what we know is the climate crisis is going
20 to continue forever, right, for generations to come.
21 And so we need to be thinking about processes that can
22 be dynamic and ongoing and based in community
23 empowerment.

24 So in doing this work in Alaska the way that
25 we started was trying to identify where government or
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1 non-governmental agencies were doing community based
2 monitoring. And what we found was that there were very
3 few government agencies doing, or non-governmental
4 agencies, doing community based monitoring.

5 We've partnered with the Alaska Coastal
6 Hazards Program because they have been installing
7 community based erosion monitoring in different places
8 in Alaska.

9 So last summer we went to five communities and
10 installed erosion monitoring tools and the communities
11 then are working with the Alaska Coastal Hazards Program
12 to document the erosion that is happening so that they
13 then can understand, along with state government
14 agencies, the predictive rate of environmental change.

15 We are then identifying where communities can
16 get access to technical assistance and funding. Because
17 one of the issues is, as I mentioned, there are no
18 government agencies designated that have the
19 [indiscernible] 30 community relocations.

20 So we are looking at current federal and state
21 government agency programs so that we can assess how
22 those programs can change to be more responsive to the
23 community needs as they're looking at relocation as
24 their long term adaptation strategy.

25 So as I mentioned the community based
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1 monitoring that we're doing is the essence of how we are
2 implementing this adaptive governance framework and
3 we're integrating indigenous acknowledge with western
4 acknowledge and we are doing that not only with erosion
5 monitoring but with the documentation of the storms that
6 have been happening.

7 So when we documented these storms that have
8 been occurring along the coast of Alaska we provide that
9 information to the National Oceanic and Atmospheric
10 Administration for (1) for that agency to understand the
11 impacts of the storms on the communities and (2) for
12 that agency to be able to provide better information to
13 the communities in regard to the forecasting that is
14 being done. So that they can provide more accurate
15 forecasting so communities can be better prepared for
16 the storms that are coming and that are causing such
17 harm as they occur.

18 This next summer we are going out to two
19 additional communities, to not only install erosion
20 monitoring, but also permafrost thaw monitoring.

21 And from my understanding it's going to be the
22 first time in Alaska where we're installing both of
23 these community based environmental monitoring tools at
24 the same time so that the community can get a holistic
25 understanding of the environmental change that is
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1 happening.

2 And then we're going to be working, again,
3 with the Alaska Coastal Hazards Program. We're honored
4 to partner with also the Woods Hole Research Center. For
5 them they're going to be coming with us to install the
6 permafrost thaw monitoring tools. And we're going to
7 work with those agencies to figure out how to integrate
8 this information so that there can be a holistic
9 understanding of the predictive weight of environmental
10 change so that communities can plan for their future and
11 understand what their best long term adaptation strategy
12 may be and, perhaps, relocation may be their decision as
13 the best choice for how to protect themselves in to the
14 future.

15 So I'm going to close by just affirming how
16 important the arctic is to the rest of the world and
17 that the arctic is in the middle of a massive
18 transformation.

19 The National Oceanic and Atmospheric
20 Administration issued a report last December. They do
21 it annually and in December of 2017 they said that the
22 frozen regions of the arctic that have existed for
23 millennia will no longer exist in the decades ahead.

24 And I'm sure you know that will not only have
25 tremendous consequences on the peoples who live in the
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1 arctic but on the entire planet and it is urgent,
2 urgent, that we reduce our greenhouse gas emissions,
3 stop fracking, stop new oil and gas exploration and then
4 also focus on adaptation because we're not mitigating
5 and we're not preparing for adaptation.

6 And so as a person who has lived in the arctic
7 for a very long time I'm very concerned that we are not
8 preparing for the future that is coming our way in the
9 not very distant future. And what I'm talking about is
10 not in the very distant future. I'm talking about five
11 to ten years.

12 So I really appreciate this opportunity to
13 share with you the work that we're doing in Alaska with
14 the Alaska native communities that have been at the
15 forefront of advocacy in the United States and
16 resilience because they inspire me every day with their
17 knowledge and perseverance and determination that they
18 will adapt as our climate continues to change.

19 Thank you.

20 I'm happy to answer questions about what I
21 I've shared.

22 DR. THOMAS KERNS: I have a question. This
23 is Tom.

24 Has your work been mostly with native
25 communities along the west coast of Alaska?

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1 And have you done work up north on the North
2 Slope or Prudhoe Bay too?

3 DR. ROBIN BRONEN: No. We're only
4 working with the communities on the west coast of
5 Alaska. So the communities that we're working with
6 asked to work with us.

7 DR. THOMAS KERNS: Are you framing your
8 arguments with, you know, your advocacy work in human
9 rights terms?

10 DR. ROBIN BRONEN: Yes. It's absolutely
11 critical that we are thinking about the enormous human
12 rights violations that are occurring because people are
13 no longer able to stay in the places that they call
14 home.

15 And it's critical that we think about the
16 human rights protections that need to be put into place
17 and when thinking about where people will go.

18 DR. THOMAS KERNS: In the meeting that
19 you've just been at in Geneva that's also about climate
20 forced migration, I think, is that right?

21 DR. ROBIN BRONEN: Yes.

22 DR. THOMAS KERNS: And do they think in
23 human rights terms also?

24 DR. ROBIN BRONEN: Yes, they do. You
25 know, there are a number of NGOs who are present who are
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1 advocating that human rights protections have to be
2 front and center with this issue. And so, yes, there
3 are human rights are being embedded in the conversation.
4 The question is what the implementation will look like?

5 DR. THOMAS KERNS: Thank you.

6 DR. ROBIN BRONEN: You're welcome.

7
8 [youtube.com/watch?v=yAuMU_cIMHU&t=3s]
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1 ALASKA CLIMATE ACTION NETWORK

2 MAY 15, 2018 2:30-3:30

3
4 MS. CEAL SMITH: Greetings. I want to
5 thank Tom Kerns and all the folks who organized this
6 important truth telling. It's a privilege to be a part
7 of this historic proceeding.

8 My name is Ceal Smith and I am an ecologist
9 and founder of the Alaska Climate Action Network.
10 We're a grassroots alliance of scientists, native
11 Alaskans, artists, renewable energy advocates and others
12 who are pushing for better and faster policy action on
13 climate change in Alaska.

14 Before I moved here in 2013 I worked with
15 communities affected by oil and gas across Colorado for
16 six years. In fact my own community of Crestone was
17 threatened when a Canadian oil company tried to drill in
18 the Baca National Wildlife Refuge just a stone's throw
19 away from my home. We fought and we won a five year
20 federal EPA lawsuit that resulted in a mineral rights
21 buy-out.

22 And that pulled me in to the larger fractavist
23 movement that was exploding across the state in the mid
24 2000s. My written brief goes into detail and the
25 amazing trailblazers from Earthworks are probably going
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1 to tell that story much better so I won't repeat it
2 here.

3 As many of you know Alaska, the arctic --
4 let's see if I can get this on -- as you can see most
5 people know by now, I think, that the arctic is warming
6 twice as fast as the global average. And living here
7 it's really quite alarming.

8 Everybody walks around sort of looking at each
9 other like where are we? What is this? It's so
10 obviously different now.

11 You can see each given year on the left-hand
12 side this is the extent of sea ice and it's just going
13 down, down, down so fast. And this year was just short
14 of a record but we're seeing, you know, amazing
15 temperatures in the arctic that are 30, 40 degrees off
16 from normal. I'm going to end that.

17 The irony, of course, is that Alaska is also
18 one of the biggest oil producing states in the US. The
19 state produced more than 15.5 billion barrels of oil
20 since production started in the early 1980's.

21 And I have some slides here showing oil and
22 gas as a very dirty business in the arctic but I don't
23 think that I can share that with you right now but I can
24 include those in my file.

25 So here we are in Alaska trapped between
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1 climate change and economic dependence on the root cause
2 of climate change with no end in sight. Between Trump's
3 interior secretary, all roads to energy dominance go
4 through Alaska, Ryan Zinke, and our governor Bill
5 Walker. The state is literally being forced to stay in
6 the clutches of dirty energy.

7 But people are really getting ready for a
8 change. And here to tell that story are two excessively
9 smart and courageous Alaskans, McKibben Jackinsky and
10 Eunice Mary Brower. They are both living on the front
11 lines of oil and gas and climate change and it's been a
12 great privilege and an honor to work with them.

13 McKibben is a fifth generation Alaskan from
14 Ninilchik, a small native village in the Kenai Peninsula
15 about 200 miles south of Anchorage who wrote an amazing
16 book, Too Close To Home: Living With Drill Baby On
17 Alaska's Kenai Peninsula.

18 And Eunice is the EPA IGAP Coordinator in the
19 Nuiqsut Tribal Council Office of Environmental
20 Management. That is 700 miles north of where McKibben
21 lives on Alaska's North Slope where almost 10,000 oil
22 wells comprise one of the biggest industrial zones in
23 the arctic. Eunice's home of Nuiqsut may be out of site
24 to most of us in the world but it's not out of mind.

25 And we are especially glad that Eunice is here
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1 today to tell you the other side of Alaska's oil boom
2 story. So I am going to hand it over to McKibben and
3 then Eunice to tell their story.

4 MS. MCKIBBEN JACKINSKY: Thank you, Ceal,
5 and many thanks to the Permanent Peoples' Tribunal for
6 addressing this topic of global importance. And thanks
7 also to the organizations that helped bring this an
8 about, The Global Network For The Study Of Human Rights
9 And The Environment, the Environment And Human Rights
10 Advisory and the Spring Creek Project and the Master's
11 Arts Of Environmental Arts And Humanities Initiative.

12 My name is McKibben Jackinsky. In 1847 my
13 great-great-great grandfather Grigorii Kvasnikoff, a
14 Russian-American company pensioner, his wife Marva
15 Rastorguev, a woman of Russian and Alutiiq blood and
16 their children, were one of the first two families to
17 found Ninilchik, a Kenai Peninsula village on the shores
18 of Cook Inlet.

19 In 1913 their great-granddaughter Masha
20 Oskolkoff married Walter Jackinsky a Polish immigrant
21 who had found his way to Ninilchik. And in 1920 Walter
22 and Marsha homesteaded three miles north of the village.
23 Since then some of the homestead has been sold but most
24 of it has been inherited by their children,
25 grandchildren and great grandchildren.

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1 In 1949 I was brought as a new born to the
2 land by my parents Walter Jackinsky Jr. and Alice
3 McKibben.

4 Ninilchik is where I grew up. In the spring
5 we moved to our fish camp near the homestead. The fish
6 we caught during the summer were sold to a cannery with
7 enough held back to feed our family. During the summers
8 I went to sleep and woke up to the sound of the waves.
9 Weather and tides dictated when we picked our fish.
10 Fall was for harvesting the vegetable gardens, picking
11 berries in the woods, hunting for moose and collecting
12 coal from the beach to warm our homes.

13 In the winter we lived on what we'd harvested.
14 On every low tide we could dig clams from the beach.
15 Our lives were governed by the seasons, the weather and
16 the life cycles of plants and animals.

17 In 1978 my two daughters and I, with the help
18 of family and friends, rebuilt the hand hewn log
19 homestead cabin where Walt and Marsha had raised their
20 children.

21 In 1995 I built a cabin on three acres of the
22 homestead my daughters and I inherited. Camp fires in
23 the front yard have cooked many a meal for our extended
24 families. Overnights at the cabin are special times to
25 tell my children and grandchildren about their
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1 ancestors.

2 My life's journey has included a decade
3 working in Alaska's oil and gas industry on the North
4 Slope, along the TransAlaska pipeline at the Valdez
5 terminal in Anchorage and on Cook Inlet platforms.

6 That was followed by 15 years working as a
7 journalist with opportunities to write about Alaska's
8 petroleum industry from numerous perspectives.

9 I retired from my employment with a local
10 newspaper in February 2015. And in 2016 my book, Too
11 Close To Home: Living With Drill Baby On Alaska Kenai
12 Peninsula was published by Hard Scratch Press.

13 Through more than 70 interviews it looks at
14 impacts, both positive and negative, of the fossil fuel
15 industry on the southern Kenai Peninsula.

16 Two things happened that made writing the book
17 seem crucial. My daughters and I were offered a lease
18 by Hilcorp, a Texas based oil and gas company that is
19 the largest producer in Cook Inlet. Hilcorp wanted to
20 lease our land to expand their oil and natural gas
21 exploration and production.

22 The second thing that happened was
23 introduction of a new word to the vocabulary of southern
24 Kenai Peninsula residents, fracking.

25 Blue Crest, another Texas based company,
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1 announced plans to frack wells at its cosmopolitan site
2 20 miles south of Ninilchik. The directional wells were
3 to be drilled on shore and extend beneath Cook Inlet.
4 The well pad is on privately owned property. The
5 owners' homes are separated from the pad by a stand of
6 spruce trees. The pad is bordered on two sides by other
7 private residences, fishing charter businesses and Bed
8 and Breakfasts. It is also a home to a salmon stream
9 that empties into Cook Inlet.

10 We'd heard the word "fracking" in relation to
11 earthquakes, drinking water being poisoned, wells
12 disappearing and noise and air pollution.

13 We'd heard about battles to ban fracking
14 because of its dangerous impacts but that was all
15 somewhere else.

16 Now we learned that fracking wasn't new to
17 Alaska. The Alaska Oil And Gas Conservation Commission,
18 the state agency that permits fracking, said 20% of the
19 oil and natural gas wells in Alaska had been
20 hydraulically fracked, including wells in Cook Inlet and
21 on the Kenai Peninsula.

22 We were surprised and angered that fracking
23 had occurred without the public knowledge or input,
24 especially those living near the fracked wells. As a
25 resident and as a journalist I set out to learn more.

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1 For starters Blue Crest, an AOGCC, pointed out
2 that chemicals comprised an insignificant 2% of fluid
3 used in the fracking process and water was the main
4 component. 2% sounded like a small until we realized
5 that each frack required millions of gallons of water.
6 For every million gallons that's 20,000 gallons of
7 additives, detergents, salts, acids, alcohols,
8 lubricants and disinfectants being forced into the
9 ground.

10 Herb Keith's water well is a little more than
11 a thousand feet from Blue Crest's first fracked well.
12 After retiring from the Alaska Railroad Herb used his
13 savings to build an a small, energy efficient, house on
14 land overlooking Cook Inlet. There were sweeping views
15 of the water and mountains on the inlet's west side.
16 Bald eagles soared along the bluff's edge. Bears and
17 moose roamed the neighborhood.

18 Herb's home offered a peace he dreamed of all
19 his years working until Blue Crest began its operations.
20 Then Herb's life became punctuated by clanging pipes,
21 back-up alarms, lights flooding his kitchen through the
22 night, a roaring natural gas flare dangerously dancing
23 in inlet winds. Drilling noises drowning out indoor
24 conversations. Vibrations shaking the ground beneath
25 his feet.

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1 Informing Blue Crest of the impacts their
2 activities were having on his life brought no
3 satisfaction. When I interviewed Herb for my book he
4 said, "They don't give a shit. They'll tell you
5 whatever they need to tell you. We're not going to get
6 rid of them but they're getting rid of us. It's said to
7 me, very sad. We are so screwed down here."

8 In the three years since Blue Crest fracking
9 began the Kenai Peninsula Borough's assessment of Herb's
10 house and land has dropped \$31,000.00. For a short time
11 he had it on the market but knowing it's likely he'll
12 never get what he put into it he has taken down the for
13 sale sign.

14 Jim and Jolayne Soplanda, who live on the
15 other side of the Stariski Creek in a two story log
16 house they built with the intent of taking full
17 advantage of its beautiful setting above the creek and a
18 view much like Herb's.

19 Jolene served as dispatcher for volunteer fire
20 and emergency responders in the nearby community of
21 Anchor Point. A deafening roar of Blue Crest's natural
22 gas flare not only shattered the peace at home but also
23 increased Jolene's workload.

24 We get 911 calls constantly because of the
25 flare, people thinking there was a fire, she told me.
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1 At the time that I wrote the book Jolene said her
2 husband was so excited when we got this property but
3 now, well, there's not much we can do about it. They
4 have since sold their home.

5 Ken Lewandowski moved to Alaska from New
6 Jersey in 1985. He built a two story log house in
7 Anchor Point only to have EnStar natural gas construct a
8 natural gas pressure reduction station nearby.

9 The station serves a pipeline that delivers
10 gas to another pipeline that carries the gas to EnStar
11 customers some 200 miles away. Ken worried about
12 methane leaks. He worried that in the case of a problem
13 at the station he and his neighbors had only one street
14 to exit the area and it led past the station.

15 He was invited to tour the station but denied
16 entrance when he arrived without the protective attire
17 he'd not been told was required.

18 He complained but was ignored when activity in
19 the station caused his house to vibrate so violently he
20 had to secure items on shelves and walls and when noise
21 made inside conversations impossible.

22 So Ken bought a new piece of land and built
23 another two story log home with windows opening on to
24 views of Cook Inlet. Little did he know that within a
25 short time his view would be dominated by Blue Crest's
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1 drill rig and that he would suffer the same impacts as
2 his new neighbor Herb.

3 "Where is the way stop these guys?", Ken
4 asked me. "I don't even know where to turn. People need
5 to know what this is like."

6 A seismologist told me that Cook Inlet is
7 riddled with so many faults it's hard to know if
8 earthquakes in the area are fracking related.

9 US geological surveys scientist, Peter
10 Haussler, used seismic data collected by the oil and gas
11 industry to map faults beneath the inlet. In an article
12 in Alexander's Oil And Gas Connections about the study
13 Haussler said, "I think the oil companies should assess
14 whether pipelines can be compressed as the faults shift.
15 The faults could produce earthquakes large enough to
16 rupture pipelines."

17 In 2016 a 7.1 quake hit the Cook Inlet area
18 and four houses were destroyed by fire when an EnStar
19 natural gas line separated at a well joint and released
20 460,000 cubic feet of natural gas.

21 Earthquakes aren't the only natural disaster
22 to take into consideration. Five volcanoes are strung
23 along the inlet's west side. An eruption at one of
24 them, Redoubt in March 2009, sent rivers of mud and
25 debris down the Drift River Valley to the Drift River
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1 oil terminal. It breached the containment berms,
2 personnel had to be evacuated and 7.9 million gallons of
3 crude oil and water were removed from the storage tanks
4 to a tanker.

5 Protecting the inlet and peninsula wildlife is
6 another concern. The inlet is home to salmon, halibut,
7 federally endangered Beluga whale and razor clams.

8 In 1969 the Alaska Department Of Fish And Game
9 reported 8,600 clam diggers had visited Cook Inlet
10 beaches, harvesting 279,500 clams. In the mid 1980's
11 the annual harvest neared one-million clams. In 2006
12 the allowable daily limit for a clamdigger was 60 clams.

13 Then in 2010 thousands of razor clams
14 mysteriously washed up on many Ninilchik's beaches.
15 Fish and Game concluded it was due to a storm but none
16 of the elders with whom I spoke, who had weathered
17 storms and dug many clams, could recall anything like
18 that happening.

19 Three years later the daily limit per clam
20 digger was reduced to 25. The following year the beach
21 was closed to digging and remains closed.

22 A study by Alaska Pacific University has
23 recognized other factors needing to be considered; fresh
24 water input, water quality, underlying geology and
25 geochemistry, coastal erosion, climate change, habitat
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1 degradation, predation by sea otters and humans.

2 Lacking an identifiable cause for the die out
3 and with no clams to harvest and none for us to eat,
4 Ninilchik resident Katie Kennedy, who owns a home and
5 bed and breakfast near gas wells Hilcorp has fracked
6 remains suspicious.

7 "The clams are gone. I think it's the oil and
8 gas seismic stuff," she said.

9 When the die-off occurred I asked Fish and
10 Game if impacts of oil and gas activities might be to
11 blame but was told that hadn't been considered.
12 Negative impacts to clams caused by humans were
13 recognized by the state in 1976 when it designated a 30
14 mile strip of beach that includes Ninilchik as the Clam
15 Gulch Critical Area Habitat.

16 Natural resource development and energy
17 exploration requires special areas permits. However,
18 Fish and Games area manager for the Kenai Peninsula told
19 me permits are only needed for surface work. A special
20 area permit for working beneath the surface where the
21 clams live is not required.

22 However, the impacts of oil and gas on
23 shellfish have been studied with experiments by the
24 Scottish Oceans Institute at St. Andrews; the University
25 of Laguna, Canary Islands and University of Auckland,
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1 New, Zealand that suggests scallops suffer negative
2 impacts from routine underwater sounds of oil
3 exploration and construction.

4 Senior research fellow Dr. Mark Johnson of St.
5 Andrews said, "Between shipping, construction and oil
6 exploration we are making more and more noise in the
7 oceans. It's important to find out what noise levels
8 are safe for shellfish to help reduce our impact on
9 these key links to the food chain."

10 Scientific American reports leaks in disposal
11 wells where toxic fracking drilling fluids are injected.
12 The US Environmental Protection Agency has reported
13 significant gaps and uncertainties of the available data
14 that make it impossible to calculate or estimate
15 fracking's impact on drinking water nationally.

16 A Princeton University study indicates
17 fracking may have significant health impacts. In other
18 words, the ongoing research on fracking could fill a
19 library and continues to grow.

20 With so much known and still unknown Alaskans
21 asked AOGCC to include a public notification and comment
22 period in the fracking permit process. With their
23 knowledge of Cook Inlet and the waters that flow into it
24 Cook Inlet Keeper led the effort, testifying at meetings
25 and raising the public's awareness.

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1 More than 450 Alaskans spoke up at meetings,
2 testified by phone and wrote letters. AOGCC also heard
3 from industry representatives and the state saying no
4 public notification was needed. As a result AOGCC did
5 revise it's regulations. Fracking applications will now
6 be posted on AOGCC web site, period. How far in advance
7 before the permit will be granted? Not noted.
8 Comment period not included. It remains property
9 owner's responsibility to find out if and what
10 development is planned and to trust that AOGCC has their
11 best interest at heart.

12 In 2017 Hilcorp purchased land bordering the
13 Jackinsky homestead. My daughters and I received
14 another lease offer, this one asking to drill under or
15 through our property. I met with an attorney and with
16 Hilcorp's landman to make sure I understood the scope of
17 what the company intended and its impacts to the land
18 and my family.

19 I asked why this time my daughters and I each
20 were offered a lease and was told by the landman it only
21 took one signature to give Hilcorp the green light.

22 I asked if Hilcorp had already fracked wells
23 in its Ninilchik unit which borders our property to the
24 north. Answer, no.

25 However, I recently discovered on AOGCC data
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1 base of hydraulically fracked Alaska wells that of the
2 2,008 wells listed five are within the Ninilchik unit
3 and one, the Paxton lateral pad, is less than a mile
4 from my cabin.

5 Hilcorp's aggressiveness in Alaska has proven
6 dangerous. Twelve violations listed by AOGCC in the
7 last five years. In December of 2015 the improper and
8 unauthorized use of nitrogen during a well clean- out
9 resulted in the near death of three North Slope workers.

10 Hilcorp was fined \$720,000.00 by AOGCC and a
11 short time later hit with another fine for \$190,000.00
12 for three more infractions.

13 AOGCC noted the disregard for regulatory
14 compliance is endemic to Hilcorp's approach to its
15 Alaska operations and virtually assured the recurrence
16 of the incident. Hilcorp's conduct is inexcusable.

17 Closer to home Hilcorp failed to submit
18 metering reports at its Bartalowitz pad in the Ninilchik
19 unit from August 2014 all the way through December 2015
20 for which it was fined \$30,000.00.

21 For Hilcorp employees, however, the company's
22 aggressive way of doing business has definitely paid
23 off. In 2015 each employee received a \$100,000 bonus
24 for helping the company double in size in five years.

25 Now Kenai Peninsula residents face a new
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1 situation. The Pebble Limited Partnership has submitted
2 to the US Army Corp of Engineers a proposal to develop a
3 copper gold molybdenum deposit in southwest Alaska. The
4 proposal includes natural gas from an existing gas
5 supply infrastructure about ten miles south of Ninilchik
6 to fuel the line's 230 megawatt power plant with a 940
7 mile subsea pipeline across Cook Inlet and continuing to
8 the mine site.

9 I have asked Hilcorp if the company was
10 working with the Pebble Limited Partnership but was told
11 no.

12 I've asked EnStar and was told that someone
13 would call me back.

14 I've asked the US Army Corp of Engineers with
15 whom the project is in the scoping period and was told
16 my question would be included with other scoping
17 questions.

18 In 2018 Alaska was the fifth highest producer
19 of crude oil in the United States at just under
20 16-million barrel according to the US Energy Information
21 Administration. Alaska was ranked 13th highest producer
22 of natural gas at 338-billion cubic feet.

23 The other side of that picture was that the
24 burning of fossil fuels is one of the causes behind
25 climate change.

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1 Alaska's temperature is rising twice as fast
2 as the temperature in other states. The National
3 Oceanic And Atmospheric Administration says the
4 temperature in the Cook Inlet area is warming at 4.8
5 degrees Fahrenheit per century.

6 On the Kenai Peninsula rising temperatures
7 have allowed cold sensitive insects and plants to
8 survive. We've lost four-million acres of spruce trees
9 to spruce bark beetles and have invasive plants turning
10 salmon habitats into marshes and we've lost 60% of the
11 available water in the Kenai lowlands.

12 With the fishing industry the largest private
13 sector employer in the state, the University of Alaska
14 Anchorage economist, Steve Colt, has urged Alaskans to
15 prepare for the impacts of ocean acidification.

16 Each time I and my family and neighbors and
17 other Alaskans are asked to support some new activity of
18 fossil fuel industry I recall something I wrote when
19 considering one of Hilcorp's lease requests.

20 Outside my cabin this October afternoon the
21 view was of birch trees, their limbs stripped of gold
22 leaves now that another fall is passing and winter
23 looms. These trees have born witness to my family's
24 presence on the planet. Along with deep green spruce
25 and rough bark cottonwood they have stood a century over
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1 the births of new generations and the passing of elders,
2 over our prosperity and our poverty, our joys and
3 heartbreaks. They have observed care free laughter and
4 voices raised in anger, lent their strength to
5 children's swings and when the cycle of life has brought
6 them to earth filled our stoves, warmed our cabins,
7 produced blazing camp fires to light the darkness.

8 Now, another sort of energy has found its way
9 to my front door. The growing momentum to discover
10 additional oil and natural gas fields, testing my
11 discovery it is here beneath my feet. It could provide
12 a source of income exceeding anything I'd imagined. It
13 could change everything. All I need to do is what I'm
14 told my neighbors have done, sign this piece of paper,
15 then step aside as the land that has been in my family
16 for generations becomes unalterably unchanged into an
17 unavailable, unfit, non-existent haven for future
18 generations.

19 My daughters and I will continue refusing to
20 sign lease offers. For now that keeps Hilcorp off our
21 piece of the planet but we fear that the oil and gas
22 industry's growth on the Kenai Peninsula, in Alaska, and
23 the world will eventually drown out our voice.

24 We worry regulator's eyes see only dollars and
25 their ears are deaf to our cry to be part of the
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1 regulating process and our need for a healthy
2 environment.

3 We see property values plummet and though we
4 have no thought of selling our three acres know that it
5 is hurting people like Herb and Katy who have chosen to
6 leave the peninsula because they can no longer tolerate
7 what is occurring.

8 We keep a close eye on earthquakes and
9 volcanic activities fearing what could result. And so
10 we are deeply thankful for this bigger stage on which to
11 present what we have seen and experienced and we thank
12 you for magnifying the sound of our voice.

13 MS. CEAL SMITH: Thank you, McKibben.

14 Well Eunice.

15 MS. EUNICE MARY BROWER: Hi, I'm Eunice
16 Brower. I work with the native village of Nuiqsut as
17 their Environmental Program Manager and I've been
18 working with them for a little over two years now in
19 this program and I want to come and testify today on the
20 things that I observed here in Nuiqsut since I've been
21 working here and living here.

22 I've moved here back in 2010 and been living
23 here since. So a lot of things have been changing here.
24 We do live a subsistence life-style and so we do hunt
25 and gather food from around our surrounding village. We
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1 hunt fish, caribou, a lot of geese, ducks, seals,
2 whales. So we do catch all of that.

3 And there is a lot of development going on
4 within our village that it's so overwhelming to stay on
5 top of all the different projects. And there is a lot
6 of concerns on the air quality. It's going to be very
7 poor with the degradation of what these hazardous air
8 pollutants coming from all the fracking that's going on
9 that's near the village from all this oil and gas. And
10 there is a lot of health impacts also that's been going
11 on within the village too.

12 I'm very concerned, too, of the permafrost
13 being affected within our area because of the oil and
14 gas infrastructure is changing all of that. And from my
15 experiences too healthwise I think I got a rare blood
16 condition that's developed from this and they're unsure
17 how to find that out.

18 So not only that but there's a lot of people,
19 you know, that have respiratory health effects. A lot
20 of people that got asthma. There's people that get sick
21 very easily, especially the children. I'm very worried
22 for them. They have, you know, a faster breathing
23 system than us and our elders too. Because there was a
24 blowout in 2012 from the Repsol blowout and a lot of
25 people were getting sick after that.

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1 The bigger concerns too that I have -- maybe
2 I should just read this.

3 There is so many issues that we're facing here
4 and the one that is closest to Nuiqsut is a Putu Project
5 and it's not that far from our community and it's an
6 exploration well that they did this season, winter
7 season. And they used very strong chemicals in those
8 process of fracturing and use of chemicals that are
9 bringing concerns because there's a lot of the wildlife
10 that we eat and I'm afraid some of those wildlife are
11 getting contaminated from some of those chemicals and
12 hazardous air pollutants.

13 And not just the wildlife but our people are
14 feeling those health effects without understanding of
15 why they're having the health effects. Because a lot of
16 these chemicals in this fracturing process they do
17 affect peoples healthwise.

18 There's a couple of cases of leukemia that had
19 been known in the village, and it's only 540 people
20 about, and a lot of people with having Bell's Palsy but
21 probably unsure of why they're having that or, you know,
22 having heart conditions that are suddenly happening and
23 not understanding some of those, why they're having
24 them.

25 And I, myself, developed a rare blood
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1 condition where my platelets are decreasing and I have
2 to seek medical attention in Anchorage. So that's
3 pretty far from here in Nuiqsut.

4 Those are the kinds of concerns and health
5 effects and all this climate change. You know the
6 infrastructure is starting to affect our permafrost and
7 although the last time one of the ice cellars needed to
8 be cleaned out because of our -- we store a lot of our
9 whale in there and it was starting to melt some of the
10 oil. And the food had rendered so they had to clean it
11 out with lots of buckets and ended up throwing away some
12 of the subsistence food we eat.

13 There are so many diesel equipment being used
14 in all of this process and all of that air pollution at
15 the ground level resulting in degradation of our ambient
16 air and all the nitrogen dioxide that are being omitted
17 at the ground level are being inhaled by our people.
18 And because their vehicles are idling 24/7 sometimes on
19 these developments and sometimes even around the village
20 and when you inhale nitrogen dioxide it can irritate the
21 lungs and cause bronchitis and pneumonia and lower
22 resistance to respiratory infection in our people.

23 So there's been more people that have been
24 getting sick and having to be seen at the clinic than
25 our regular village where there is no oil and gas

1 development. So the health of our peoples is actually
2 even being impacted because some of the times they have
3 to get sent out from the village because we don't have
4 the enough higher level of care facility for them to be
5 staying in our village.

6 So when they do have those blow outs a lot of
7 the time they don't notify us right away like they do
8 with their employees on their sites. They take awhile
9 to notify us to let us know the situation and just so we
10 can have, you know, health questions or think about us
11 when we're going outside and there's all these chemicals
12 and gases in the air.

13 Because it only takes 60-seconds of exposure
14 time for inhaling and breathing these fine particulate
15 matter that are getting into the air of these hazardous
16 air pollutants from the oil and gas facilities and
17 drilling rigs around here and near here.

18 And we are afraid our for subsistence
19 life-style. You know, we're having to go further to
20 catch our food and our ice cellars are in jeopardy
21 because they're melting.

22 A lot of particulate matter being put in the
23 air. The soot from these drilling rigs when they do
24 flares they're really big flares too and they flare for
25 days and days sometimes even. They're not just 24-hours
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1 like they're supposed to be. And they're so big I am
2 afraid from all that soot, too. And the methane being
3 developed from that is increasing the climate change and
4 increasing it at a faster rate.

5 Did you want to say anything? I have Sam
6 here. He would like to say something if that's okay.

7 Yeah, I think you can. You can come and say
8 something Sam.

9 MR. SAM KUNAKNANA: Good afternoon
10 everybody. My name is Sam Kunaknana and I have been a
11 lifelong subsistence hunter in the village of Nuiqsut.

12 I've worked in the oil fields for ten years
13 with three and a half years working in the lab going
14 around all the pads in Kuparuk getting samples to see if
15 there was anything leeching out from the pads because in
16 those days, you know, they just put the drilling mud in
17 the pad.

18 And, you know, I've been a life long hunter
19 here in Nuiqsut. Back then in the 80's when I was 20-
20 years old, 18-20 years old, just a young hunter who
21 could see the lights on the east side coming closer and
22 closer to our village. Back then it was like 40 miles
23 out to the east.

24 And, you know, I had to ride around the
25 village of Nuiqsut to think about what I would say to
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1 you guys. It's not about me. It's about the future
2 generations that will be dealing with development
3 surrounding Nuiqsut.

4 We've already been, I like to say, infected
5 from what's been going on from industry. I participated
6 in a lot of EIS's, supplemental EIS's and, you know, to
7 me I tell industry, BLM, State of Alaska, that all this
8 that is going on around our village can be under one
9 umbrella. Instead they're just slowly dissecting the
10 way our culture, our subsistence life-style.

11 And, you know, when you talk about
12 environmental justice you talk about human rights, about
13 future generations that will be dealing with industry as
14 they move forward towards Teshekpuk Lake.

15 And I don't have a degree in anything but I do
16 understand what's going on with these environmental
17 impact statements that BLM, State of Alaska -- actually
18 it's BLM on NPRA, you know, Cook Inlet land that is
19 private land so, you know, we pretty much had no say so
20 even though we are the ones that are the ones that lived
21 the day-to-day lives of the impacts of industry.

22 I would like to go back to what Eunice said
23 about the heavy equipment. You know, I just realized
24 something earlier that it's 11 months out of the year
25 that we deal with industry and the contractors. Just
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1 last week Conoco Phillips put up a notice saying that
2 the chopper activity is going to start. And me just
3 thinking about when the contractors are moving out
4 that's in April. So it's 11 months out of the year.
5 It's pretty much all year around we feel the impacts of
6 industry when it comes to their studies. EIS's,
7 studies, hmm.

8 There is no objectivity. You know, there's
9 just only one scientist that's doing the studies and we
10 don't have no quality assurance when it comes to the
11 contractors coming over here and telling us that this is
12 what -- this is what we know about what's going on. We
13 want your input. We want it. We want to put it down on
14 paper.

15 You know, when it comes to EIS's I feel as
16 though Nuiqsut is being deceived from the scientists
17 that are coming over here to do the studies because they
18 come over here, they get our input and they take a lot
19 of it out to make it look like the impacts aren't that
20 great when, in fact, the impacts are great when it comes
21 to the HIA, the subsistence life-style.

22 And it's just, overwhelming to know that, you
23 know, when they talk about the EIS's and about this is
24 what they're going to do. This is what they're saying
25 is they're saying that they will move forward with
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1 development speculating that this is going to happen.
2 Science isn't based on speculating.

3 With the Trump Administration changing things
4 around for EPA to make it easier for industry to move
5 forward with development, it's wrong. There is
6 environmental injustice in that because there is a
7 little town called Nuiqsut right in the middle of the
8 new Prudhoe Bay.

9 You know, there's a lot of more things that I
10 would like to say but, you know, I just wanted to make
11 this short and sweet because I understand what's going
12 on when it comes to them coming over to talk to us about
13 the impacts and telling us the impacts are great but
14 when the contractors write up another report because the
15 operator says we don't like it. You need to take some
16 things out. That's an environmental injustice itself
17 for the operator to tell the contractor we don't like
18 it. You need to make it more so that we can move
19 forward with industry. I understand that part. I'm
20 only one person.

21 I've experienced a lot of ridicule over the
22 past year just because I started talking. It even got
23 down to the point where my employer was trying to fire
24 me just because I started talking. I didn't know what I
25 was going to do for a couple of years. Those are the
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1 kinds of things that happen in a small town. It's hard
2 and it's hard to speak.

3 Hunters don't want to speak because they'd
4 only be ridiculed. They'd only lose their jobs because
5 there's not that many jobs in a small village. Where is
6 the environmental justice in that when you have people
7 grilling you to the point where they scare you so you
8 don't talk.

9 So I'm speaking on behalf of the hunters and
10 the people because it's not about me, it's about the
11 future generations that will be dealing with this.

12 My heart goes out to the kids because after
13 the Repsol blowout I noticed that a lot of the kids got
14 sick and a lot of the elders had to go on nebulizer. I
15 know what it can do.

16 A lot of the people don't understand what you
17 can't see will not hurt you because gases will hurt you,
18 volatile organic compound will hurt you in the long run.

19 For years we've been telling the state of
20 Alaska, our own borough government, to put up an air
21 monitoring station for Nuiqsut because Conoco Phillips
22 has one. They use that to their advantage to move
23 forward with development. And we just don't have the
24 resources.

25 If Conoco Phillips can hire a contractor to
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1 set up three air monitoring stations in between here and
2 Potu 2 project with one air monitoring station that
3 burned down right in between Nuiqsut and the
4 exploration, you know, there's something wrong with that
5 on top of that, you know.

6 And data that was in that station they said
7 it's lost. It's gone. You know, we just don't have no
8 resources to tell BLM, our own government, our own real
9 government that we want this in place. I call that
10 responsible development. It's for quality assurance for
11 the village of Nuiqsut in the future just in case there
12 is a blowout.

13 Because the Repsol blowout, if we had that in
14 place, we would have caught the gases that came over
15 here to Nuiqsut that got everybody sick in town.

16 My kids were injected with just about every
17 kind of antibiotic that they can give them. Didn't
18 work. And, you know, that's when I started getting
19 involved with development. That's when I started
20 talking.

21 My kids got sick walking home minus 33 below,
22 winds coming from the blowout a week after the blowout
23 and, you know, I found out that the contractors couldn't
24 do anything with the rig for about a month until they
25 knew it was safe for them to come over to dismantle and
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1 get all the ice out that was just inside the rig.

2 That thing, that blowout, they did not shut
3 off until it was safe. The gases made it to Nuiqsut but
4 we do not have the equipment to catch and show the world
5 what happens when you have a blowout. The potential for
6 blowout increases exponentially because they're going to
7 be drilling more and more wells as they move forward.
8 And Nuiqsut is just overwhelmed, surrounded. We don't
9 have the resources.

10 I'm just a hunter but we're living the lives
11 of what's going on here in Nuiqsut in terms of
12 development. We've been telling the state of Alaska,
13 especially the [indiscernible] elder they were talking
14 about how the air has changed in the meetings when the
15 guys that came over here to talk about what they're
16 going to do on the EIS's. And there's testimony from
17 elders saying that, yeah, the air has changed. I know
18 it's changed too because I've been here all my life,
19 most of my life.

20 You know, Conoco Phillips is the No. 1
21 operator here on our side. What I'd like to see is --
22 what I'd like to see in the future when it comes to
23 NPRA, especially on federal land, to see if the village
24 of Nuiqsut can take over the studies and have our point
25 of view when it comes to what we've been talking about
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1 all these years on the air. And it's affecting
2 everybody. We've been affected.

3 I got lost yesterday when, you know, Ceal, you
4 know, when you texted me I was getting my presentation
5 ready. But, you know, I had to drive around the village
6 because I have to talk. I need to talk. Somebody has
7 to talk. Even though if, you know, you get ridiculed.
8 I've been called a tree hugger and stuff like that.
9 It's doesn't matter to me because it's not about me.
10 It's about the future generations that will be dealing
11 with the industry.

12 Thank you.

13 MS. EUNICE MARY BROWER: Did anybody have
14 any questions I wonder?

15 DR. THOMAS KERNS: I do. I'm not one of
16 the judges but I certainly have questions.

17 I'm sorry, I didn't catch the other person's
18 name that just got done speaking.

19 MR. SAM KUNAKNANA: My name is Sam
20 Kunaknana.

21 DR. THOMAS KERNS: Sam. Okay. Thank
22 you. Very impressive testimony. Thank you, thank you,
23 thank you.

24 One question I have is what -- so the
25 industry comes in and does studies or studying things
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1 and claiming that that study is valid and objective and
2 so on.

3 What exactly is it that they're studying?
4 What kind of things are they looking for?

5 And you think the village should take it over
6 and ideally that would be a great thing. So I'm curious
7 what are they studying?

8 MR. SAM KUNAKNANA: Well, they study
9 subsistence harvesting, plants. So, you know, to this
10 date I haven't seen anybody come over here to talk about
11 the plants.

12 They do come over here to talk about or to ask
13 questions about our harvesting of caribou, fish and all
14 the subsistence food we need in this area.

15 One thing I should have mentioned about how it
16 used to be, you know, in the beginning as a kid growing
17 up the Colville River delta area used to thrive with
18 caribou during the summer. We'd see tens of thousands
19 of caribous migrate through this area but the structures
20 that they built in place on the east side state land,
21 the state didn't even come over to Nuiqsut to discuss
22 what they're going to be doing on the east side.

23 It was only until they came over here to the
24 corporation's lands and now that they're on NPRA that
25 they're doing EIS's and the impact -- there's ten years
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1 of -- they already have ten years of studies from the
2 contractor that Conoco Phillips hired and he comes over
3 here every year to do a survey on harvesting.

4 DR. THOMAS KERNS: So is the only thing
5 they want to know is how many salmon and client
6 shellfish and caribou and so on?

7 Do they just want to know how many?

8 Do they test for the health of the any of
9 those caribou or shellfish or anything?

10 Do they test for the contamination of the
11 lands or the sea bed or, you know, the food sources for
12 those animals or do they test for the number of them?

13 MR. SAM KUNAKNANA: Okay. Just recently
14 we asked Conoco Phillips to start testing the caribou
15 because we started seeing more and more sick caribou
16 with big lumps on their throats and on their legs.

17 For the past four or five years we started
18 getting sick fish and I did send a picture of a fish for
19 the first time in my life. As a subsistence hunter I
20 took a picture of a fish that was frozen in time. Those
21 were the kind of broad white fish that we started
22 getting sick as they come up from the delta to go spawn
23 and on the way back out they would come back sick.

24 And they're just now starting to study what is
25 causing the stress on the fish to get the mold. Because
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1 in five years in a row that we've been getting sick fish
2 too.

3 You know, I could go on and on and about a lot
4 of the other stuff that, you know, we've asked for them
5 to test but it's ten years later after the fact after
6 they moved forward with the development on these
7 projects.

8 And when they talk about projects they dissect
9 it into sections to move forward. All this that's
10 surrounding Nuiqsut should be under one umbrella and
11 that's development.

12 And until this day they haven't -- they
13 haven't analyzed the impacts. They're speculating now
14 based on Trump administration's change to some policies.
15 And, you know, I don't know all that science. There's
16 no science in speculation.

17 DR. THOMAS KERNS: So do they bring --
18 some of these studies that they claim to be doing at
19 least are they -- do they share their data with you,
20 their findings or do they share their conclusions with
21 you or do they share their methods with you or is it
22 just they come in and collect data and then that's the
23 last you hear of it?

24 MR. SAM KUNAKNANA: Well, they do tell us
25 the methodology on what they're testing. I know that
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1 part. And I just don't see -- you know, when they talk
2 about baseline, baseline studies, there is no such thing
3 as baseline because, you know, industry is already
4 surrounding us.

5 And for Conoco Phillips to use baseline data
6 on the air they had to use baseline from 2011 using
7 their monitoring station that they have encasing Nuiqsut
8 when, in fact, that air monitoring station has been in
9 place since the late 80's.

10 And the only reason why they said they could
11 use the 2011 data is because that is the only good data
12 that they could use for one year.

13 And you know that -- that that gives CD 1, CD
14 2, CD 3, CD 4, CD 5 a free ride. And they're going to
15 continue to use 2011 data to more forward westward
16 toward Teshekpuk Lake.

17 I just don't see any reasoning in them using
18 data from 2011 just because they didn't have any good
19 data in the late and early 90's even before industry
20 came.

21 MS. CEAL SMITH: Can I say a couple of
22 things? This is Ceal. Can you all hear me?

23 Just wanted to kind of reiterate what Sam is
24 saying. I've done environmental compliance for many
25 years and been looking at some of the environmental
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1 impacts statements, EIS's coming out of Nuiqsut and NPRA
2 and the Moose's Tooth that you guys are in right now and
3 it's very common for industry to send their third-party
4 contractors up and do a very surface assessment that
5 essentially tells the -- minimizes the impacts and
6 allows them to what I call wave their magic wand and say
7 there are no significant impacts.

8 Industry or government or our so-called
9 regulators never say no. There's no impact that is
10 unacceptable to them.

11 And we've seen this get worse and worse over
12 10, 20, 30-years to the point where they barely even
13 pretend now to acknowledge the impacts.

14 Looking at subsistence resources the EIS for
15 greater Moose's Tooth right now admits that there are
16 significant impacts on subsistence resources but they,
17 again, wave them away magically and say well, it doesn't
18 matter. We'll do this anyway. It's more important.

19 So this is systemic issues that go very far
20 back and very deeply into our so called regulating
21 system that's very broken.

22 And as Sam points out they want to hear, they
23 have to, because EPA requires public comment. So they
24 have to hear what the people have to say but they don't
25 have to listen and they don't listen.

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1 And they very regularly just set it aside.
2 Say we've done all this commenting, we've done the
3 consultation, those significant impacts, let's move
4 ahead. And it's just very frustrating for everybody in
5 the process because people spend many, many hours of
6 their precious time commenting on these things for
7 absolutely no result.

8 MR. SAM KUNAKNANA: Yes. I feel as
9 though we're just a check off on a piece of paper when
10 it comes to them coming over to hear our comments.

11 It's just frustrating because, you know, we're
12 the ones that are living the life of the impacts of
13 industry.

14 And it's not about me. It's about the future
15 generations, especially if there's some other blowout.

16 And, you know, we've been asking the state,
17 federal government to get our own air monitoring
18 station. And I call that responsible development. That
19 would be quality assurance for the release of noxious
20 air in the future. And for some odd reason they don't
21 want to hear it. We've been saying that for many years.

22 DR. THOMAS KERNS: I want to give the
23 other judges a chance to ask questions if they want to.

24 MR. GILL BOEHRINGER: Thanks, Tom, for
25 asking those questions.
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1 DR. THOMAS KERNS: Yes. You know, it's
2 very frustrating. I know what it's like to have a study
3 pick its own baseline. And if you can pick a baseline
4 that is pretty recent, you know, after the damage is
5 already largely done and call that, just name it
6 arbitrarily, name it baseline --

7 MR. SAM KUNAKNANA: You know, I would
8 like to say something about baseline.

9 Traditional knowledge should be baseline for
10 our area and they don't hear it. You know, it's
11 something that has been passed down from generation to
12 generation.

13 And just because it wasn't in black and white
14 and there's no science they say but if it wasn't for
15 that we've been telling the state and the feds that
16 traditional knowledge should be used in these case
17 EIS's.

18 MS. CEAL SMITH: Absolutely.

19 DR. THOMAS KERNS: Thank you. Thank
20 you. Thank you.

21 MR. SAM: Un-huh. Thank you.

22 MS. CEAL SMITH: Thank you Sam.

23 MR. SAM KUNAKNANA: Thank you, yes.

24 MS. MCKIBBEN JACKINSKY: Thank you Sam.

25 MR. SAM KUNAKNANA: Yes.

1 MS. CEAL SMITH: Thank you Eunice.

2 MS. EUNICE MAY BROWER: Thank you too.

3 Thank you so much.

4 MS. CEAL SMITH: We'll be talking.

5

6 [youtube.com/watch?v=uSyqSge2C6g&t=3s]

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1 AUSTRALIA PROCEDURAL RIGHTS

2 MAY 15, 2018 3:30-4:30

3
4 DR. AMANDA KENNEDY: Hi, my name is
5 Amanda Kennedy and I'm an associate professor at the
6 University of New England in New South Wales, Australia.

7 Since 2012 I've been working on research
8 concerned with the regulation of coal seam gas
9 development predominantly in Australia but also looking
10 at the state of Queensland in Australia and Pennsylvania
11 in the USA.

12 Coal seam gas, or CSG as it's commonly
13 abbreviated here, is a type of unconventional natural
14 gas and may also be referred to as coal bed methane.

15 As you would already be aware it is extracted
16 by drilling through to the coal seam and pumping out the
17 water or dewatering until the gas flows to the surface.

18 In some cases other techniques may be required
19 to increase the permeability of the seam, including
20 hydraulic fracturing.

21 I have been particularly interested in
22 exploring from the perspective of environmental justice
23 how decisions are made to approve or reject coal seam
24 gas developments. And together with my colleagues Revel
25 Pointon and Evan Hamman we have put forward an Amicus
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1 Brief to the Permanent Peoples' Tribunal session on
2 Human Rights Impacts Of Fracking.

3 And I'm here today to speak to that submission
4 which draws, in part, on some of the work that I've been
5 involved with in recent years.

6 So the focus of our submissions is on
7 procedural rights. And the pursuit of procedural
8 justice is a fundamental stage in the attainment of
9 environmental justice, that is, the fair and equitable
10 distributions of environmental risks and benefits
11 throughout society.

12 As lawyers and legal scholars my colleagues
13 and I are first and foremost concerned about proper
14 process as well as just decision-making and adequate
15 avenues of appeal. Indeed these are all fundamental
16 elements of a functioning democratic society.

17 In the human rights literature which focuses
18 on which human rights legally exist and how they are
19 implemented procedural rights are commonly recognized as
20 a pre-condition for the attainment of more substantive
21 human rights that are enshrined under international law.

22 On most occasions these procedures may need to
23 be read into international treaties or upheld by
24 protocols or implementation bodies. On other occasions
25 they are explicitly referred to within human rights
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1 instruments themselves.

2 In recent years arguments have been made for
3 the emergence of a possible right to a healthy
4 environment. But there is some disagreement as to
5 whether such a substantive right exists.

6 Certainly the Aarhus Convention on Access To
7 Information, Public Participation In Decision Making And
8 Access To Justice In environmental Matters, highlights
9 the right of every person to live in an environment
10 adequate to his or her health and well-being.

11 The three pillars of Aarhus, which include
12 access to information, public participation and access
13 to justice represent the minimum standard by which
14 governments should seek to protect procedural rights in
15 environmental matters.

16 Whether or not a specific right to a healthy
17 environment exists it seems clear that substantive rights
18 rely on the ability of people, both individual and
19 collectively, to access information and to participate
20 and/or legally challenge decisions which affect their
21 lives.

22 In short, the achievement of substantive
23 rights is contingent upon the availability and
24 successful implementation of procedural rights.

25 While Australia is not a signatory to the
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1 Aarhus Convention the treaty is widely acknowledged as
2 the best available international legal framework for the
3 protection of procedural rights in environmental
4 matters.

5 It presents the clearest attempts at creating
6 legal rules for the fulfillment of procedural rights in
7 environmental matters. We have, therefore, adopted it
8 within our submission as a normative framework to
9 evaluate decision-making processes concerning coal seam
10 gas development.

11 The Aarhus Convention clearly links the
12 implementation of procedures to the attainment of
13 substantive human rights, including the right to life,
14 and the right to health.

15 For instance, Article 1 of the convention
16 provides that in order to contribute to the protection
17 of the right of every person of present and future
18 generations to live in an environment adequate to his or
19 her health and well-being each party should guarantee
20 the rights of access to information, public
21 participation in decision-making and access to justice
22 in environmental matters in accordance with the
23 provisions of this convention.

24 While the focus of our submissions is on
25 procedural rights we have assumed that these are
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1 fundamental to the attainment of substantive human
2 rights, in particular, the right to health, the right to
3 life and the right to a healthy environment.

4 We have thus used these three pillars from the
5 Aarhus Convention to assess procedural rights within
6 decision-making concerning coal seam gas development in
7 Australia.

8 So turning first to explore access to
9 information. Access to information is the first pillar
10 of the Aarhus framework. It is the key aspect of
11 achieving substantive human rights. The general premise
12 of this right is that people ought to know about
13 information that is held about them or information held
14 by others which might adversely affect their community
15 or general health.

16 Article 4 of the convention describes the
17 access to information obligation as follows;

18 Each party shall ensure that public authorities, in
19 response to a request for environmental information,
20 make such information available to the public within the
21 framework of national legislation, including copies of
22 the actual documentation containing or comprising such
23 information. And further, that information is to be
24 provided at the least within one month after the request
25 has been submitted.

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1 The obligation to provide information is
2 placed upon states but it is arguable that it should
3 also apply to non-state actors who hold vital
4 information about community health, risks and the
5 environment.

6 For example, private corporations which
7 operate and manage extractive industries such as coal
8 seam gas facilities ought to be expected to release,
9 either to the state or directly to the public,
10 information such as possible toxin levels and risk to
11 human health as a result of their operations.

12 The release of such information by state or
13 non-state actors should be timely, comprehensible and,
14 above all, easy to obtain.

15 At first glance the federal and state
16 governments in Australia fare reasonably well under the
17 Access To Information Principle.

18 There are, for example, both national and
19 state laws where any person can make an application, for
20 a fee, to obtain information about government decisions.
21 This includes coal seam gas projects in the assessment
22 phase as well as in the operational phase.

23 However, the practical implementation of those
24 laws appears weak and there four key reasons for this.

25 Firstly, Australia Freedom Of Information laws
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1 apply only to state entities. Often it is non-state
2 entities such as private corporations that hold
3 information that is vital to the health and well-being
4 of communities and the environment.

5 Second, Freedom Of Information laws are
6 subject to exceptions such as commercial sensitivities,
7 military, diplomatic or other states secrets or
8 provisions and the protection of names and personal
9 details.

10 While Aarhus does envision reasonable
11 exceptions, in practice, this can mean that documents
12 which are released have many pages of redacted material,
13 at times rendering them incomprehensible and worthless
14 for independent investigation.

15 Third, there are many practical challenges for
16 community groups in accessing information, even though
17 they may have the right to it. For example,
18 understanding and using the information that they have
19 received effectively.

20 Finally, there is a lack of interest by states
21 in the promotion of the right to information and
22 procedural rights more generally. Article 3.3 of Aarhus
23 requires that states shall promote environmental
24 education and environmental awareness among the public,
25 especially on how to access information.

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1 Targeted campaigns on accessing information
2 and rights to information are rare in Australia. The
3 information process seems more reactive in this regard
4 and tends to be exercised most often by media
5 organizations, activists and non-government
6 organizations.

7 Overall the problem in our view seems to lie
8 not in the ability to access information but to decipher
9 it and to make sense of it and to use it effectively to
10 protect substantive human rights, such as the right to
11 health and the right to life.

12 To improve this process, certainly in
13 Australia, further thought needs to be given to,
14 firstly, the timeliness of information that is provided,
15 secondly, the quality of information provided and,
16 finally, the method of transmission of the information.

17 Turning now to public participation, the
18 second pillar from the Aarhus Convention, the convention
19 includes public participation necessary for sound
20 environmental decision-making processes.

21 Article 6, in particular, sets out the crux of
22 the principle. It provides that public concern shall be
23 informed either by public notice or individually as
24 appropriate early in the environmental decision-making
25 procedure and in an adequate, timely and effective
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1 manner and by allowing sufficient time for the public to
2 prepare and participate effectively during the
3 environmental decision-making period.

4 Moreover, Article 6.7 provides procedures for
5 public participation shall allow the public to submit in
6 writing or as appropriate at a public hearing or inquiry
7 with the applicant any comments, information, analyses
8 or opinions that it considers relevant to the proposed
9 activity.

10 Environmental justice requires effective
11 participation in environmental decision-making,
12 recognition of affected stakeholders and fair
13 distribution of benefits and burdens. While there are
14 some opportunities for public participation in
15 decision-making around coal seam gas activities in
16 Australia it is once again the quality of participation
17 and the adequacy of recognition of participants that is
18 of particular concern.

19 In the state of New South Wales, for example,
20 one of the major sources of frustration for those who
21 object to coal seam gas development is the lack of
22 public consultation in the approval processes relevant
23 to the exploration phase as distinct to the approval
24 processes that apply for full scale production.

25 The situation is similar in Queensland where
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1 communities have very little participatory rights with
2 regards to exploration activities. So this means that
3 when a development is first being considered and debated
4 and explored there is very little opportunity for
5 communities to have a say at that point in time.

6 And even where there are rights to consult,
7 which certainly happens further down the track in the
8 stage of development and consent, there is still a great
9 inequity in public participation mechanisms. Because
10 these tend to sit with well-funded corporate entities
11 against underfunded or even non-funded community and
12 interest groups typically comprised of individuals who
13 need to balance their activism and their interests in a
14 particular cause with other responsibilities, which may
15 include employment or career duties alongside that
16 participation in land use decision-making processes.

17 In many cases public participation is often
18 limited to written submissions or one of public hearing
19 staff forums. The capacity for individuals to
20 participate effectively in these sorts of opportunities
21 is quite limited.

22 For example, subject applications against
23 development proposals typically requires objectors to
24 respond to proponent claims regarding such things as the
25 economic benefits of a project or the risk that it will
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1 cause environmental harm.

2 This requires objectors, members of the
3 public, to have access to as well as be able to
4 understand a significant volume of technical data and
5 often they need to do so within a very short time frame.

6 Research has detailed the difficulties that
7 this places on individuals and community groups who, in
8 many cases, do not possess adequate financial or other
9 resources to fully integrate the applicant's claims.

10 Access to expert testimony to challenge
11 proponent evidence tends to be difficult, either proving
12 too costly or not accessible within the short
13 development assessment time frames.

14 Other structural factors can also inhibit
15 access to information or participation in
16 decision-making more generally including things like
17 morality or membership of minority cultural or language
18 groups.

19 In many cases development proponents also
20 enjoy significant political influence in land use
21 decision-making processes. They're able to fund
22 wide-reaching advertising campaigns and typically enjoy
23 exclusive lobbying access to politicians.

24 Development assessment processes often
25 position expert scientific opinion as objective. So for
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1 those seeking to challenge development applications must
2 do so using technical language and by engaging
3 authoritative scientific opinions and methodologies. In
4 turn this tends to marginalize other forms of knowledge
5 such as citizen science, placed-based perspectives and
6 also indigenous perspectives.

7 Finally government actions which seek to
8 remove resources and funding for public interest legal
9 services or which otherwise attempt to limit standing
10 and curtail protests or which use derogatory language to
11 characterize individuals and groups opposed to
12 development as self-interested reinforces a lack of
13 recognition of non-dominant interests and concerns and
14 restricts access to environmental justice.

15 Certainly in Australia both federal and state
16 governments in New South Wales and Queensland have
17 actively sought to remove funding and also block
18 philanthropic funding to community legal centers that
19 specialize in public interest environmental law.

20 Overall, by restricting the capacity of
21 individuals and community groups to participate
22 effectively in land use decision-making, can cultivate
23 perceptions of injustice and foster opposition. At the
24 very least they certainly render provisions which allow
25 for public participation as largely ineffective.

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1 Finally access to justice, the third pillar of
2 Aarhus. Access to justice is closely linked to the
3 failure to provide adequate measures for the fulfillment
4 of the first two pillars of the Aarhus Convention.

5 Article 9 of the Aarhus Convention describes
6 the access to justice obligation as follows:

7 Each party shall, within the framework of its
8 national legislation, ensure that any person who
9 considers that his or her request for information has
10 been ignored, wrongfully refused, whether in part or in
11 full, inadequately answered, has access to a review
12 procedure before a court of law or another independent
13 and impartial body established bylaw.

14 In addition each party shall ensure that where
15 they make certain criteria, if any, laid down in
16 national law members of the public have access to
17 administrative or judicial procedures to challenge acts
18 and omissions by private persons and public authorities
19 which contravene provisions of its national law relating
20 to the environment.

21 Aarhus also considers that costs and other
22 barriers must be removed for communities to effectively
23 access the courts and tribunals in order to address or
24 challenge adverse environmental impacts.

25 For example, Article 9.4 provides that states
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1 shall provide adequate and effective remedies, including
2 injunctive relief as appropriate and be fare, equitable,
3 timely and not prohibitively expensive.

4 As with the other two pillars of effective
5 decision-making on the face of it the federal and state
6 governments in Australia once again fair reasonably well
7 under these limbs. There are, for example, court
8 actions available to communities where information is
9 not provided as requested and in instances where the
10 individual or community disagrees with the decision of
11 the regulatory body. However, once again, the practical
12 implementation of these laws is weak.

13 It must be noted that there are many
14 challenges for community groups in accessing the courts,
15 even though they may have the right to, most of which
16 revolve around prohibitive costs and reasonable time
17 frames and the inability to effectively access expertise
18 to challenge proponents submissions.

19 In addition the creation of further barriers
20 to accessing particular tribunals, and in New South
21 Wales we see this in particular with the distinction
22 between merits review and judicial review, with the
23 threshold now for merits review becoming increasingly
24 difficult for community groups and individuals to
25 attain.

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1 So in the last few minutes that I have I
2 wanted to turn to our responses to the advisory
3 questions for the tribunal.

4 The first of these questions asks under what
5 circumstances do fracking and other unconventional oil
6 and gas extraction techniques breach substantive and
7 procedural human rights protected had by international
8 law as a matter of treaty or custom.

9 On our analysis there are three circumstances
10 where procedural rights may have been breached by the
11 practices of CSG extraction in Australia.

12 Firstly, though information is legally
13 available on CSG projects it is often too complex to
14 decipher, too costly to obtain and too redacted to be of
15 any practical use to communities.

16 Second, though the public is entitled to
17 participate in CSG decision-making these rights are
18 largely limited to phases of extractive development, not
19 necessarily early exploration phases and typically do
20 not involve a meaningful debate over whether there might
21 be a more suitable use for the land.

22 Third, although some court appeal rights are
23 available in legislation these are rarely, if ever, used
24 due to restrictive standing provisions, a lack of
25 technical or scientific expertise and access to expert
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1 witnesses, short time frames available to appeal and the
2 costs and complications of litigation more generally.

3 Defunding of specialist community legal
4 centers such as the environmental Defenders Office, by
5 both state and federal governments, has also hamstrung
6 the ability of Australian communities to legally protest
7 against coal seam gas projects which negatively affect
8 their lives.

9 The second question asks, in what
10 circumstances do fracking and other unconventional oil
11 and gas extraction techniques warrant the issuance of
12 either provisional measures, a judgment enjoining
13 further activity, remediation relief or damages for
14 causing environmental harm?

15 Where environmental damage can be proven,
16 including as a result of the denial of procedural
17 rights, we see no reason why adequate compensation
18 and/or remediation relief should not be available to all
19 those who have suffered through the process, including
20 the environment.

21 We bring the attention of the Permanent
22 Peoples' Tribunal to the principle of environmental law
23 entitled The Polluter Pays Principle.

24 We do note, however, the remediation for
25 environmental damage was not the focus of our
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1 submissions to the Permanent Peoples' Tribunal. For
2 breaches of procedural rights, however, we suggest that
3 reparation must also be considered, for example, in the
4 form of reasonable damages though, of course, that task
5 is far more difficult to quantify.

6 The best remediation that can occur, in our
7 view, is for states to ensure that procedural
8 protections are sufficiently robust in the first place.

9 The third question asks, what is the extent of
10 responsibility and liability of states and non-state
11 actors for violations of human rights and for
12 environmental and climate harm caused by oil and gas
13 extraction techniques?

14 Based on our analysis both states and
15 non-states are responsible for breaching procedural
16 rights. Whilst states, through law and policy,
17 determine the framework for participation in coal seam
18 gas decision-making non-state actors must also be held
19 responsible for adequately providing, in good faith,
20 relevant and timely information and consultation
21 opportunities that relate to the project proposed,
22 otherwise, the risk is that neither states or
23 non-states, including corporations, will accept
24 responsibility for environmental transgressions and the
25 buck will continue to be passed to innocent communities.
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1 We acknowledge that this view creates problems
2 for the traditional view of human rights law, including
3 our host, which places obligations on states as opposed
4 to non-state entities.

5 However, for environmental justice to be truly
6 realized both states and non-state actors must be
7 prepared to relinquish power in decision-making
8 processes through the possibility of the imposition of a
9 need for a social license to extract, to use one
10 example.

11 The fourth question asks, What is the extent
12 of the responsibility and liability of states and
13 non-state actors, both legal and moral, for violations
14 of the rights of nature related to environmental and
15 climate harm caused by these unconventional oil and gas
16 extraction techniques?

17 Our Brief did not cover this question and
18 we're not in a position to comment with any authority.
19 We do note, however, that none of the procedural rights
20 analyzed in this brief recognize nature as conceptually
21 having standing to sue in a court or obtain information
22 or participate in decision-making processes or the
23 possibility of humans acting on nature's behalf in such
24 processes.

25 Giving nature a legal personality is something
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1 which is currently being explored in other countries and
2 we defer to the position of the Australian Earth Law
3 Alliance in this regard who have considerable expertise
4 on these questions.

5 Procedural rights, such as access to
6 information, public participation and access to justice
7 are a fundamental to the attainment of substantive human
8 rights.

9 In the context of coal seam gas the most
10 relevant substantive rights are probably the right to
11 health and the right to life. There is a strong
12 argument that there exists a right to a healthy
13 environment which, if correct, is also highly relevant
14 to the issues surrounding coal seam gas extraction in
15 Australia.

16 Overall, our analysis has found that while
17 Australian state and federal governments do have laws
18 that provide for information, participation and appeals,
19 they lack appropriate implementation at the
20 institutional level, in particular, the support
21 structures necessary for them to work effectively.

22 The systems which are in place fail to
23 recognize the enormous power and balance which exists
24 between the coal seam gas industry and proponents,
25 government and rural communities.

1 This is why laws on paper are often not
2 enough. Urgent attention is needed to address ways in
3 which the existing legal frame works in Australia can be
4 made to work better on the ground and to produce better
5 outcomes for ordinary citizens.

6 That is the completion of my submission and
7 I'm happy to answer any questions.

8 DR. THOMAS KERNS: Well I sure have a
9 question.

10 Your last sentence, what was that last
11 sentence again? We need ways to ensure that these
12 rights are respected by states, something to that
13 effect?

14 DR. AMANDA KENNEDY: More that we need
15 ways in which existing legal frameworks can be made to
16 work better.

17 So it's not enough simply to have legislation
18 that provides for access to information or that sets up
19 processes by which citizens can bring a review in court.
20 There needs to be further support to ensure that these
21 things can actually occur in practice.

22 So a common example that I've seen in my own
23 research is small rural communities that have to pitch
24 together to raise funds simply to access expert
25 witnesses in order to challenge the evidence that is
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1 brought forward by multi-national corporations who are
2 usually behind coal seal gas development.

3 DR. THOMAS KERNS: Right. So do you have
4 suggestions for how to make sure that they get
5 implemented more effectively?

6 DR. AMANDA KENNEDY: It's ultimately a
7 question of resourcing and it's always the 64-million
8 dollar question, I guess. So it is a question of
9 resourcing.

10 I have read suggestions that have been modeled
11 on approaches in some jurisdictions which have things
12 like a sovereign wealth fund or things like a tax that
13 is imposed upon corporations where monies are passed
14 from the proponent to the communities in order to fund
15 whether it might be a merits review or access to
16 information or access to expert witnesses.

17 And we've certainly seen cases where companies
18 have passed money on to community groups or individual
19 citizens in order to assist them in that regard but it's
20 typically a trickle of resources rather than something
21 substantial.

22 DR. THOMAS KERNS: Sure.

23 DR. AMANDA KENNEDY: And I think there is
24 also much to be done in terms of speaking the language
25 of communities as well.

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1 So often a lot of the information that is
2 passed from proponents down to communities is very
3 technical. It's quite voluminous.

4 So I had one community member show me a ream
5 of paper that stood taller than them which was the
6 technical information behind one of the coal seam gas
7 developments that they were looking at.

8 The time that it takes to read through those
9 documents and to digest them, particularly when we're
10 talking about people that have not necessarily completed
11 high school, you know, it's very skewed in terms of
12 those capacities.

13 So it's not necessarily just a question of
14 providing more money but it's about helping people to
15 better understand that information and also being open
16 to information that is not necessarily in the language
17 of what typically a development assessment would take
18 place in.

19 So being open to play space perspectives,
20 being open to indigenous perspectives even though it may
21 not be a question of the technical development of a
22 particular coal seam gas development.

23 DR. THOMAS KERNS: Yeah. And I like your
24 emphasis on these procedural rights being respected
25 early in the process rather than later.
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1 DR. AMANDA KENNEDY: So, again, to just
2 point to another example from my own jurisdiction and
3 also the state of Queensland, typically there's very
4 little opportunity at the exploration phase for
5 communities to have a say in a proposed or prospective
6 development. That right will usually come once the
7 exploration phase has ended and the proponent is moving
8 more to full scale development.

9 And so there tends to be a perspective that
10 it's almost a fait accompli by that point. That the
11 development is already here and we've not really had an
12 opportunity to have any input or say at that early
13 phase.

14 And it's a fundamental principle of
15 environmental justice that front-ended community
16 consultations is critical.

17 MR. GILL BOEHRINGER: Gill Boehringer.

18 I agree with what you're both saying but to
19 some extent the things that you're suggesting could also
20 be on paper and then whipped away at the whim of any
21 conservative or even half-assed labor government as
22 we've seen with legal aid funding. All over the world
23 now it's being taken away or reduced drastically.

24 And I was thinking of the idea of, which is
25 not entirely irrelevant, the idea of participatory
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1 budgeting.

2 It seems to me that what needs to be done is
3 to embed the communities somehow in the process and, of
4 course, with resources and with things you're talking
5 about. So that, in a sense, just to build a barrier to
6 bypassing them. And then I guess -- well, yeah, I
7 think that's generally the only suggestion I have.

8 DR. AMANDA KENNEDY: Look, I think that's
9 a fantastic suggestion and certainly something that
10 communities have called out for and in some
11 jurisdictions in Australia we've seen pockets of that
12 happening. We have, in some cases, community consultive
13 committees which are, in practice, are meant to meet
14 with communities from the outset of the development any
15 proposal takes place with representatives in place.

16 But, again, you know, there are a lot
17 criticisms of those processes such that the committees
18 can be stacked with people favorable to development.
19 It's not necessarily representative but, you know, I
20 agree. I think that's certainly another mechanism that
21 can be part of the arsenal to ensure that there is deep
22 and meaningful communication and consideration of issues
23 from the outset.

24 MR. GILL BOEHRINGER: Yeah, I mean I
25 realize that no system is going to be perfect and there
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1 is certainly inequality and power imbalance.

2 I know of a situation in the Philippines, for
3 example, where they have peace and order communities in
4 every village but they're usually stacked with military
5 people on one side and a few citizens on the other side
6 who may or may not be interested in things other than
7 what the military is interested in. But the military has
8 the expertise, you know, they have the power. They're
9 very intimidating and so that doesn't work too well
10 either. But, yeah, anyway we'll see.

11 I think that I like the idea of stressing the
12 procedural rights. I mean every lawyer knows that if
13 the procedure is wanky the results are a going to be
14 wanky. So good on you.

15 DR. AMANDA KENNEDY: Yeah, I think that's
16 essentially the basis of the submission that the
17 strength of the substantive rights really is very much
18 entwined with the strength of the procedural rights.

19 DR. THOMAS KERNS: Beautiful. Thank you.

20 DR. AMANDA KENNEDY: Thanks Tom.

21

22 [youtube.com/watch?v=p38nWy4EUOc]

23

24

25

1 CHARLOTTESVILLE, VIRGINIA

2 PRE-PPT TRIBUNAL BRIEFING

3 MAY 16, 2018 9:00-11:00

4
5 MS. LAKSHMI FJORD: I'm Lakshmi Fjord,

6 chair of the Charlottesville, Virginia Peoples

7 Tribunal. We are so honored to come before you today

8 to present some of the places and persons whose

9 testimony you received in full from our October 28th,

10 2017 Charlottesville Tribunal. These few representative

11 testimonies speak for the thousands of people in West

12 Virginia, Virginia and North Carolina who now face two

13 huge new fracked gas infrastructure projects. The

14 Atlantic Coast Pipeline and/or ACP and the Mountain

15 Valley Pipeline or MVP.

16 Because of their route choices, these most
17 impacted people will never themselves receive a single
18 kilowatt of electricity or gas from these projects.

19 For over four years, after the first shock
20 until today, we collectively have learned one certainty,
21 fracked gas first fractures rock, then fractures people
22 from their land by eminent domain, communities from
23 their present clean air, water and soil; and counties
24 and states along preexisting social injustice fault
25 lines.

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1 Both ACP and MVP disproportionally target
2 people and places that are majority rural, low income
3 and majority African-American, Native American and coal,
4 now fracked gas country, Appalachians.

5 These we identify as the four environmental
6 justice communities whose very existence, their towns
7 and demographics were erased in ACP and MVP application
8 documents yet they are targeted to pay the true costs of
9 these two pipelines if constructed.

10 Their hard earned investments are in
11 communities targeted by ACP and MVP to bear the heaviest
12 per community environmental burdens of toxic hazards to
13 health, water, air, present jobs and economies, losses
14 of property value and even their insurance.

15 David Sly of the conservation group, Wild
16 Virginia and whose family has lived in this early
17 colonized place since the early 1700s testified saying,
18 the pipeline companies want to cross through thousands
19 of streams and wetlands and to disrupt the ecological
20 health of watersheds. Cumulative impacts will affect
21 major river basins including the Shenandoah and Potomac
22 Rivers, the James River and the Roanoke River.

23 Many highly sensitive water bodies will be
24 affected ranging from mountain trout streams to habitats
25 for endangered and threatened species to unique wetland
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1 communities.

2 And construction is proposed to occur in some
3 of the most challenging environments in the United
4 States. The route to which the western portion of
5 Virginia would cross many areas with very steep slopes,
6 highly erodible soils and records of frequent land
7 slides. Most construction companies, which routinely
8 expect to abide by run-off control requirements, would
9 never propose to build in these types of environments
10 because the standard measures simply will not protect
11 water quality and they know it.

12 The destruction of the forest and native
13 plants and the excavation of huge trenches for the
14 pipelines would result in the discharge of thousands of
15 tons of sediments and other pollutants into our waters
16 by digging, cutting, even blasting through stream
17 bottoms, the companies would release more pollution and
18 would also fundamentally alter the physical features and
19 vital habitats in these waters. State agencies'
20 scientists have stated that the natural functions of
21 those ecosystems could be eliminated.

22 On this map are marked the huge areas of US
23 national forest public lands held in trust for the
24 American people's well-being where the US Forest Service
25 approved the ACP and MVP projects to be routed. After
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1 the presidential election a once critical Forest Service
2 has since given MVP and ACP rights to vary away from
3 long held restrictions on harms to soil, water,
4 riparian, old growth and recreation and visual
5 resources.

6 Dana Christofellus writes, "Over its 300 mile
7 length MVP would cut through almost 250 miles of
8 forested land, or over 80% of its total route, including
9 an old growth forest in Jefferson National Forest."

10 The ACP route is through the George Washington
11 and Monongahela National Forest. These exemplify
12 violations of the rights of nature that will impact
13 complex, diverse ecosystems that provides most needed
14 equilibrium against greater climate change.

15 The ACP estimates their climate change
16 contribution to be 67,591,816 metric tons per year.
17 That is the emissions equivalent of 20 coal fired energy
18 plants or 14-million passenger vehicles.

19 If built both will horizontal drill under the
20 Appalachian Trail, part of the national park service.
21 Old Dominion Trail Club warns the release of chemicals
22 into the fractured bedrock geology and the water
23 resources of the Blue Ridge Mountains could be
24 devastating to the natural communities and severely
25 impede the recreational use of the AT and the
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1 surrounding public lands.

2 In a staggering breach of human rights the
3 Forest Service and Virginia state police in the
4 Jefferson National Forest are currently denying food,
5 water and medical care to tree sitter protesters against
6 those predations by the MVP.

7 All this loss and not even Cheryl LaFleur, the
8 senior most federal energy regulatory commissioner, or
9 FERC, finds either pipeline is needed, nor do they, in
10 her words, serve the public interest.

11 On October 13, 2017 FERC approved both the ACP
12 and MVP in a very rare 2 to 1 vote. LaFluer dissented
13 and these are her main points that are on the screen.
14 They're both very similar.

15 They take their gas from the same source.
16 Their markets are the same and their routes are almost
17 parallel in some places. She's saying, you know, we
18 don't need 900 miles of new fracked gas infrastructure
19 that has significant impacts, karsts, thousands of water
20 bodies.

21 It's going to impact a lot of significant
22 cultural resources, as I mentioned earlier, and there's
23 absolutely no demonstrated need other than ACP for it's
24 own subsidiaries.

25 From Tom Hadwin, who is the former gas and oil
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1 industry executive, has done extensive research and in
2 his testimony we learned that this rush to build
3 pipelines is entirely a result of FERC's decision to pay
4 50% higher rates of return for new gas transmission line
5 than to do utility infrastructure building, which would
6 be renewables.

7 The last thing about this context in FERCs own
8 first quarter report for 2018 they noted that only 3% of
9 new electrical generation was from gas and 94% from
10 renewables. This ought to make us very glad, but not
11 when the fracking boom has not yet busted because of the
12 higher returns from exporting to foreign markets. It's
13 the tragedy of the last soldier killed after the peace
14 was called but before the looting stopped.

15 The Charlottesville People's Tribunal was a
16 direct response to witnessing Virginia state police in
17 riot gear standing by and doing nothing to protect
18 people of color being savagely beaten before our eyes,
19 killed as we chanted for equality on August 11 and 12,
20 2017.

21 The hostility of the police to the non-violent
22 protesters felt akin, though not at the same scale, to
23 the hostility expressed at public meetings in critiquing
24 these projects by boards of supervisors, by FERC staff
25 at hearings, by the water control board, by Virginia's
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1 then governor, a great ally of Dominion Energy, largest
2 campaign donor in the state of Virginia and the
3 principal stake holder of the ACP.

4 That is why many of our testimonies from
5 across both pipelines are of betrayal by local elected
6 representatives, by state agencies, governors, charged
7 with protecting all citizens but instead replicating
8 centuries-long social injustices and disparity.

9 Last night we learned that it's the rights of
10 nature that is chiseled into ACP seemingly rock solid
11 forward progress. And we hope that MVPs lawyers will
12 take up this strategy.

13 Based on the Endangered Species Act the Fourth
14 Circuit Court of Appeals did not accept an incidental
15 take-statement which is the depths allowed for Dominion
16 by the US Fish & Wildlife Agencies of threatened and
17 endanger species while building the ACP. Therefore, the
18 Forest Service and Corp of Engineers must halt all the
19 ground pipeline activities under these permits until the
20 defects of that plan have been remedied.

21 In response, however, Dominion vowed to
22 continue to press forward with construction on the
23 project according to Robert Zullo of the Richmond Times
24 Dispatch.

25 Thank you.
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1 DR. IRENE LEECH: Hello, I'm Irene Leach.
2 And I am going to be talking about the rural communities
3 and the public participation. So I'll share my screen
4 and start the power point.

5 I'm going to introduce you to some of the
6 people. This is Cletus and Beverly Bohon's property and
7 it's split by the pipeline. And they've been told that
8 they can access the half of their property that's not
9 available once the workers are not there.

10 Don Apgar is in his 80's and the water of the
11 north fork of the Roanoke River is an important piece
12 for him in terms of recreation as well as the family
13 heritage.

14 Bill and Linn Limpert live in Bath County and
15 their retirement home is threatened by this. They're
16 standing by Ona, who is a 300 to 400-year old sugar
17 maple tree in an old growth forest and approximately
18 somewhere between 10 and 60 feet of this mountain are
19 going to be removed in order to make a space wide enough
20 for the pipeline.

21 This is my own family farm, 1,200 acres that
22 we have in the geographic center of Virginia and that we
23 have farmed with registered Angus cattle for 116-years.
24 What you're looking at right now are the terraces that
25 my grandfather built 50 or more years ago to make the
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1 water stay on the land instead of running off. Dominion
2 insists that for ACP they have to go straight through
3 these. While if they would do as we have asked within
4 our quantity of land to move to the edges of the fields
5 that they're going through they could avoid damaging
6 this.

7 So you see that there are all kinds of issues.
8 Rural communities are being hit. Nobody wants to invest
9 in them to give us the internet and things that other
10 people have.

11 Many of the people say that, well, we should
12 just leave these communities and go other places. They
13 don't understand that they need the trees and the soil
14 to have the clean air and the water that they all count
15 on.

16 There are a number of ways that there have
17 been challenges to people participating in the process.
18 FERC, the federal government agency that's responsible
19 for all of this, is very closely tied to the industry.
20 And, for example, even if they require that they do some
21 inspections the pipeline companies hire the inspectors
22 and supervise them.

23 They'll do things and allow things to happen
24 so that they can ignore the information. And so the
25 landowner or consumer is not listened to, even though in
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1 the 1930 legislation for the agency, it required that
2 they have a landowner or consumer office. And we've
3 tried several times but they just won't allow it to
4 happen.

5 Internet access is critical to participate in
6 the process because that's how you submit things to
7 FERC. You could mail them but the way that you really
8 get up-to-date information is on the internet. And many
9 of these rural communities don't have decent internet
10 service. We have less than some third world countries
11 in our rural areas. And then, on top of that, people
12 depend upon the FERC web site but it's not dependable
13 and so it's a real challenge to make things happen the
14 way that we need for them to.

15 Public information has been limited and
16 focused on PR, not facts, that don't have spin connected
17 with them. And they've focused on the information that
18 the company wants to get out there.

19 It's been very frustrating because the
20 meetings have been arranged in ways that make it very
21 hard for people to participate in them. For example,
22 not in the affected county, requiring that people drive
23 distances at night. And many of the people affected are
24 elderly. Or they'll have meetings during working hours
25 when working people cannot get there.

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1 They're set up in ways that are intimidating
2 to people and the agency people who have moderated in
3 several cases have been threatening to people,
4 threatening that if they didn't stop standing against
5 the wall that they're going to close the hearing.

6 They've also done things like require that
7 when people come in the door they say whether they are
8 for or against the project and then arranging things
9 that way. Or they have also gotten so that now they
10 don't want people to speak at the podium and they will
11 require that people go to a private room somewhere to
12 say what they're going to say. And that means that the
13 other people cannot hear what they say. The press
14 cannot hear what they say. And so you have this lack of
15 a record.

16 We've also seen that the transcriptions that
17 have shown up on the FERC web site are often very poor
18 and totally failed to get the message that the
19 individuals are trying to put across. So this has been a
20 major problem all through this process.

21 You've already heard that there's been no real
22 evaluation of the need for the infrastructure and that's
23 a big problem because they claim that they've got
24 growing needs and increased demand when, in reality,
25 it's decreasing and we have no known use for the energy
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1 that they're trying to move.

2 They're taking our land. They're making us
3 live with it and with the stress and the risk and
4 there's no verified need. And, in fact, what we suspect
5 is that it will sold for private profit.

6 The decisions that are made are made using
7 incomplete and inaccurate information partly because of
8 the way the system is set up so that different
9 information gets submitted to the federal agency at
10 different times as well as to other agencies. And
11 they're forced to make decisions and we're forced to
12 respond to things when the information isn't all in
13 place.

14 We've also had problems with them ignoring the
15 facts that we've presented even when we've told them
16 that the information that they're using is wrong and
17 they'll manipulate the data in their favor.

18 For example, Lakshmi has proved there are many
19 more people living in the Union Hill area than the
20 county level data that the industry has used. And when
21 she asked just last week if they would fix that the
22 answer was no.

23 And they'll do things like tell neighbors that
24 people have accepted an easement when they haven't. And
25 this information issue goes all the way through this.
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1 The procedures are not easily discovered or
2 understood. For example, you would have to sign up as
3 an intervenor in the very beginning of the case or
4 you're not allowed to later. You can't challenge the
5 decision. And they've been denying letting people be a
6 part of that. They only notify the people who are
7 directly involved, not the people who are affected but
8 whose property is not going to have infrastructure on
9 it, even if it's right next to it and their property is
10 going to have danger and so forth as a part of that.

11 And there are no rules that tell you when
12 things have to be done, when the company can say that
13 they won't make any adjustments and so forth. Even
14 local government and state historical associations have
15 been stymied in their trying to be a part of things.

16 This use of eminent domain is a major problem
17 because the industry uses it from the very beginning to
18 intimidate the land owners. The industry has no reason
19 to work with the land owners. And housing is, and land,
20 you know, that's the single largest asset that most
21 people have. And so the fact that they could take this
22 and that they could reduce the value of it really puts
23 some families in economic jeopardy. And it's not fair
24 to be doing this when it's something that isn't going to
25 be for public benefit.

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1 The easements give the people a one-time
2 payment, not ongoing income for ongoing use of that
3 land. And that land owner continues to pay property
4 taxes while their use of the land is permanently
5 changed.

6 There's great pressure to accept an easement
7 early in the process which then the federal agency takes
8 as people being willing to do it and, yet, when we wait
9 to do it then they will not move the pipeline on your
10 property. That's a part of what I'm dealing with with
11 my family.

12 And the disruptions of homes and businesses.
13 For example, there's a couple in Newport, Virginia along
14 the MVP who had the pipeline on one side of their acre
15 and half lot and an access road on the other side.
16 They're in their 80's. They've been forced to move.

17 For my family business we have found that, you
18 know, they don't understand the needs of making our
19 business continue on the land that we own as they do
20 what they're going to do. They just say, well, we'll
21 show up when we show up and, you know, we'll pay you for
22 anything that you lose as a result of that.

23 We need to time to plan for our 400 cattle and
24 for how we're going to get done the things that we need
25 to do. But as far as they're concerned our business
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1 doesn't matter and that disruption doesn't matter.

2 States are having to fight in court in order
3 have the opportunity to be a part of the decision-making
4 process. New York has pushed the envelope.

5 Our state of Virginia and West Virginia and
6 North Carolina, none of them have wanted to press that.
7 In fact we have a hard time getting them to do the
8 things that they need to do and that we know that they
9 have the authority to do.

10 And we've been told your air and water are so
11 clean you can afford this additional pollution. They
12 really have -- they don't think anything of taking away
13 from us the things that rural people have moved to our
14 area for and they clearly have the attitude that we
15 don't deserve to have this clean air and that they have
16 a right to take it from us.

17 And finally the safety standards are based on
18 the industry risk, not the risk of the people who are
19 affected. And there's a lower level of safety provided
20 to people in rural areas. Thinner pipe and 20 miles
21 between cutoff valves and all the gas has to burn off in
22 order to get it to stop.

23 And so for even with as much property as my
24 family has all of our buildings are currently within the
25 incineration zone and all of our property is within the
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1 evacuation zone or the fire zone. And so the risks that
2 they are exposing people to are unreasonable and are
3 something that we really need to do something about.

4 So I will turn this over to our next speaker
5 who is April.

6 MS. APRIL PIERSON-KEATING: So I'm April
7 Pierson-Keating from Buchanan, West Virginia. I'm with
8 the Mountain Lakes Preservation Alliance and I'm going
9 to try to give you the background of West Virginia's
10 part in this.

11 We're Appalachian. We're the only state
12 that's completely surrounded by Appalachia. All of our
13 areas are contained within the Appalachian region and
14 many of our people are very poor.

15 We have the second greatest biodiversity in
16 the world after the Amazon Rain Forest and we're home to
17 the headwaters of eight major rivers, several endangered
18 species and we've been ravished by industry since before
19 we became a state.

20 Logging began in the early part of the
21 century, the 19th century. As you can see they took a
22 lot of old growth trees out. They took most of them but
23 some of them are still left.

24 The railroads came and the landmen started
25 conning people and cheating people out of their land and
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1 mineral rights and getting them to agree to sell them
2 for very cheap. And that tradition continues today.

3 Coal mining was a staple industry, always has
4 been here. It's starting to die out now because the
5 reserves are going down but as it has become mechanized
6 there's been losses of jobs and that's just the way the
7 industry goes.

8 In the 1970's mountain top removal mining
9 started in earnest and started destroying the valleys
10 even worse. What happens is when they blow the tops
11 off the mountains and they get down in to the rock they
12 get into the heavy metals, the arsenic, the cadmium, the
13 copper, and they take all that dust and they throw it
14 down the valley.

15 And you can see from the picture that the
16 valleys contain little streams and rivers. So that's
17 what happens to our water is it has become contaminated --
18 has been contaminated by the industry.

19 Our governor is a coal baron. He ran for
20 governor as a democrat but he was a republican before
21 that and people might remember soon after he was elected
22 he switched back.

23 He put a mine by a Head Start preschool. He
24 had 23,000 water pollution violations and he -- that's
25 the Clean Water Act Violations, and unpaid fines and
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1 taxes. So that's our leadership.

2 Oil and gas began mid-1800's. Back then in
3 order to drill a well you had a horse and cart going in
4 a circle for several days before you would get down to
5 the bottom. And those wells were shallow.

6 Now we have wells that take up 25 acres and go
7 7,000 or more feet down and take tons of water and
8 chemicals to do the job. So the industry isn't what it
9 used to be.

10 It uses of millions of gallons of water every
11 time a well is fracked. It creates a huge waste stream
12 and that waste has to be put somewhere. We know that
13 pipelines are going to expand fracking. There are 300
14 permits currently waiting to be developed in both Upshur
15 County, where I'm from and Lewis County, a neighboring
16 county. And there are many more large pipeline projects
17 proposed for the state or already approved that are not
18 on this map. We also have thousands of miles of
19 pipeline in the ground.

20 Meanwhile the old infrastructure isn't being
21 taken care of. You know, a rural place like Doddridge
22 County. That has beautiful places and old growth forests
23 is crisscrossed by pipeline and full of gas
24 infrastructure as you can see in the picture on the
25 right.

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1 The picture on the left is from a visit from
2 Princeton University researchers who came and did some
3 research on gas emissions in West Virginia, New Jersey
4 and Pennsylvania and they said they had never seen
5 anything this bad as what we had in West Virginia.

6 And I know personally as we were driving
7 through Doddridge County sometimes it was very thick and
8 you couldn't really breathe very well.

9 So the air quality is a problem not only from
10 the leaking infrastructure but also from the large
11 trucks and equipment and the compressor stations.
12 Michael MacCaulley from WVU has been studying air
13 quality and has pointed to the diesel emissions as being
14 very, very hazardous and, of course, this kind of
15 development requires a lot of diesel equipment.

16 West Virginia water is wonderful. We have the
17 best water anywhere, or we did, and it feeds 14 states
18 and 46 rivers.

19 The picture on the right is what happened
20 after the Stonewall Momentum pipeline, that is a 36-inch
21 pipeline, went into one of the streams that we were
22 monitoring.

23 And here's some more of the effects. You can
24 see in the top left and the bottom right photos that is
25 bentonite clay that came up into the stream bed after
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1 they drilled underneath the stream.

2 The top right photograph is siltation after a
3 rain which happens in horrendous amounts once they tear
4 off the trees and grass and create mud.

5 And then the bottom left picture is just a
6 coal mining holding pond for the acid mine drainage
7 water before they treat it. But we do have acid mine
8 drainage in the streams and several places.

9 A lot of this construction is crossing
10 wetlands and they are not, as you can see in this
11 picture on the right, they're not controlling the run-
12 off that goes into that little stream down there and
13 this is happening everywhere.

14 The industry has been intimidating our people
15 from the beginning. These pipes have been sitting out
16 here since May 2016. They've been here too long but
17 since they're here people just figure that the pipeline
18 is definitely going through and they don't want to fight
19 it. They don't see any reason to.

20 Even our county commission wrote a letter of
21 approval for the storm water permit on the ACP without
22 reading it first.

23 The trucks that carry the waste are not
24 regulated because of the Halliburton loophole. The
25 brine itself, the salt water that comes out of the
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1 earth, is ten times as salty as sea water. It will kill
2 anything it touches. And there are terrible chemicals
3 and radiation that are in this water and they're using
4 it to de-ice the roads.

5 Of course there's a danger of leaks, fires and
6 explosions. And this is just a picture of an explosion
7 that happened a few months ago in Ohio and that fire
8 took a couple of weeks to put out.

9 The McClain family, this is a heart-rendering
10 story. They've got a beautiful farm that they've had
11 in their family for 70-years and they have had a lot of
12 trouble from the gas industry development in Doddridge
13 County.

14 As you can see their homestead is surrounded
15 by three giant pipelines. The purple and the blue are
16 the MVP in the Stonewall line and you can see they are
17 crossing each other, which I think is absolute
18 insanity. And then about a mile away from them on the
19 other side is the Supply Header Project from the
20 Atlantic Coast Pipeline.

21 They have been worried that the water might
22 get into their house because the pipeline construction
23 from the MVP is up on the ridge above them and it's
24 very, very, steep. And I'll show you some pictures of
25 that in a minute.

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1 A lot of these slopes are over 50%. And the
2 Middle Island Creek is the longest creek in the world.
3 This is the water that feeds Doddridge County and it
4 contains mussels, fresh water mussels that are
5 endangered.

6 This is from a letter that they wrote to
7 Senators Manchin and Capita and got no response. "The
8 land agent stated they would use our road and it was
9 their right to use it. He did not care about the damage
10 that occurred to the fences and road banks, ditches, et
11 cetera.

12 "As of today no one has talked to us about
13 this pipeline project. They have sent countless people
14 on our land to survey and plan the destruction of our
15 land without talking with us. I have lived here almost
16 70 years. I know which direction the water flows and
17 where erosion and damage to the land will happen.

18 "These people do not care about the land,
19 water, trees or the lives of people living near these
20 pipelines."

21 When the Stonewall line went in three years
22 ago, it's a 36-inch, it crossed Middle Island Creek and
23 various wetlands as well. It was constructed by
24 Precision which is doing the MVP. They were almost shut
25 down. They were flatlanders. They were from Wisconsin
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1 and they didn't know how to do construction on these
2 steep hills.

3 And then the company, another company added
4 the Morgan compressor station to that pipeline and they
5 do regular blow downs which are very noisy and very
6 disturbing to the people in the area.

7 I went up on the ridge to see the construction
8 a few days ago and it is absolutely horrible. I would
9 say breathtaking but that sounds positive.

10 The picture on the left shows this 125-foot
11 wide swath that they've cleared. And the picture on the
12 right is looking down only about half way up to this
13 ridge, looking down at their farmstead and the potential
14 for the run-off on to their land and into home.

15 Here is more some pictures. This is
16 enormous. These pictures cannot possibly do it justice.
17 The one on the right shows the valley below and the
18 houses. And, of course, there are streams down there
19 that are going to be affected by all of this dirt as it
20 gets wet in the rain.

21 In this one the picture on the left shows a
22 silt fence that is supposed to protect -- keep the
23 run-off from going down hill but in a major rain that's
24 not going to do anything.

25 They've cut the trees and piled them. They're
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1 going to burn them. And there is a beer can in the
2 ground there where they've just tossed it.

3 The picture on the lower-right that is a spill
4 kit. I have no idea what they think they can clean up
5 with that. It's a joke.

6 Doddridge County has been dealing with huge
7 infrastructure and they just had completed this Antero,
8 what they call Clearwater facility, but it's a frack
9 waste processing place. They're going to be taking 600,
10 that's an average, 600 trucks per day of frack waste
11 containing radium 226.

12 They're going to be producing a trillion tons
13 of toxic salt over the 20-years they intend to operate
14 and they think they're going to use this for food and
15 salt deicing on the roads. This is upstream of the
16 water source for two towns and they think they're going
17 to protect the water.

18 Another aspect of this industry is the damage
19 to the roads and the dangers. People are regularly
20 killed when these trucks turn over and topple and fall
21 on top of cars and kill families, children. And an
22 accident just happened a few days ago out on Route 50
23 near Clarksburg, West Virginia.

24 They tout jobs. They tell us it's going to be
25 great. But we took some pictures of the different
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1 parking areas and these license plates are almost 100%
2 out of state.

3 The fleet at the bottom is a new fleet. A
4 bunch of trucks that were just brought in and the ones
5 at the top that's from back when they were doing the
6 Stonewall pipeline. And we saw trucks from Wisconsin,
7 Louisiana, Mississippi, all kinds of other places, but
8 very few West Virginia license plates.

9 This just continues the boom and bust
10 economy. And the workers are exposed to things and not
11 even told what they're exposed to.

12 Kevin Campbell used to work on the rigs and he
13 drove trucks, you know, carrying pipe and different
14 pumps and supplies. And, you know, they abuse these
15 workers. They make them work over 40-hours. They don't
16 let them sleep. They tell them to falsify the
17 documents.

18 And he tells this horrible story of when they
19 were pouring concrete down for a casing and it just kept
20 on going and they didn't know where it was going. And
21 they just kept on pumping it for 30-hours straight.

22 He later worked as an EMT where he transported
23 people that were sickened by their water wells that had
24 been poisoned by fracked waste.

25 The Binion family has been through it. They
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1 had a dehydrator in Taylor County, although the picture
2 is from a Sherwood processing plant in Doddridge County
3 but that's where they live now. But they had heart
4 problems. The kids in the neighborhood had nose bleeds
5 and various other health problems.

6 The EPA and the DEP just wouldn't do anything.
7 The DEP didn't even have equipment to test the air to
8 see what was in it or how much was in it.

9 This is one land owner who is surrounded by
10 both ACP and MVP in Lewis County.

11 Upshur County, this is where I live, this is
12 our high school. The pipeline is 2200 feet from the
13 county's only high school. The Class II pipe is the
14 second thinnest type of pipe that they are required or
15 allowed to put in. There are four thicknesses and they
16 don't, apparently, think that we're worth the thickest
17 pipe.

18 This also, if it would blow in this area, it
19 would cover up Route 20, which is our main north/south
20 artery in the county, and emergency vehicles would not
21 be able to get to the school to rescue anyone.

22 This is a construction yard that's been built
23 and they're currently working at and I just wanted to
24 show you that there is water all around this. And when
25 you look at the plans in the permits, almost all of
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1 these yards are surrounded by water.

2 Selbyville has an injection well that went in
3 five years ago. We went canvassing out there to let them
4 know about a public hearing that they didn't know
5 about. And we talked to people who had lost their water
6 when the well first went in.

7 So the injection of the waste has created
8 seismic activity. If you look over on the right side of
9 your screen at Braxton County, where the yellow dot is
10 the Marcellus injection well, and the orange circles are --
11 so on the right side of the screen you can see the
12 injection well there and a bunch of earthquakes that
13 occurred in 2010 and 2013 that were attributed to that
14 injection well. West Virginia shouldn't be having any
15 kind of seismic activity.

16 Also there's been widespread water
17 contamination in Fayette County at the Loch Kelly well
18 ponds, sludge ponds, that's been leaking out into that
19 community's water and they cannot use their water any
20 more. And, of course, our sledge and waste, a lot of it
21 has been going to Youngstown, Ohio which has been
22 experiencing a lot of earthquakes related to that
23 injection.

24 Griesingers had a beautiful farm out on Holly
25 Grove Road and after Chesapeake drilled a Marcellus well
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1 they lost their water and so did the neighbors.

2 Sometimes the underground injection -- well
3 the injection can, but the fracking can shake the ground
4 and create fissures and cracks where the water then from
5 the aquifer will leak out and just dry up. And that's
6 what happened to their well.

7 Now Wetzel County is the origin of the
8 Mountain Valley pipeline and Mobley, West Virginia has
9 basically been completely taken over by EQT and Mark
10 West.

11 You can see the picture on the top there with
12 the red circle. Now that's the Mark West facility that
13 is blown up there at the bottom, that bottom picture.

14 There is also an EQT well pad with 17 wells on
15 it. And the blue squares are where homes used to be.
16 Those homes have been purchased and razed. So this
17 area is completely owned and controlled by oil and gas.

18 Monroe County is right next to, I believe it's
19 Giles in Virginia, and they've been fighting very
20 valiantly against the MVP. They have had tree sits that
21 have been actually very successful, in my opinion, at
22 delaying things long enough for the courts to consider
23 what's really going on.

24 And they were denied food and water by the
25 Forest Service, of all organizations. And one of the
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1 problems is that there was an earthquake in September
2 2017 only a mile and a half away from the MVP route. In
3 May of that year there was one six miles away.

4 So, you know, when you're putting a pipeline
5 in the ground these pipes are in 40-foot sections and
6 that means there's 135 welds per mile. So that's 135
7 chances per mile for something to go wrong if the earth
8 should move.

9 Next thing that is going to be coming along is
10 this Appalachian storage hub because Louisiana and
11 Houston are no longer viable and everything starts up
12 here anyway. This is where most of the gas and the
13 natural gas liquids are sourced.

14 What they're going to be doing is this project
15 is only in the conceptual stages but you might have
16 heard about the 83.7-billion dollar deal with China.
17 They're going to be investing in this project. Our
18 governors are behind it. Our commerce secretary and
19 WVU, our major university, are all behind this project.

20 They would be injecting natural gas liquids
21 into abandoned salt caverns, which are the red circles,
22 and some abandoned underground gas wells and possibly
23 potentially mines in these areas. And then they're
24 going to run six pipelines adjacent to the Ohio River
25 and expect nothing to go wrong.

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1 These caverns will be full of LNG, natural --
2 NGLs, natural gas liquids, and they will be stored in
3 there, several different types, by density in the same
4 cavern.

5 So here's some resources. This is just the
6 tip of the iceberg. I invite anyone to reach out to me
7 for more information, look these up on the internet,
8 find your own local organizations but there's a lot of
9 people working on this right now and I encourage
10 everyone to get involved because our water is our future
11 and without it we won't survive.

12 MS. LAKSHMI FJORD: Hi, I'm Lakshmi Fjord
13 and here I'm the historian and demographer of Union
14 Hill.

15 After the violent and racist events in
16 Charlottesville in August, Virginians asked ourselves
17 where do we stand on the racist heritage of Virginia?

18 I'm going to discuss a little bit about the
19 African American impacts of the Atlantic Coast Pipeline.
20 We're asking how and where does racism manifest itself
21 in present day social systems and institutions?

22 So in our people's tribunal one of the
23 questions we asked was what direct relationship is there
24 between the extremist racist violence that was
25 perpetrated in the name of preserving Virginia's
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1 heritage and civil war monuments and the slow violence
2 of locating the Atlantic Coast Pipeline's only enormous
3 highly toxic polluting Virginia compressor station in an
4 85% African American and historic freedmen community of
5 Union Hill?

6 So what are the cost benefits specifically of
7 racism and environmental injustice more broadly?

8 Yesterday I was sent from allies in North
9 Carolina communities a press release that they filed a
10 complaint with the EPA with their civil rights
11 compliance office because they say that the federal and
12 state agencies have discriminated on the basis of race
13 and color because they failed to assess the
14 disproportionate impacts of the ACP on communities of
15 color which is required under Title 6 of the Civil
16 Rights Act of 1964.

17 So they're calling them out. They're saying,
18 you know, they haven't done any of the basic
19 environmental assessments. And they are also along
20 places where they're already experiencing a lot of the
21 impacts of climate change and sea level rise.

22 Belinda Joyner, who is the president of
23 Concerned Citizens of North Hampton County in North
24 Carolina where the ACP plans to build its only North
25 Carolina mega compressor station said, "The ACP pipeline
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1 will benefit us in no shape, form or fashion. The
2 economic development types don't mind harming us, but if
3 a pipeline were planned close to their homes they'd say
4 it would bring their property values down."

5 Well, for people of color in sacrifice zones,
6 not only will it bring our property value down it will
7 kill us at the same time. But do they care?

8 And she is entirely right. Compressor
9 stations even 1/7th the size of the ones planned by the
10 ACP, one for each state, do commonly cause respiratory
11 issues that occur in higher proportions in African
12 Americans already because of higher rates of continuous
13 exposure to sources of toxic emissions.

14 Tessa Moroso testified on behalf of the
15 people of Norfolk and Tidewater, Virginia on our
16 Atlantic Coast whose water supplies threatened by the
17 aptly named Atlantic Coast Pipeline. She notes that
18 these are places already vulnerable to the devastating
19 effects of climate change and sea level rise.

20 This is where ACP is going to want to run
21 their connector link through reservoirs, right by
22 reservoirs in Suffolk County, Virginia and underground
23 in three urban majority African American
24 neighborhoods.

25 So what we're bringing to light is this long
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1 term unrelenting pattern of discriminatory
2 infrastructure building in minority and low income
3 communities. And this is what led to the creation of
4 the National Environmental Policy Act or NEPA but
5 Dominion has consistently engaged in the use of
6 misinformation about demographics for these high impact
7 sites where it just so happens that African Americans
8 are the majority.

9 These strategic omissions have served ACP well
10 by providing enormous cost benefits. Erasing population
11 numbers allows for the rural classifications that people
12 have talked about which cost the developers less.
13 Erasing population turns the regulatory eyes away from
14 Union Hill's massive concentration of toxic polluting
15 infrastructure, which is a deviation from actual gas
16 industry standards where to build even a small
17 compressor station they say it should be in truly
18 sparsely populated places and not near highly traveled
19 roads. Well, none of those are true for Union Hill.

20 These emissions actually don't allow
21 decision-makers to make informed decisions like FERC or
22 the Virginia Department of Environmental Quality. Even
23 our local and state officials and the public.

24 Dominion's ratepayers don't know that
25 increases in their utility rates are to pay for the
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1 Atlantic Coast Pipeline and so it will be higher costs
2 to their wallets but they're also perpetrating
3 environmental racism and climate change.

4 So Buckingham's over 125-year recorded history
5 of frequent, like four times a year, earthquakes is but
6 one of the total absences of key information that ACP
7 had in their application and FERC in their final
8 environmental impact study. Even though many of us made
9 comments to correct that information, as Irene spoke
10 about, and completely missing was Union Hill's history
11 and the demographics and the topographies, the soil
12 characteristics, the migratory species and habitats and
13 proximity to single source aquifers.

14 But all that stands in really sharp contrast
15 to the counties that are next to Buckingham where ACP
16 filed hundreds of pages of historic cultural resources.

17 So to correct that record I undertook a NEPA
18 asked community study review. And at the same time I
19 uncovered, you know, not that well hidden, 150-year
20 history of the cost benefits of erasing Union Hill's
21 slave and freedman past.

22 On February 26, 1869, the day the US House of
23 Representatives passed the 15th Amendment giving former
24 slaves the right to vote, vigilantes burnt down the
25 Buckingham courthouse. From news articles of the day I
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1 learned that former slaveholders feared that the wills
2 with the names of inherited slaves or records of slaves
3 purchasing freedmen from certain owners would be used by
4 the then 2 to 1 former slave majority to sue for
5 restitution.

6 These are some of the things that we have
7 found that are on the ground and these are some of the
8 freedmen families and their locations. If you can see,
9 and my cursor works, there is a yellow band coming
10 through that says compressor station and clustered on
11 all of these sides are these African American families.

12 Here is the numbers, incredible numbers, of
13 people that we've found when we went on a door-to-door
14 household study. Our teams filled in those vital
15 statistics that were missing from any -- from the
16 absent NEPA review. We found out about family history.
17 We found some pretty shocking and concerning preexisting
18 chronic health conditions. And these are places in
19 which, if you can see in the middle that yellow
20 triangle, that is the compressor station complex but
21 these are clusters of 99 houses that are very close by,
22 between 150 feet to one mile.

23 Put this altogether and we were eligible to
24 apply for the most endangered historic place in Virginia
25 for this Union Hill Woods Corner District. We learned
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1 that the Atlantic Coast Pipeline had purchased that 68
2 acre site in secrecy from white descendents of former
3 variety shade plantation owners.

4 Recorded in the public records were their
5 payments of \$37,000.00 an acre to the white plantation
6 family where surrounded on every side were these 99
7 households of majority African Americans, one-third of
8 whom are known freedmen descendents of ancestors and
9 slaves nearby whose heritage land is meant to be passed
10 along to future generations and has lost a lot of its
11 value and they may even lose insurance coverage.

12 Going door-to-door we found that, as Irene
13 mentioned, that the misinformation that Dominion used
14 was the average census data for the whole county, which
15 is 29.6 people per square mile, which is just a figure.
16 But then if you look at this, this is a square mile and
17 we had 500% more people living there than Dominion would
18 admit. It's a suburban level of habitation and of that
19 habitation 85% identifies as African American.

20 We've had Union Hill residents skew in this
21 study toward the very old and the very young. There's
22 been two generations of out-migration of young adults to
23 more equal opportunity urban places and that's led to
24 their leaving with their parents and grandparents a very
25 large number of very young -- I mean zero to six age
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1 children who have respiratory illnesses.

2 And as was mentioned because of the present
3 clear air and peaceful environments, says Marie
4 Gillespie, her granddaughter has this chronic
5 respiratory illness. And she's deeply concerned that
6 she will then become exposed to these things, to the
7 toxins in the air.

8 The slave burials that were originally notated
9 as part of the variety shade plantation are hundreds
10 laid out in rows, and it's really very hard to see and
11 imagine what it's like to see these row after row after
12 uniform row of sunken graves in the ground where just
13 these two concrete hand-made markers were placed. But
14 with the archeologists and Preservation of Virginia you
15 can come to see exactly where these slave burials are.

16 And they're also marked with, you can't really
17 see it that well, but there's some green under that fall
18 foliage and that is periwinkle and it turns out that
19 this is one of the things in Virginia that archeologists
20 look for when trying to find slave burial sites that
21 they've been told about.

22 In particular variety shade's long uniform
23 rows of unmarked burials are where we now know that
24 Berkeley and John Wesley Laury's ancestors lie.

25 So I'm introducing you to John Lowry and wife
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1 Ruby's farm on Union Hill Road.

2 MR. JOHN W. LAURY: My name is John W.
3 Laury. I grew up on my grandfather's farm. His name
4 was Asbury Laury and his grandmother's name was Ama
5 Lowry and my father's name was Wilbur Lowry and my
6 mother's name was Mimi Lowry. And as far as I know
7 their farm was in their name. Goes back to the 1800s.

8 And I grew up in the Union Hill/Union Grove
9 community and I had an enjoyable upbringing and we all
10 learned to live off the land. We was all farmers. We
11 raised our own food and farmed. We grew the vegetables
12 and raised the meats that we used. And we also attended
13 our local schools, Union Grove Elementary School and
14 from there we went to S. U. Ellis Middle School and
15 (indiscernable) Weston High School I graduated from.

16 After that I joined the Air Force, spent four
17 years, discharged at Norton Air Force Base and from
18 there I remained in Southern California.

19 After 35 years there returned and relocated in
20 2003 to Buckingham, at which time I had decided that I
21 wanted to farm myself and raise cattle.

22 All went well till 2014 I was informed that
23 our board of supervisors and county officials had
24 decided that they were going to allow a Dominion ACP to
25 have a special use permit for Dominion to build a
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1 proposed compressor station in our community.

2 And that was bad news because that meant that
3 in our cattle raising and in our farming and also in my
4 golden years it was a disaster for our community.

5 So our main concern then went from clean air
6 to what we felt was definitely poisonous gas,
7 underground water contamination. And these are still
8 our major concern even today.

9 We have to depend on our underground water
10 source for our entire community as well as for our
11 animals and without our clean water we can not survive.

12 So we have been fighting this monster since
13 2014 and we intend to continue to fight it because we
14 want to continue breathing this clean air and drinking
15 this clean underground water.

16 Thank you.

17 MS. RUBY LAURY: Good afternoon. My name
18 is Ruby Laury and I will be speaking on the effect of
19 noise on performance, stress and behavior of animals.
20 I'm originally from Southern California. I moved here
21 almost 15-years ago with my husband.

22 After moving here I understood why he wanted
23 to come back home. Buckingham is a beautiful place and
24 one the most quiet and peaceful, no pollution, lots of
25 clean air, no stress.

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1 My husband's avocation is raising cattle. He
2 is an animal lover. You name it, cattle, donkey, sheep,
3 dogs, deer, et cetera.

4 So my concerns are the effect noise will have
5 on our cattle, especially the new born calves and our
6 donkey.

7 The other concern are these dangerous
8 chemicals that will be released into the air and that
9 our cattle will have to breathe as well the effect these
10 gases will have on our ground water for our animals.

11 So it has been proven that cattle hear high
12 frequency sounds much better than humans. Can you
13 imagine the stress, the performance and the behavior
14 this noise will have on our cattle as well as the new
15 born calves on a continual basis? Can you imagine the
16 trauma this noise will have when the mother cow is
17 trying to give birth?

18 This is one of the reasons why I am so adamant
19 about this proposed pipeline and compressor station. It
20 not only is not fair to the animals but it is also not
21 fair to the humans.

22 Needless to say our property values will
23 definitely go down. My husband and I retired. We just
24 want to live out our golden years in the now clean air
25 that we have. We want to keep the peace, quietness. We
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1 want to be able to sit outdoors and look up into the
2 night sky and see the beautiful moon and twinkling
3 bright stars.

4 This is an agricultural area where we raise
5 crops and cattle. It's not for Dominion who has said we
6 will be able to receive this natural gas, which is not
7 true. This gas will have to be fracked which will emit
8 unsafe gases and poisons polluting this most precious
9 air that we breathe.

10 Dominion has not been telling the truth. They
11 are modern day gangsters. All they are interested in is
12 monetary gain. They just want to come in here and
13 condemn this property as if we don't exist.

14 MS. LAKSHMI FJORD: Next is Barb
15 Gottlieb.

16 MS. BARBARA GOTTLIEB: Hello. My name is
17 Barbara Gottlieb. I'm the program director for
18 Environment And Health at Physicians For Social
19 Responsibility. We are a nonprofit organization with
20 headquarters in Washington DC and have chapters across
21 the United States.

22 Back in my previously submitted testimony I
23 addressed the health impacts of pipelines and compressor
24 stations. Today I am going to focus in on health risks
25 associated specifically with air emissions from
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1 compressors stations.

2 So what you've been hearing from the people of
3 Virginia and people from West Virginia about the threats
4 to health is very true. I'm going to just add a little
5 bit of scientific background to give that more
6 scientific basis to what you've been told.

7 It's known and it's already well-documented
8 that compressor stations emit methane and other gases.
9 In fact a study by a University of Houston team that is
10 from Texas found that emission rates for compressor
11 stations in Texas' Barnett shale were far higher than
12 emissions from fracking well pads.

13 Compressor stations may leak due to the
14 malfunction of a component and they also release gases
15 intentionally. The most dramatic form of these
16 intentional releases is what they call blow downs which
17 are the release of gases to the blow down valve.

18 Now these blow downs are used to control the
19 pressure within the system. They create a 30 to 60
20 meter high gas plume that can last as long as three
21 hours. Normally blow downs are not reflected in the
22 estimates of emissions and the possible exposures that
23 utility companies or pipeline companies use when they
24 are submitting their applications for permitting.

25 Thus the estimates in those applications are
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1 often grossly understated. Meaning local residents may
2 be exposed to far greater concentrations of toxic
3 substances than the permitting decision assumes.

4 I want to share with you very, very briefly
5 the findings of three fairly recent studies about
6 leakage from compressor stations.

7 In 2017 researchers from the University of
8 Texas investigated emissions from natural gas compressor
9 stations throughout the states of Pennsylvania and New
10 York. They found that compressors emitted plumes of
11 methane that spread downwind and were measurable for a
12 mile away.

13 In the second study, this one was conducted in
14 2016 by the Agency For Toxic Substances & Disease
15 Registry, ATSDR, it's an agency of the US government.
16 This study focused on fine particulate matter, what we
17 call PM2.5 and it evaluated data that had been collected
18 by the US Environmental Protection Agency near a natural
19 gas compressor station in Susquehanna County,
20 Pennsylvania. The study found that PM2.5 levels at
21 levels where, if there were long term exposure, it could
22 cause serious health effects. And I'll tell you about
23 those health effects in just a moment.

24 Of course, we know that with a compressor
25 station which runs 24/7 for years and years as long as
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1 the gas is flowing there is a high likelihood of
2 continuous long term exposure.

3 And in another study dated October 2017
4 researchers at the University of Albany, that's in the
5 state of New York, Institute For Health And The
6 Environment, prepared a 300 page technical report on the
7 health effects of the emissions from 18 existing natural
8 gas compressor stations in that state. What they found
9 was that collectively these sites, these 18 compressor
10 stations, released 40 million pounds of 70 different
11 contaminants, that's 70, over a seven-year period making
12 the natural gas compressor stations the seventh largest
13 point source of air pollution in the state of New York.
14 And, as you know, that's a state with, you know, pretty
15 big city there and it's own share of industry.

16 By volume the largest emissions were from
17 nitrogen oxides, carbon monoxide, volatile organic
18 compounds such as benzene, formaldehyde and particulate
19 matter.

20 So, as I said, I'm going to tell you a little
21 bit about the health impacts of these pollutants because
22 they can cause serious harm to health.

23 Nitrogen oxides, the most common or most
24 concentrated of the pollutants coming from compressor
25 stations, decrease oxygen absorption and weaken the

1 lobes. They can, even at low concentrations, aggravate
2 asthma.

3 Carbon monoxide, you probably heard about
4 that, if you inhale that in high enough concentrations,
5 it can kill you because, in your blood, it bonds with
6 the blood cells where oxygen would normally bond and
7 basically you suffocate to death from the inside.

8 Volatile organic compounds are a very large
9 class of chemicals but they are linked to cancer,
10 nervous systems effects -- and when we say nervous
11 systems effects think of the brain -- miscarriages,
12 blood disorders and other effects.

13 But one of the most common volatile organic
14 compounds associated with methane gas is benzene which
15 is itself a carcinogen. It causes cancer. Formaldehyde,
16 another of the gases on the list, is also a known
17 carcinogen.

18 And particulate matter, particulate matter is
19 a category rather than a particular substance. It
20 refers to particles that are very, very small, even
21 microscopic. Particulate matter, when we inhale it, can
22 damage the lungs and the heart because the particles are
23 so fine they can cross the blood barrier in the lungs
24 and circulate through the entire body.

25 They can cause premature death in people with
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1 heart or lung disease. Particulate matter is also
2 associated with preterm birth and low birth weight. For
3 those who don't know it those are the leading causes of
4 infant death in the United States. So we're talking
5 about death and disease not just for the hale and hardy
6 among us but also the most vulnerable.

7 I would also point one other contaminant
8 that's particularly relevant in Virginia for both the
9 ACP and MVP for both of the two pipelines that we are
10 talking about. Since these compressor stations along
11 these two pipelines carry gas that is extracted from the
12 Marcellus shale that gas may very well carry gaseous
13 radon. Radon occurs naturally in this part of the
14 country. When the gas is fracked it comes to the
15 surface with the gas.

16 Radon, as you probably know, is radioactive.
17 Although it breaks down relatively quickly it breaks
18 down into two other also radioactive substances.

19 Finally I would like to mention some health
20 concerns that are specific to the Atlantic Coast
21 proposed compressor station. Because what we know about
22 the impacts of emissions from compressor stations is
23 alarming. And in the case of the proposed Atlantic
24 Coast compressor station we have two additional reasons
25 to be concerned.

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1 First of all the compressor station proposed
2 to be built in Union Hill is massive. It's huge. It
3 would have four gas fired turbine engines with
4 horsepower of 54,000 hp, ranging up to 57,000 horsepower
5 in the winter. That's enormous. And it's a lot larger
6 than most of the other compressor stations that are
7 built.

8 Compressor stations are typically placed about
9 every 40 to 70 miles along the pipeline. This proposed
10 compressor station will be so powerful it will be
11 designed to pressurize gas to transmit over 200 miles in
12 each direction.

13 So the compressor station is huge. The
14 magnitude of the health threats would likewise be
15 greater.

16 Second of all, as you've been hearing from a
17 number of our testifiers today, although Buckingham
18 County is rural the compressor station is not being
19 placed in some unpopulated area. It's been proposed to
20 be placed in a community near residents' homes and
21 subjecting the people of Union Hill to severe threats to
22 their health. That's totally unacceptable. This
23 compressor station and the Atlantic Coast Pipeline
24 itself should not be allowed.

25 Thank you very much. And it's my pleasure now
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1 to turn the microphone over to a wonderful activist,
2 whom I'm proud to count as a friend Ms. Chad Oba.

3 MS. CHAD OBA: So, thank you, Barb, for
4 the introduction. My name is Chad Oba. I am the chair
5 and a founding member of Friends of Buckingham, a
6 grassroots organization that was quickly put together to
7 defend our air, our land, our water and our cultural and
8 historical places of residence from the Atlantic Coast
9 Pipeline.

10 Dominion, right now, is poised to begin
11 construction of the ACP as windfall profits are promised
12 to the company and it's shaleholders and other
13 investors. They are, no matter what, guaranteed a 14%
14 return which is paid by us, the ratepayers but many
15 others would suffer significant losses. Our costs are
16 not factored in.

17 Property owners directly impacted are having
18 their property taken from them through intimidating and
19 very misleading easement offers. They're using eminent
20 domain for their gain and not for the public good. This
21 has been mentioned in numerous of the presentations so
22 far.

23 And all but one county along the 600 mile
24 length of the ACP is below median income for the state.

25 Where I live, in the Union Hill area of Buckingham
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1 County -- I forgot to mention that I am an impacted
2 landowner being that I'm quite close, 1.3 mile, to the
3 proposed compressor station and am surrounded by
4 pipelines. I would be surrounded by pipelines. I have a
5 lateral line of the TransCo that goes directly across
6 the road from me.

7 But landowners are being forced to give up
8 easements while being taken to court for eminent domain.
9 Many do not have the financial means to fight this out
10 in court. And this is providing a certain level of
11 divisiveness within the community where I live as people
12 try to survive as best they can. And this is a direct
13 assault on determining the best use of our own property.

14 I mentioned I live only a little over a mile,
15 my husband and I, from the proposed 57,000 horsepower
16 compressor station, the only one in the entire state.
17 And this is in the middle of what Lakshmi had told you
18 about that 85% freedmen found African American
19 community.

20 For those of us well within the blast zone and
21 now the proposed compressor station locality we receive
22 absolutely no compensation for the loss of our property
23 values on our homes and the constant 24/7 noise but
24 worse, though, is the toxic pollutants that Barb just
25 told you all about.

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1 Our health is going to suffer greatly. Our
2 population is mostly 65 and up, elderly and very young
3 children who often have grandparents as their caretakers
4 because their adult children, their parents, have left
5 the locality for work. Because there is very little
6 work in Buckingham. So our property is going to lose
7 considerable value.

8 My husband and I have lived in this
9 neighborhood for 34 years. We own an old antebellum
10 simple farm house that we have renovated to meet our own
11 needs. It is our sole investment and it's what we have
12 as a legacy for our own children and to ensure that we
13 have some financial resource into the future.

14 This will disappear due to the compressor
15 station proximity to our home but the worst of it is,
16 and it's always been my concern, are the threats to our
17 health and safety. We pay the most with our lives and
18 our property losses and do not get one cent in
19 compensation.

20 I work as a mental health practitioner in the
21 county and I have been for 25-years and I have been
22 witness to, and experienced myself, the anticipatory
23 stress of not knowing what the future holds. This is
24 weighing very heavily on my neighbors as they've been
25 forced to postpone their present and future plans for
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1 their lives. Long periods of uncertainty and looming
2 threats create chronic stress symptoms. Our bodies can
3 handle short periods of that but long periods have a
4 very devastating effect on us.

5 We've been battling this threat for nearly
6 four long years now and it's just caused harmful chronic
7 stress symptoms. And many of my neighbors, many of us
8 as we've mentioned earlier, are elderly and we're
9 already suffering with health issues. This further
10 causes a lot of stress on our systems and will shorten
11 whatever life span we have left.

12 And people are filled with dread as trees are
13 being cut around them. Some of the trees they began to
14 cut and then they got a stop order but it's very
15 intimidating when you have trees coming down right next
16 to your home.

17 And Dominion is making its intimidating
18 presence known. Every time we get a little victory
19 they show up in force. People out on the trucks, out on
20 the road, trees being cut, whatever it takes to send
21 their message. And people are being told to make the
22 best of it as it's going to happen. So people, you
23 know, get discouraged.

24 We are being denied the most basic, the most
25 basic of human rights: Health, clean air and water and
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1 the ability to use our own land but also the right to be
2 heard at all levels of government. Our health, our
3 future, our lives are on the line and they matter.

4 Thank you for giving us this opportunity to be
5 heard.

6 MR. JEEVA ABBATE: Hello. I'm Jeeva
7 Abbate, director of Yogaville Environmental Solutions
8 and I've been working with this same group of people
9 that you're hearing testimony from for the sake of our
10 community, which is five miles from the Union Hill
11 community and only a few thousand feet from the actual
12 ACP routes.

13 Satchidananda Ashram Yogaville is a unique
14 spiritual center located on 660 acres in Buckingham
15 County, Virginia. We offer training in classic yoga
16 practices including prayer, mediation and hatha yoga.
17 Our life-style, spiritual and religious practices
18 necessitate a clean and peaceful environment.

19 The ACP route next to Yogaville places us and
20 our residents, students, teachers and staff, which is
21 estimated at 120 to 200 people on any day, in a
22 dangerous impact zone for any potential leak resulting
23 in fire and explosion.

24 The ACP is a threat to our water, property,
25 school, homes, our Lotus temple in the picture here, and
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1 our ongoing operations. This is a threat to the safety,
2 health and homes of our friends, our neighbors and the
3 whole Buckingham County community around where the ACP
4 is coming.

5 The impact zone, as you can see in this slide,
6 shows the ACP with the red line, then a yellow line
7 drawn to our temple showing it's about 3,300 feet from
8 the ACPs route. Then the next line down is to our
9 school which is approximately 1,660 feet from the ACP.
10 That's kindergarten through 12. And then the bottom
11 yellow line shows our community at the bottom of that
12 screen which is about 1,800 feet from the ACP.

13 This is involving the threat of fire, leaking,
14 pollution. So it's a life and death issue for
15 Buckingham County property owners and for Yogaville
16 residents. We are deep in the impact zone where any
17 fire could burn quickly. And we're going to talk about
18 the safety issues related to that.

19 Noxious fumes and toxic chemicals have been
20 detected within 10 miles of the Leesburg Loudoun County
21 Dominion compressor station by residents in Loudoun
22 County. That's documented. So we're concerned that
23 we're five miles from the compressor station. So those
24 fumes and any problem there could also impact our
25 community.

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1 The pipeline and Hazardous Material Safety
2 Administration treats natural gas as a hazardous
3 material. This is important to understand. The number
4 of serious accidents every year average between 30 and
5 40 major accidents. Only those accidents that cost the
6 pipeline companies more than \$50,000.00 per year are
7 reported. So we're not in a position to understand all
8 the accidents or fires but it's important to know that
9 this happens regularly and this is a hazardous
10 situation.

11 In Highway 77 we had a huge explosion of a
12 20-inch natural gas pipeline. It melted the guardrails,
13 the pavement, caused injury to five homes and obviously
14 you can see this is a huge problem. Our pipe, that will
15 be proposed to come close to us, is 42-inches at 1,440
16 psi.

17 This is the aftermath of a natural gas
18 compressor station leak and explosion. So this resulted
19 in a large fire ball. The person who was near the site
20 had to run about a mile away to be saved and three homes
21 were evacuated. The truck and the property around the
22 compressor station was destroyed.

23 This is the Durham Woods natural gas pipeline
24 explosion. This occurred in New Jersey where a 36-inch
25 diameter pipeline broke and exploded into flames. The
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1 resulting fire destroyed 14 of the apartment buildings
2 and caused over 150 guests to run into the woods
3 because, just like with the ACP, there was no evacuation
4 plan and the police or first responders could not get to
5 the site for about 20 or 30 minutes. This is a major
6 problem.

7 We want to show you that this is the
8 compressor station area. The yellow triangle is where
9 the compressor station will be installed. The red line
10 is the probable impact radius around the blue line which
11 is the ACP route. So you see the church in the robin's
12 egg blue color cross within the probable impact zone.
13 So we, again, are subject to the injustice of having to
14 be threatened by a pipeline that we have studied and
15 realized is not necessary.

16 Now, in addition to the fact that we're close
17 to the route, we also are in the middle of what's called
18 the Central Virginia seismic zone, which includes
19 Buckingham County. So this is a common area for seismic
20 activity, earthquakes. And this is another danger. All
21 you need is a crack in this pipe to have a leak and a
22 possible fire.

23 So this is a slide that April showed that
24 shows the TransCo pipeline is the pipeline that's
25 already under-utilized and could supply all the gas to
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1 the same regions that both the MVP and ACP are targeted
2 to support.

3 If you to go to the top of that TransCo purple
4 line you see that the Cove Point pipeline is right there
5 running to Cove Point allowing the natural gas to be
6 liquefied and then shipped off-site. With such a little
7 demand in any of the domestic regions we can anticipate
8 that that pipeline will be used to shuffle that gas
9 overseas, which is not a reason to apply eminent domain
10 and it will raise the cost of domestic gas.

11 The Buckingham County comprehensive plan that
12 has already been written shows that this area that the
13 pipeline is coming to was intended to be a rural
14 agricultural forest area. These areas are located
15 farthest from the centralized public services such as
16 first responders, fire, rescue and law enforcement and
17 so protecting this area is key to the comprehensive
18 plan.

19 The special use permit that was granted by our
20 county officials violates this plan and violates their
21 own request for safety. So the ACP mitigation plan was
22 inadequate, weak or, in the case of an evacuation plan,
23 nonexistent.

24 And we have already covered some of the
25 impacts to our water, the horizontal drilling, the lack
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1 of critical review of all the waterways that could be
2 impacted, the creeks, the wells and the springs.

3 So the conclusion is that this is an
4 unnecessary project that is an abuse of eminent domain.
5 It's a threat to farm use, livestock, land use, legacy
6 properties, threat to property values, threat to the
7 rural pristine environment and air and water that we
8 require and impact to existing businesses such as
9 Yogaville or farms or any new land development.

10 So we are asking you, please, protect our
11 lives from these hazardous leaks and explosions, protect
12 our health, our children, our elders, our constitutional
13 right to private property, our property values, land use
14 and our animals and our families.

15 Thank you.

16 MS. SWAMI DAI ANANDA: Good afternoon. My
17 name is Swami Dai Ananda. I am one of the monastic
18 members of Yogaville in Buckingham, Virginia.

19 Yogaville is a retreat center community. Has
20 about 275 residents and we host about 10,000 guests
21 annually who come for health, for meditation and for
22 their retreat.

23 So today I would like to show you the place,
24 the people, the wild animals, trees, forests and our
25 water bodies, all of which will be negatively impacted
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1 by the building of an Atlantic Coast Pipeline, which
2 would run as close to 700 to 1,000 feet from our homes.

3 So Yogaville is known for light of truth,
4 universal shrine Lotus, an interfaith shrine. The
5 entire Yogaville was founded by Sri Swami Satchidananda
6 who is regarded as a pioneer of the interfaith movement
7 and as an apostle of peace. He is also one the most
8 revered yoga masters of all time.

9 We practice peaceful and peaceful useful lives
10 starting with health, meditation and service. So
11 Yogaville is designed to serve as a model of how
12 individuals of all different backgrounds can live and
13 work together in harmony. Yogaville functions as the
14 place of principles of truth, non-violence, spirit of
15 dedication, environmental stewardship and universal
16 brotherhood.

17 These are the images from our classrooms of
18 hatha yoga classes for health, mediation rooms, our
19 accommodations and all the different classes and
20 workshops that we hold for children and adults and some
21 of the programs that we provide every weekend.

22 And now we are here showing our kitchen which
23 receives organic vegetables from our own farm. They
24 provide us fresh produce for our vegetarian life-style.

25 These are different members of Yogaville and
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1 Yogaville people also live in harmony with wild animals,
2 deers, bears, bald eagles and many other creatures.

3 We have ponds, streams, over 20 bubbling
4 springs. And our Yogaville green teams environmental
5 education for youth have showed that our streams host
6 creatures which only live in purest water.

7 This is Yogaville And Environmental Solutions
8 logo, which is an organization that works to oppose the
9 pipeline as well as move us toward renewable energy, the
10 director of which is Jeeva Abbate who was the speaker
11 before me.

12 This is the image of our beautiful James River
13 bordering our property. James River was known by some
14 native people as Waloa, winding river.

15 And if you can see this map there is a Lotus
16 shrine to the right. That red line is the approximate
17 line of the pipeline which will run right by us.

18 And this is the image of the pipeline
19 construction. There will be two pipelines 42-inches
20 side by side. And we are particularly concerned about
21 the James River and its well-being because the proposed
22 horizontal directional drilling will likely damage our
23 ecological health of our wetland.

24 And I'm going to stay on this image for a
25 little awhile to speak about the HDD, horizontal
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1 directional drilling, because all of us here in this
2 community have wells. We depend on the aquifer or the
3 water below our grounds for our drinking and all other
4 uses of water.

5 So geotechnical site investigation report by
6 Geosyntec for ACP, which was not shown to us, that
7 crossing the James River, and I'm going to quote, "The
8 boring log provides bedrock descriptions that indicate
9 conditions that can negatively impact HDD feasibility.
10 Specifically the borings encountered in the marble are
11 indicative of solution. The same as encountered in
12 crustic limestone. Such solution cavities can
13 substantially deflect the drill pipe due to low cycle
14 fatigue. The material characteristic that most
15 frequently prevents successful HDD installations is the
16 large grain content in the form of cobbles and boulders
17 which are found under James River. This amount of
18 material found under James River are the type of
19 material described as most frequently preventing
20 successful HDD installation."

21 So it also says that, "At least additional
22 geo-technical borings should be conducted -- at least
23 additional studies to verify the bedrock conditions
24 underlying the James River."

25 Our communities have been asking for, and many
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1 other communities in fact, stream by stream studies of
2 more than hundreds of rivers and streams crossings. So
3 this has gone unheard and not responded to.

4 So during this water control board DEQ hearing
5 we hope that they will change their mind and actually do
6 those studies.

7 And I'll just go quickly for the rest of the
8 images to show -- I think we have seen these before.
9 Yes James River. Downward. Yes, I think there we were.

10 Just to show you how much of peaceful protest
11 and respect and reverence to water and our nature we
12 have done, now you'll see that James River has had 500
13 year flood in 1980's and couple of 100 year floods in
14 recent times. These are all of our community members
15 doing peaceful protest.

16 And we share this beautiful photo of James
17 River at sunset to ask all of you to please help us to
18 protect our water, our environment, so that we can
19 continue our life here and service to our children,
20 future generation and all of our guests.

21 Thank you very much.

22 MS. HEIDI DHIVYA BERTHOUD: Hi, my name
23 is Heidi Dhivya Berthoud and I live downstream about a
24 mile from where the James River would be crossed by the
25 ACP. I've been living on a bluff above the James River
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1 for about 27-years and I'm secretary of Friends Of
2 Buckingham and project manager for the base line testing
3 and also I'm a member of Buckingham We The People.

4 So communities across the US and around the
5 world are being told that they don't have the right to
6 make critical decisions for themselves. They are told
7 they can not say no to fracking, pipelines or factory
8 farming. They are told they cannot say "yes" to
9 sustainable food or energy systems.

10 Agencies such as the EPA do not actually
11 protect us, rather, they regulate the amount of harm
12 that is inflicted on our communities.

13 Our system of law elevates corporate
14 decision-making over community decision-making.

15 The work of CELDF, Community Environmental
16 Legal Defense Fund, is a paradigm shift towards
17 democratic rights of local self-government,
18 environmental rights, the rights of nature and workers
19 rights.

20 The grassroots organization, Buckingham We The
21 People, have worked with CELDF for the past two years to
22 create the James River Natural Community Bill of Rights,
23 the first such ordinance in Virginia.

24 Excerpts from the bill are as follows.

25 The James River natural community possesses
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1 the right to exist, flourish and naturally evolve,
2 including the right to restoration;

3 It has the right to a clean and healthy
4 environment, including the right to clean air, pure
5 water and healthy soil;

6 To restore and protect the James River natural
7 community we recognize that we must secure the highest
8 protections through the recognition of legal rights for
9 nature herself;

10 Therefore, we deem it necessary to alter our
11 system of local government and we do so by adopting this
12 ordinance. The James River Natural Community Bill of
13 Rights.

14 The James River watershed plays important
15 roles that contamination would destroy. It is a water
16 source for wells and for communities along its length,
17 including the Richmond metropolitan area with a
18 population of 1.3 million. It provides habitat for
19 wildlife, recreation, tourism, irrigation,
20 transportation. It provides essential wetland for
21 absorbing and mitigating seasonal and storm flooding.

22 The James River is the northern border of
23 Buckingham County, the Yogaville community and my
24 personal land.

25 From Virginia Tech Extension Service, a little
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1 info, Buckingham County lies in the Piedmont physio-
2 graphic province, the largest in Virginia, extending
3 west of the fault line to the Blue Ridge Mountains.

4 The diversity of geology results in wide
5 variations of ground water quality and well yields.
6 Ground water use, in many locations, is limited. For
7 example, a few areas have problems with high iron
8 concentrations and low ph. Hard crystalline, igneous
9 and metamorphic formations dominate this region.

10 The size and number of fractures and faults,
11 which store and transmit ground water in the bedrock,
12 decrease with depth. So the most significant water
13 supplies are found within a few hundred feet of the
14 surface.

15 Because of the range in ground water quality
16 and quantity in this region, as well as the varying
17 potential for contamination, well site evaluation and
18 well monitoring is very important. So says our great
19 institutions.

20 The Mountain Valley pipeline crosses the
21 Roanoke River, impacting the water of 100,000 people in
22 the City of Roanoke. The Roanoke River also feeds the
23 lake from which the water is piped to Virginia Beach,
24 thereby, affecting the water of that city and nearly a
25 half a million people. Mini wiconi, water is life.
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1 L'eau est la vie. Thank you.

2 MS. ANITA PUCKETT: All right. I'm Anita
3 Puckett. I'm at Virginia Tech in Appalachian Studies
4 and I am a consultant on this project with Preserve
5 Montgomery County. Yes, it's just Preserve Montgomery
6 County, Virginia, nonprofit. You know, I've said it a
7 thousand times a day.

8 It's one of the things about coming in a
9 little bit later is that all of these people have all
10 contributed to my presentation and also have reinforced
11 what I'm about to say. So I'm going to be editing as I
12 go through this so I'm not repetitive.

13 And, April, I'm very grateful for what you
14 said. And, Heidi, you just helped me as well. And, so,
15 let's move on here.

16 The 303 mile or 488 kilometer Mountain Valley
17 pipeline carries fracked gas and its particulate residue
18 of carcinogens from West Virginia and Pennsylvania
19 production fields across some of the most
20 environmentally challenging geological and ecological
21 terrain in the world, not just the United States.
22 Highly diverse in flora and fauna on par with the
23 Brazilian Rain Forest in it's geological and bio-
24 geological diversity. It is offered hundreds of unique
25 aquatic and floral species found only in specific eco-
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1 zones supported both by sedimentary and metamorphic geo-
2 morphology.

3 And what makes us different from West Virginia
4 is this metamorphic rock geo-morphology because it's
5 fractured, it's harder, it's going to require blasting
6 and all kinds of other adjustments in construction and
7 maintenance that aren't present in other places in West
8 Virginia.

9 The Virginia region, which is where I'm
10 focusing, is impacted by the MVP and it is still
11 pristine for the most part, nurtured and supported by
12 many of the long term residences up to nine generations
13 and 250 years who live there.

14 The complexity of the biosphere has, in turn,
15 led to extremely nuanced and deeply attached human
16 ecological relations that literally attach these long-
17 time owners and their kin to the land around them and
18 deeply significant cultural relationships that many
19 label as cultural attachment or place attachment.

20 Losing these identity relations through mega
21 pipeline construction and fracked gas transmissions is
22 destroying them and will continue to destroy them and
23 their natural environment in which they're identified
24 because of these deeply rooted nuanced relations.

25 These identifications have resulted
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1 historically in their being labeled Appalachian
2 hillbillies who are deficient and backward, in popular
3 media and in the general American and Virginia
4 governmental ethos.

5 These deracinations have resulted in ongoing
6 state and governmental stances or actual policies that
7 are doing little to nothing to mitigate or stop the
8 human rights degradations they are currently
9 experiencing as others have talked about.

10 Now I understand that the cursor isn't working
11 but and if you will look at this map the red line arc
12 separates West Virginia from Virginia sort kind of, but
13 the three little circles represent places I'll be
14 talking about mostly in the rest of my talk.

15 The one closest to the arc is over in
16 Jefferson National Forest. The one in the middle has to
17 do with Newport, Virginia. And the third one on the
18 right has to do with eastern Montgomery County and with
19 the Spring Hollow Reservoir that Heidi just talked about
20 and that area in there.

21 So the first area to be talked about, which
22 Barbara Gottlieb did so very well, are the health
23 issues. And I'm going to be borrowing from my
24 Physicians For Social Justice colleague, Tina Schmooz,
25 to say just a few things because Barbara said so many of
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1 them.

2 Every stage of the MVP from tree clearing to
3 construction operation carries pollution. It does not
4 stop. It continues from beginning until it's stopped
5 being used and is pulled up again.

6 The pipeline will cross over at least 100
7 waterways and the watershed of the Roanoke River serving
8 over 200,000 people. And as Heidi just noted we're
9 going to get down into half a million by the time it
10 gets to the southeast of us.

11 Over 100,000 tons of new sediment, and I think
12 that is a low number, into the Roanoke River will come
13 from the project. It carries long buried toxic
14 pesticides -- we haven't talked about that -- which can
15 pollute downstream waters as they flood and bring out
16 these old pieces of dirt that have been sitting there
17 for a long time. These old pesticides will become
18 active again.

19 In the Mountain Valley pipeline there is no
20 mercaptan, no odorant, and this means that residents,
21 wildlife and visitors, will not know when there is a
22 leak. And so we're going to have issues in terms of
23 methane poisoning that will have profound impacts. And
24 we're not allowed to put things on the easement as well
25 as it turns out, at least not right now.

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1 The transmission pipeline failure has
2 increased 6 fold since 2010. And on this slide here, I
3 just put this in from Tina's presentation, and you can
4 see that -- you can't necessarily read the numbers, it
5 might be hard to read, but back in the 1940's we had a
6 lot and it went down, down and down but in 2010s where
7 they'd just come back up and they're as high as they
8 ever been. And they attribute this to sloppy
9 construction, sloppy maintenance and to just leaks and
10 other kinds of issues because they're not paying any
11 attention to the environment.

12 Water and species losses are inevitable and
13 the very livelihoods of local residents, as many people
14 have talked about with the way people hunt, gather, use
15 subsistence agriculture and other ways of getting
16 fishing.

17 And I just put up, too, that we pretty much
18 know will go. One is the brook trout. It's over in --
19 it's not as endangered as the Roanoke log perch but it
20 is threatened. And it probably will be out of the
21 Roanoke River very soon because sedimentation during
22 construction is happening right now.

23 The Roanoke log perch is very much endangered
24 and it requires a very pristine waters that aren't too
25 acidic, and they're being destroyed right now along the
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1 north fork as we are having our session here today.

2 Now I have some quotes from people but Irene
3 covered some of that so I'm going to skip that for the
4 moment.

5 The steep slopes in the region guarantees
6 extensive sedimentation. Over here on the right we
7 have an existing 18-inch pipeline easement on Peters
8 Mountain, which is in the boundary between Giles County,
9 Virginia and Monroe County, West Virginia. This
10 particular -- it goes up to about 4,000-feet, 3800-
11 feet, and you've got this collapse of the soil that has
12 come down, because it's so steep, and the collapse has
13 caused heavy sedimentation down into a sink hole at the
14 bottom. This on the West Virginia side. The water in
15 that sink hole that was going underground was used by an
16 adjoining community for their public water.

17 Their filtration system had to be changed or
18 the filters had to be changed about every three months.
19 Now it's almost every week because of this collapse.
20 They can not afford it. They're going out of business.
21 They have no water.

22 Over on the left, if you can see it, is the
23 slopes are so steep that construction requires that they
24 use guy wires and cables to hold the equipment to
25 literally dig it. And as others have shown they are not
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1 going to be putting in adequate kinds of mitigations to
2 hold this sedimentation back. So it's going to be a
3 major problem. They are going to, because of the
4 metamorphic rock in Virginia, they're going to have to
5 blast and blast a lot with dynamite.

6 And we're talking about -- some people are
7 calling it mountain top removal. Southwest Virginia
8 finds that offensive but, nevertheless, it's something
9 like it.

10 Karsts in our area is another factor. Now
11 karst is created because you have sedimentary rock,
12 usually limestone, dolomite, that dissolves easily with
13 water and you get these expansive underground systems of
14 water connectivities through such things -- and I hope
15 my cursor is working. You have caves. You're going to
16 have underground streams that come out like Sinking
17 Creek does over in the Newport area. And then you have
18 sink holes which come down.

19 Now what this means is that all of these are
20 connected. If one becomes contaminated or poisoned it's
21 going to impact miles and miles and miles of other
22 people's waters, community water supplies, underground
23 species, ground species and so on.

24 Here, this particular slide, shows a well
25 coming down into a karst topography and how complex they
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1 are.

2 This one is what the kind of thing, the bottom
3 one, is what Mountain Valley is doing. What they're
4 doing with the sink holes is they're treating them as a
5 static feature instead of a dynamic features that they
6 are. So they're just pouring boulders into them and
7 then building the pipeline over it.

8 And I'm afraid I can't remember who talked
9 about it but the idea is you've got these pipelines,
10 these 42-inchers, are not going to be stable in that
11 environment because it is dynamic and, over time, it
12 will leak. It will probably rupture.

13 And then you have the Giles County seismic
14 zone, which April mentioned, which is an active seismic
15 zone and it will come in and as having earthquakes may
16 indeed cause it to break and then we will get leaks and
17 explosions.

18 So the karsts, we're an incredibly heavy karst
19 area and I thought Irene was going to cover that so I
20 didn't put my slide back in to show you where it is but
21 it's everywhere in Virginia and in parts of -- in the
22 Virginia sections and also in the West Virginia
23 sections.

24 This particular slide is one that shows you
25 the extent and what's going to probably happen. In the
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1 upper left hand corner is Brush Mountain and about 25
2 miles away to the right is the Spring Hollow Reservoir
3 that Heidi mentioned about. And the water, we've done
4 dye testing, the water from Brush Mountain will come
5 down underground along into the Roanoke River all the
6 way through. This whole field here will be impacted.

7 We're talking about a huge area here will go,
8 sediment will go, toxins will go, pesticides will go
9 into the Spring Hollow Reservoir and they will have to
10 filter it out. They're anticipating a multi-million
11 dollar increase in their filtration they're going to
12 need and that will be passed on to the ratepayers and to
13 the local citizens, not to mention what it will do to
14 the environment. Hundreds of thousands of people and
15 now half a million people will also be involved because
16 they're selling their water.

17 And then this one is the potential destruction
18 of cultural capital and communities' abilities to
19 survive. And perhaps the most salient is Newport, this
20 little community in Giles County, Virginia. The MVP has
21 been approved to run directly through the Newport Rural
22 Historic District. Close to, too close to, like within
23 15-feet of one structure, 50-feet, to close to many of
24 them of homes, churches, schools, community centers and
25 even the volunteer fire rescue station.

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1 And what we have here is two views of the same
2 thing. At the top is looking down the road, Route 42,
3 and you can see on the right-hand corner where they've
4 cut the trees or constructing, if not today, they'll be
5 constructing there very, very soon.

6 And then the bottom slide is looking from the
7 top of the mountain down through the tree cutting. At
8 the bottom is the exact same piece of road that you're
9 seeing in the top picture.

10 And if my cursor is working at the top you
11 will see a local church, the Methodist church and beyond
12 it are some storage and homes. To the left are some
13 homes. Down in the lower left corner on the other side
14 of the cut is the community center. And beyond that is
15 the fire station, all within very easy reach of some
16 kind of blast or issue leakage from the pipeline.

17 And so these rural historic districts -- it
18 was created in 1790s. These homes some of them go back
19 earlier and they are 200-year old home in many cases.
20 The church is almost that old. And these historic
21 districts are formed by deep relationships and linkages
22 between natural and historic features and the people who
23 live and work in them.

24 Just look at the slide. How can an area
25 retain it's historical significance, its deeply felt and
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1 constantly regenerated sense of animacy and personhood
2 with a 150 foot right-of-way through it and a final
3 50-foot easement between historical structures dating
4 back to the late 1700s when you have this 42- inch
5 pipeline.

6 Now Preservation Virginia has put Newport on
7 its state list of most endangered historic places.

8 Here is something. I can take you to it right
9 now. Out here in Catawabe Valley looks very much like
10 this as they're digging through to plant the pipeline
11 here very close to Newport. I haven't been out there in
12 a few days. I don't know if it's looking exactly like
13 this but it will look very much like this right through
14 the center of town.

15 And so Kalkan residents live here when they
16 live in fear. And we've been talking about that. That
17 it will leak and contaminate their water, land or air if
18 not actually explode. And they can't sell their
19 properties, of course, because of the pipeline.

20 And this scenario is not unique. It's true of
21 every actual community and culturally attached home
22 place near where the MVP runs.

23 Now there is push back. We're getting push
24 back in terms of our own residents. All of us are doing
25 this but direct action has surfaced as well. Direct
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1 actions for the ACP and the MVP.

2 In our area, here we have where the corridor
3 is going over. This is over on Brush Mountain at the
4 top is where we're going to get -- yeah, this is Brush
5 Mountain and this is where we've got the Appalachian
6 Trail at the top.

7 And we're in Jefferson Natural Forest where we
8 currently have two tree sitters out of five total that
9 still remain perched high in the Jefferson National
10 Forest, and April mentioned this earlier.

11 On the Virginia side in Montgomery County is
12 Nutty. He's about 34-years old. And on the Monroe
13 County, West Virginia side is a man named with a
14 pseudonym of Deckard. Both of them are on Peters
15 Mountain, which this is not, but it's close to it.

16 Nutty has been in a monopod longer than has
17 Deckard, since April 6th, and she's had been able to get
18 no restocking of her food or water because of the
19 National Forest Service. She has only a few applesauce
20 containers left as of yesterday and some Power Bars.
21 Water is coming from collecting rain water. And luckily
22 it rained yesterday.

23 And on-the-ground supporters, of whom there
24 are many, they cannot get to her. The Forest Service and
25 others are arresting them if they try. And they are
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1 armed to the teeth and they are not letting them get
2 in. And she cannot get medical care. We don't know
3 what kind of shape she's in. Of course, her cell is
4 dead by now, pretty much dead. She's got a charger but
5 communications are weak and not happening very often.

6 And then, the other thing is, she can't get
7 any legal counsel. The Forest Service people are saying
8 just let her come down out of the tree.

9 This is in violation, direct violation of the
10 Geneva Convention and other state and federal laws
11 regarding the treatment of our citizens.

12 Nevertheless, as of this writing both Nutty
13 and Deckard are still in the protection of the
14 Appalaches and, by the way, her mono pad.

15 Let me give you a picture of this. This is
16 what they're doing to her at night, shining light at her
17 so she can't sleep. They played horrible music for
18 awhile but they've stopped that. And she's protecting
19 the guy wires that are coming down here from the mono-
20 pod and are keeping them from opening the gate to the
21 Appalachian Trail so they can get across and do more
22 cutting over there. Deckard is just in the forest.
23 Similar kinds of situations though.

24 And then so direct action grows and legal
25 actions increase. Citizens are assuming a stance of
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1 asserting their democratic rights to resist
2 construction, such as in this tribunal, and the
3 operations of a methane transmission line with a
4 minimal, mostly no local or domestic use as we try to
5 keep on fighting it.

6 But before I stop I need to contextualize this
7 discussion of human environmental impacts at the local/
8 regional levels to the larger global issues of climate
9 change. And I want to refer you to this really
10 fascinating report constructed under Obama's
11 Administration. And it's called A Bridge Too Far.
12 Appalachian Basin And Gas Pipeline Expansion Will
13 Undermined US Climate Goals.

14 And I'm just going to make a couple of
15 comments. Please read it if you can. I think maybe we
16 can get it up on our web site.

17 First, the Appalachian basin is the key source
18 of potential US gas production growth in the future
19 because of the Utica and the Marcellus. And in the past
20 decade natural gas production in the Appalachian basin
21 has experienced unprecedented growth, particularly in
22 the Marcellus and Utica in Pennsylvania, West Virginia
23 and Ohio.

24 So the gas production has grown 13 fold since
25 2009 reaching over 18 billion cubic feet per day in
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1 2015. It is widely expected that production in the
2 Appalachian basin region will double over current levels
3 by 2030s. And in 2010 the Appalachian basin produced
4 just 4% of the US gas production but by 2030 it could
5 provide 50%.

6 With the completion and operation of the MVP
7 and with Trump Administration's withdrawal from the
8 Paris Climate Agreement there is almost no limit on how
9 much natural gas can be dumped into the air and
10 surface.

11 Climate change over the tipping point appears
12 inevitable if we don't stop this thing. With a project
13 of 2.4 billion cubic feet per day of transmission the
14 Mountain Valley pipeline will be a major contributor to
15 this disastrous outcome. They're counting on it for
16 that particular financial gain.

17 Now that ends officially what I wanted to say
18 but I do want to add that, omitted from this brief
19 presentation, has been the archeological impact on
20 Native American sites where other people have come in
21 and other people have talked about it as well but they
22 are there and I just didn't have time to deal with them.

23 And they are commonly overlooked by MVP, the
24 archeological sites are. They are hiring really
25 inadequate people to do it.

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1 And the African American communities that we
2 have along on the Virginia side of the MVP, I haven't
3 had a chance to talk to about them either, but Union
4 Hill, and they have a lot in common. But regardless,
5 the situation is often the same as it was for the whites
6 for harrasination and dismissal, dehumanization by a
7 major corporation, government agencies and several state
8 agencies are denying Appalachian residents full
9 participation in the democratic process. A situation,
10 if not a condition, that continues the labeling of them
11 which we are hearing almost every day as just a bunch of
12 dumb hillbillies.

13 And now I'll pass it on to Robie.

14 MR. ROBIE GOINS: So this presentation
15 today is for the People's Tribunal On Human Rights And
16 Environmental Justice Impacts Of The Fracked Gas
17 Infrastructure.

18 In summary this presentation will share
19 information about one North Carolina's state recognized
20 tribes, the Lumbee. My testimony will be detailing some
21 of the impacts that the Atlantic Coast Pipeline will
22 have on the Lumbee people and the tribe.

23 Once gain my name is Robie Goins. I'm a
24 Lumbee indian from Robeson County, North Carolina. This
25 testimony is based on my personal knowledge, information
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1 and belief.

2 I am a member of the Lumbee tribe and my
3 family has been in this area of North Carolina for many
4 generations. I have seen historical documents showing
5 that my ancestors have been in or our around Robeson
6 County area since the 1700s. My family and I have long
7 fought for the health and prosperity of the Lumbee tribe
8 and its community within Robeson County.

9 Early on the earliest European documentation
10 of Native Americans in these communities was done by
11 John Herbert in 1725 who was an English commissioner of
12 indian trade for the Wineau factory on the Black River.
13 Herbert identified the four Siouan speaking communities,
14 which is Saraw, Pee Dee, Scavano and Wacoma. Modern day
15 Lumbees claims connections to these settlements.

16 The indians of Robeson County who have been
17 called Croatan and Cherokee are descended mainly from
18 certain Siouan speaking tribes but we are predominately
19 Cheraw or Keyauwee. And we also have some remanents of
20 the Eno and Shakori tribes.

21 It's also important to state that some of the
22 families that originated here also spoke Algonquian and
23 Iroquoian languages.

24 The Lumbee tribe is a state recognized tribe
25 and it has about 60,000 enrollment membership and most
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1 of the members are living here in Robeson County. And
2 the Lumbees were recognized as a Native American tribe
3 by the United States Congress in 1956 under conditions
4 that it agreed to at the time, which did not allow them
5 to have benefits available to other federally recognized
6 tribes.

7 The Lumbee are one of the eight state
8 recognized North American tribes in North Carolina that
9 have been recognized by the state and this route
10 actually impacts four or five major tribes.

11 Archeological evidence shows that Native
12 American cultures have long occupied present day Robeson
13 County. And indians of diverse cultures have continued
14 to reside here during the historical period after
15 European colonization.

16 Some of the home places, some of the people
17 here, you know, they talk about home and its importance
18 to us. Some of them are local farmers and they say that
19 soil gives us life. We treat the land as being one with
20 our existence.

21 They treat the land like dirt, meaning these
22 developers, these companies, these corporations that are
23 coming in. They don't see the value that the soil that
24 they're building on actually possesses.

25 And then some other land owners in the area
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1 gave a quote saying, "Having a pipeline directly under
2 your land means that you are in a blast zone from which
3 you may not escape. The pipeline is already here. Our
4 tribe has already been impacted by past pipelines. We
5 need to be planning for our future. One that will not
6 include a pipe that may fail and/or corrode in the
7 future."

8 And this is an old story of injustice. The
9 pipeline's threat is an old story. One that my family
10 and the community has been familiar with for over time.
11 The companies and government officials responsible for
12 the pipeline have not been transparent throughout this
13 process and those of us who will be most affected by the
14 pipeline have been ignored or misinformed.

15 North Carolina of two centuries ago presented
16 an unbroken expanse of long leaf pine. Curiously enough
17 they grew up a legend that only the pines of North
18 Carolina could produce the particular grade of tar that
19 had found such favor throughout the world.

20 North Carolina prospered because of the legend
21 and monopolized the business. It become famous through-
22 out the world for its turpentine products. So you can
23 see in the past this region was basically taken from its
24 resources a large amount of trees for a turpentine
25 industry that sold it to other countries for naval
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1 construction for their ships at sea.

2 Right now I know everyone before me has talked
3 about some of the pipelines and things. Here in North
4 Carolina you can see with this line here is the proposed
5 route of the ACP. And you can also see what many have
6 spoke about as the TransCo. And, again, the TransCo is
7 an interstate type pipeline that goes through many, many
8 states to deliver gas. I think they deliver about 9.8
9 billion gas each day or something like that. I
10 apologize.

11 But the terminus in Robeson County is here for
12 the ACP. Here is going to be the terminus and this is
13 where Robeson County is for most of you all.

14 This is the east coast of the -- the Atlantic
15 Coast is here, this is the east coast, Maryland,
16 Virginia, North Carolina and South Carolina.

17 Again here is some existing gas transmission
18 pipelines here in Robeson County. And, again, this is
19 the proposed terminus for the ACP. As you can see
20 existing Piedmont natural gas pipelines, which basically
21 come off the TransCo, go right through Prospect. And
22 this is one of the biggest communities that the Native
23 Americans in this county reside.

24 And you can also see we have other
25 infrastructure gas pipe infrastructure that feeds most
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1 of our major towns like Saint Pauls, Lumberton and
2 Pembroke.

3 So some of the key players in Robeson County
4 gas distribution. North Carolina energy utilities use
5 existing natural gas pipelines and related
6 infrastructure. Most used gas comes, again, from the
7 TransCo pipeline. You have the Sandhills pipeline which
8 comes off the TransCo.

9 In 2001 it was stated by CP&L, Progress Energy
10 Carolina's Electric Utility made a long term agreement
11 for gas from TransCo pipeline. And now they've also fed
12 other gas-fired powered plants from the TransCo.

13 So what Duke Energy and Dominion are doing,
14 they're trying to get an avenue to a pipeline where they
15 don't have to depend upon the TransCo. Where they can
16 basically have control of their own destiny and have
17 control of their own pipeline.

18 Current infrastructure here again at Prospect
19 this current infrastructure is a compressor station that
20 is already there. And this compressor station has been
21 here since the early 50's and 60's. What we have now is
22 existing pipes that are basically sticking out of the
23 ground in anticipation for delivery of the ACP.

24 The ACP would attach to these and then that
25 would create another streamline for the gas to go back
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1 and forth this way to Wilmington and this way to
2 Charlotte, North Carolina, where there are both gas-
3 fired power plants on each end, with one being the Smith
4 power station and being one the Sutton steam plant.

5 So proposed infrastructure. For Prospect, the
6 Prospect/Pembroke compressor station, this thing right
7 here, is also going to get a M&R station. In this
8 proposal they're planning to bring a M&R station, a
9 metering and regulation station, here to Prospect which
10 also emits emissions just like compressor stations in
11 what others spoke about previously.

12 There's emissions coming from the compressor
13 station and now there's going to be emissions from the
14 M&R stations in the form of blow downs and things like
15 that. So this is what's coming here to Prospect. And
16 along with the 350 foot tall communication tower, lit
17 and blinking at night, and this is coming to Prospect.

18 For native people the open sky both day and
19 night is a natural and cultural resource. The proposed
20 tower would obstruct the open view in our community of
21 Prospect and for miles around. It is not in harmony
22 with the natural beauty of Prospect community.

23 Here you can see the high consequence area
24 that will be created with the introduction of this M&R
25 station coupling that with the compressor station. If
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1 you can see here on the left side of road is where the
2 M&R station will go. The right side is the compressor
3 station. This line is the ACP and it's coming into the
4 community of Prospect and will be meeting there.

5 This is really relevant for my family
6 especially because for my family we're concerned about
7 this possibility of an explosion from the new
8 infrastructure.

9 Pipelines are not immune from accidents and
10 they are vulnerable to natural disasters that are common
11 in the areas such as hurricanes and flooding.

12 This area of North Carolina received a huge
13 hurricane just two years ago in the form of hurricane
14 Matthew that left many without homes, many flooded, some
15 even lost their lives. And in 2000 in New Mexico a
16 pipeline explosion killed 10 people. The size and
17 pipeline that is coming here to this area is actually
18 the same size as that pipeline.

19 My brother's home is on the edge, if you can
20 see, adjacent basically right here in this corner. My
21 brother's home is at the edge of the blast zone.

22 The blast zone, if you can see, is this purple
23 area. This is just the blast zone. I'm sorry, the
24 smaller purple is the blast zone. Actually the bigger
25 area is the evacuation zone. So he's on the border of
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1 both evacuation and blast zone in this area which is
2 adjacent to this compressor station.

3 Like I said pipeline incidents occur annually
4 throughout the US. We've had two incidences here in
5 Robeson County on the Piedmont natural gas line since
6 2014. It, again, it was in Saint Pauls and in Saint
7 Pauls up here and in Lumberton, North Carolina.

8 So compressor stations and meter regulation
9 stations are a common source of methane leaks, we know
10 that, and the leaks pollute our air. Robeson County,
11 especially the Prospect community, will become one of
12 the most dangerous locations along the route of the ACP.

13 For approximately 125 to 150 years my family
14 has lived on that property adjacent. My brother and his
15 family now live on that property and I live about two
16 miles away. So our family is very concerned about the
17 possibility of this explosion.

18 And there are other approaches to
19 infrastructure. I mean for us the Native American
20 community view it differently than modern industrial
21 companies for the approaches to develop based on two
22 traditions.

23 For relationship with nature. We want to
24 preserve and restore nature. They want to extract and
25 it contaminate it. With relationships with the land,
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1 source of life to preserve. Their's, its a resource for
2 material gain.

3 Business fellowship. We want it to be more
4 local and tribal and they want to be absent, national,
5 international. And that is one thing that they're
6 trying to do with this pipeline is take this gas to
7 these exports to be a competitor into the world market.
8 They're competing with Russia on that platform.

9 And other relationships to climate change, the
10 great cleansing has begun. How further fossil fuel
11 development, particularly shale and methane gas, they
12 say -- they're denying climate change and they promote
13 shale and they promote methane gas, and the only
14 remaining fossil fuel where profits can be maximized by
15 the industry.

16 And again this is just some alternatives that
17 Robeson County could be looking into, biomass, solar.
18 We're big on that in this region. And also landfill gas
19 and fuel cell.

20 The Atlantic Coast Pipeline in their final
21 Environmental Impact Statement to the Federal Energy
22 Regulatory Commission, FERC, they gave some bad
23 information or incomplete information. There are three
24 North Carolina tribes. We noted inaccurate and
25 incomplete assessment and final draft statements and we
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1 requested formal consultation with the federal
2 regulators.

3 The federal regulators ignored requests for
4 consultation, asked the developer to communicate with
5 the tribes instead.

6 And then the final statement in 2017 mentions
7 the tribes by name but did not correct inaccuracies or
8 address all tribal concerns.

9 Decision on the federal permit is currently
10 pending but decision-making documents lack tribal input.
11 So FERC, you know, approved this permitting process and
12 they have incomplete information to back their decision
13 up.

14 And for the impacts for Native Americans
15 there's 30,000 Native Americans that live within one
16 mile of this proposed route and which is 25% of North
17 Carolina native population. So that's 25% of our native
18 population in North Carolina being affected by this
19 route. That is 13%, and it's 1.2% of the North Carolina
20 population and 13% make up the total population of
21 people affected.

22 Some of the tribes along this routes that are
23 affected are the Lumbee, the Coharie, Haliwa-Saponi and
24 the Meherrin.

25 Federal regulators ignore directions to flawed
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1 analysis and deny that the Native Americans are
2 disproportionately impacted by the route. Instead
3 federal regulators concluded that poor and minority
4 populations would not be disproportionately affected.
5 That's a lot of people affected along this route right
6 here.

7 So some of the organizations that we've worked
8 with in the past have like been the Advisory Council On
9 Historic Preservation where they, in their own book or
10 own proceedings, give us as an example of being
11 discriminated against by the US government.

12 It talks about us getting recognition in 1985
13 but then getting federal recognition in 1956 with
14 special benefits.

15 And so the Advisory Council say that while a
16 statutory requirement exists to include indian tribes,
17 and they've chosen Section 106, Consultations, federal
18 agencies should remember that non-federally recognized
19 tribes can and often should be involved. Their
20 contributions to the process can include a deep
21 knowledge of the history and resources in their home-
22 lands.

23 And they give us, the Lumbee of North
24 Carolina, we have occupied this present day homeland for
25 generations.

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1 And there's other books, other reports, that
2 talk about the flawed environmental justice analysis by
3 Dr. Emanuel. And then there is our native communities
4 being overlooked in the ACP process and then on the
5 defense against the environmental policy.

6 With that environmental policy and the attack
7 on it we're going to see greenhouse gas emissions heat
8 up our atmosphere in the next 30-years or 40-years.

9 We're here right now and in 2060 we are going
10 to be 6 degrees warmer on average July. So it's going
11 to get hotter with these greenhouse gas emissions that
12 are coming from these leaking pipes, that are coming
13 from these compressor stations, that are coming from
14 metering and regulation stations.

15 More infrastructure means more leaks. And 3% --
16 if they leak 3% then it's heating up our atmosphere.
17 And they're leaking more than 3%.

18 The stakes are high for Robeson County. This
19 is an image that shows future gross domestic product for
20 the 2100 year mark. So it's a little bit off but still
21 it shows that 11% of our total county GDP will be lost
22 in the year 2100 due to the rising temperatures.
23 Meaning our crops won't be able to grow. Our water is
24 going to basically evaporate and we won't have access to
25 that. And that is what this slides shows is that we're
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1 already competing for water sources here.

2 With the Hurricane Matthew it came in to North
3 Carolina and Robeson County was flooded. We had a lot
4 of sedimentation that came out that of storm. The same
5 sedimentation our rivers were polluted by.

6 This same sedimentation is going to come from
7 construction of this Atlantic Coast Pipeline. If this
8 Hurricane Matthew would have hit and these guys would
9 have had opened up these holes in to the ground and
10 scarred Mother Earth there would have been way more
11 sedimentation along the banks of the Lumbee River and
12 other rivers leading to the Atlantic Coast. So there
13 would have been more sedimentation going into the coast
14 and affecting marine life.

15 For American indian health out come
16 disparities. Some of the racial disparities: We have
17 higher infant mortalities, our life expectancy is lower.
18 We have decreased access to health services.

19 Some critical data. American indian mean
20 average age is younger than the major majority of the
21 population. We have higher morbidity of diabetes,
22 hypertension, asthma and arthritis. And some of the
23 social determinants, 22% live below the poverty line.
24 And I'll show you a demographic of that.

25 The path that this pipeline takes goes into
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1 areas of low income families, high minority populations
2 and for American indians we have 58% have had high
3 school education or less and 7.8% are unemployed.

4 Leading causes of death for us are cancer.
5 And with emissions you're going to get cancerous types
6 emissions. So that's a big thing that's affecting us
7 now. Our heart disease is affecting us along with
8 chronic lung disease. Again, we're breathing in these
9 carcinogenics. It's causing cancer or it's causing
10 lungs and asthma with our children.

11 And, again, this is the ACP proposed route.
12 And along this route, as I showed earlier, right here
13 the Meherrin, the Haliwa-Saponi, the Coharie and the
14 Lumbee and also Tuscarora in this nation or in this area
15 is affected by this route.

16 And here it shows the rural counties. And
17 this is kind of a regional city of Fayetteville, Ft.
18 Bragg, North Carolina. And this is why this is blue but
19 everything else is green. It's very rural. It's
20 affecting people's farm lands. It's taking people's
21 crops. Land that their family have been growing crops
22 on for centuries. This is going straight through their
23 land.

24 And local disparities again are increasing
25 infant mortality, decreased life expectancy and
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1 decreased access to services. So they're bringing all
2 this pollution in but they're not trying to give us
3 anything to combat it.

4 As I said there're basically five tribes that
5 are affected, the Haliwa-Saponi, the Meherrin, the
6 Coharie, Lumbee and the Tuscarora.

7 And for sovereignty of our indigenous peoples
8 since the time that human beings offered thanks for the
9 first sunrise, sovereignty has been an integral part of
10 the indigenous people's daily existence. Our
11 sovereignty leads to self-governance and requires no
12 less.

13 And this is a picture of some of our local
14 tribe members at a pow-wow, a festival, celebrating
15 either spring or fall ceremonies thanking the creator
16 for all that he's given us.

17 So, for conclusions. Federal regulators
18 omitted tribal perspectives from decision-making by
19 ignoring disproportionate impacts in its quest for
20 consultation. Developers do not give a complete picture
21 of the project impacts.

22 And in speaking on that, they're telling us
23 that they want this gas to help them keep their gas
24 fired power plants operational. That is not true.

25 We know that this is a competition to get
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1 world dominance in the natural gas realm. We've got
2 Senator Burr on record, he's a North Carolina senator,
3 saying they're trying to compete with the Russians in
4 2015.

5 We're got recent legislators in North Carolina
6 talking about, you tell us which direction we go. We
7 may go leading to Georgia to another export. So that's
8 some of the things that these corporations aren't
9 telling.

10 And for the Lumbee one of the things is
11 they've got a Piedmont natural gas which they can tie
12 to. And this Piedmont natural gas pipeline has already
13 added another pipeline because it's an existing pipeline
14 and the ACP excluded that out of their application so
15 they wouldn't have to do anything, mitigation for
16 crossing the Lumber River.

17 Right now it comes short of crossing the
18 Lumber River but it crosses a lot of its tributaries.
19 And like I said earlier with the Hurricane Matthew if we
20 had that kind of an event when operations were
21 happening, a lot of sedimentation would have gotten into
22 our water ways.

23 So here in Robeson County, in Prospect at the
24 current site, we're already seeing that our air has been
25 affected. Our water has been affected.
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1 Someone spoke about noise. This 1,400 psi
2 pipeline is pushing gas through it. It has a hissing
3 sound. I can hear the hiss from my brother's doorsteps
4 of this gas just being pushed through this pipeline and
5 that causes anxiety around the communities.

6 So tribal members do not feel secure in their
7 persons and property as they are intimidated and
8 threatened with eminent domain in regard to their land.
9 Communities, family and individual health depends upon
10 maintaining strong connections to healthful and
11 intactfull ancestral lands and environment.

12 Conversations with corporations do not equate
13 with consultations. Government to government
14 consultation is required. In the case of the ACP that
15 would mean consultation between FERC and the Lumbee
16 Tribal Council.

17 The UN Tribunal, these are some
18 recommendations, should draft resolutions calling on the
19 US federal and state regulators to deny all permits
20 until the impacts on the Lumbee and other tribes have
21 been fully assessed through accurate analysis and
22 meaningful government to government consultation.

23 Help the US to create a tribal climate
24 resilience plan to prepare for economic health and other
25 impacts of hotter summers, increased drought and
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1 damaging floods.

2 The UN should also request the US government
3 to work with tribes like the Lumbee to help create a
4 sustainable economic development plan in partnership
5 with local governments. There's other alternatives. We
6 could be doing a lot more with that.

7 So next, as I said, tribal consultation. Give
8 tribes seats at decision-making tables. Ask regulators
9 to comply fully with consultation recommendations of the
10 federal government, of the state government, of
11 international bodies, UN Declaration of Rights Of
12 Indigenous Peoples.

13 We need cultural impact studies. I was just
14 out at a site just last week and we were digging and we
15 found artifacts of arrowheads, other tools, pottery of
16 ancient peoples that have been around the Lumbee River
17 of North Carolina. So there's still remnants of our
18 ancestors just lying around, lying about.

19 And these people are coming in cutting through
20 our trees, cutting through our land, haven't did any
21 kind type of cultural impact study, haven't did any
22 meaningful archeological studies to determine if any of
23 our lands are impacted culturally.

24 So I would like to give special thanks for
25 some of the local Lumbee members who shared their
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1 stories and valuable information. Those are Dr. Mariann
2 Jacobs, Mr. Herbert Eddie Moore, Dr. Ryan Emanuel, Dr.
3 Cherry Beasley and Ms. Donna Chavis.

4 So if anybody has any questions you can ask
5 about that.

6 I would just like to point out that the
7 current infrastructure --

8 MS. LAKSHMI FJORD: We have one more.

9 MR. ROBIE GOINS: You got one more?

10 MS. LAKSHMI FJORD: Yeah. We have our
11 judge Adrienne Hollis is waiting.

12 MR. ROBIE GOINS: Oh, okay.

13 MS. LAKSHMI FJORD: That was great.
14 Thank you.

15 MR. ROBIE GOINS: Thank you.

16 DR. ADRIENNE HOLLIS: Good afternoon. My
17 name is Dr. Adrienne Hollis and I've served as a judge
18 at the Peoples's Tribunal in Charlottesville on October
19 29th.

20 Today you've heard only a small portion of the
21 impactfull testimony shared with the impartial three-
22 judge panel. That Tribunal lasted almost 12-hours. And
23 what's really important to know is that the majority of
24 participants and attendees stayed the entire day, which
25 underlines, as nothing else would, the importance of the
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1 tribunal and the seriousness of the issues.

2 These heartfelt and sometimes shocking and gut
3 wrenching testimonies led the judges to develop the
4 following conclusions and recommendations.

5 Whereas indigenous peoples, people of color,
6 descendents of freedmen communities, Appalachian
7 communities and vulnerable populations have been
8 blatantly targeted and will most certainly be, and in
9 some cases already are, negatively impacted by the
10 Atlantic Coast Pipeline and Mountain Valley Pipeline as
11 evidenced throughout the tribunal testimonies;

12 And whereas numerous and diverse examples of
13 cultural attachment and historic preservation atrocities
14 exist, violations of religious and cultural practices
15 and beliefs exist, and capricious use of eminent domain
16 to deprive people of property and heritage, including
17 such activities as destruction of historical records and
18 intimidation tactics;

19 And whereas there was there was a consistent
20 and pervasive lack of public participation, lack of
21 opportunities for public input and access to information
22 such as the denial of access to the wireless tower
23 planned by the pipeline and the denial of consultancy
24 status to Preservation Virginia under Section 106 of the
25 National Historic Preservation Act;
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1 And whereas there are numerous threats to the
2 built environment, including places of faith, roads,
3 highways, driveways and homes, many of which are located
4 within the blast zone and have existed for generations;

5 And whereas water is put at grave risk because
6 of the continuous crisscrossing of the proposed
7 pipelines, rivers, streams, ground water and wetlands,
8 and that under current regulation pipes in rural areas
9 are dramatically thinner putting our water at tremendous
10 risk;

11 And whereas many witnesses have testified to
12 the release of greenhouse gases from pipelines and
13 compressor stations adding to climate change and,
14 therefore, harming the environment and adding to the
15 burden, both locally and globally;

16 And whereas all of these insults negatively
17 impact the health of humans and all living things,
18 especially the most vulnerable, women of child bearing
19 age, pregnant women and children, the elderly and the
20 infirm, this Tribunal strongly recommends that the State
21 of West Virginia, Virginia and North Carolina, along
22 with all environmental agencies just suspend all
23 actions, undertake necessary thorough investigation such
24 as environmental, cultural and health impacts
25 assessments with real voice and real vote from the
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1 community and immediately cease and desist eminent
2 domain actions.

3 In addition, we strongly recommend that the
4 United Nations Human Rights Council should put the
5 United States on trial for crimes against human rights.

6 Thank you.

7 MS. LAKSHMI FJORD: Thank you so much
8 Adrienne for staying with us. Thank you for your
9 incredible patience and understanding with the technical
10 problems. We're so grateful to you.

11 I practically can't even speak I'm so moved by
12 your generosity and time. Thank you so very much for
13 holding this Tribunal and allowing us to testify before
14 you.

15
16
17 [youtube.com/watch?v=ssDWtmalb80&feature=youtu.be]
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1 FOOD & WATER WATCH
2 and
3 FOOD & WATER WATCH EUROPE
4 MAY 16, 2018. 11:00-12:00

5 MR. ANDY GHEORGHIU: Well, hello
6 everybody. First of all thanks a lot for having me
7 here. It's really an honor to have the opportunity to
8 present for the Permanent Peoples' Tribunal Session on
9 Fracking, Human Rights And Climate Change.

10 My name is Andy Gheorghiu and I work as a
11 campaigner and consultant for Food & Water Europe which
12 is the European branch of Food & Water Watch. And today
13 I'll try to summarize, in this presentation, the Amicus
14 Brief I was able to send on behalf of Food & Water Watch
15 and Food & Water Europe for the Permanent Peoples'
16 Tribunal Session On Fracking, Human Rights And Climate
17 Change.

18 Okay. Let's get started.

19 So I'll go through the four questions that
20 you've asked about and I'll try to give the brief
21 summary of our answers.

22 So the first question was, Under what
23 circumstances do fracking and other unconventional oil
24 and gas extraction techniques breach substantive and
25 procedural human rights protected by international law
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1 as a matter of treaty or custom?

2 And I think before we start really answering
3 the question it's very important for me to make people
4 aware of the fact that fracking itself cannot break
5 anything. It's just the technique.

6 So if we want to focus on the people that are
7 the right addressee then it's state and non-state actors
8 that we must focus on. So it's not fracking, that
9 doesn't breach anything, it's the people behind the
10 technique, the markets behind the technique and the
11 whole demand that is interlinked with it.

12 And a second very important thing is to define
13 what fracking is. Because we have, in several parts of
14 the world, we have different definitions of what
15 fracking is and what fracking is not from a legal
16 perspective.

17 For us at Food & Water Watch and Food & Water
18 Europe when we speak of fracking we speak of the whole
19 process. So it's not about the pure fracturing of the
20 rocks. It's about the whole industrialization that is
21 necessary and interlinked with fracking, it's about the
22 construction of the whole infrastructure including
23 pipelines, LNG terminals and so on and so forth. So
24 it's the whole life cycle that is interconnected with
25 fracking itself. And I think that this is something
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1 very important to keep in mind.

2 Now what is fracking in actual fact and why do
3 we speak about unconventional and conventional
4 deposits?

5 So usually hydrocarbons migrate through space
6 and time. They try to reach the surface from
7 underground and when they are then gathered in a natural
8 trap, as we see here, this is what we usually call
9 conventional deposits. So you drill a well and then you
10 start exploiting the site. It's gas or oil that you
11 will extract then out of this ground.

12 What we call unconventional or non-
13 conventional deposits are the hydrocarbons that are
14 being trapped in geological layers. For example, shale
15 layers, coal bed methane layers or sandstone layers.

16 Because the hydrocarbons are dispersed in the
17 geological formation you will have to drill down
18 sometimes at first vertically until you reach the
19 geological layer and then horizontally into the layer
20 and then you'll start pumping large quantities of water
21 under high pressure mixed with sand and toxic chemicals
22 in order to fracture the rocks and to release the
23 hydrocarbons so that you're able to extract them. So
24 this is the main difference.

25 However, the European Commission and the
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1 United Kingdom have tried to find their own definition
2 of fracking meaning that they've linked their definition
3 of fracking to the amount of water that is being used
4 per well in order to fracture the rock and to start the
5 extraction of the hydrocarbons. So the threshold
6 they're using is 10,000 cubic meters of water.

7 If you use less than 10,000 cubic meters of
8 water then the United Kingdom and the European
9 Commission do not consider this to be what they are
10 calling high volume hydraulic fracturing. Meaning that
11 a less strict legal framework is applicable. But what
12 they do is they basically apply these legal frameworks
13 to certain fracking projects but this means that a large
14 amount of other projects won't be covered by this
15 definition.

16 Germany has a similar approach. The German
17 government simply redefined, based on no scientific
18 evidence whatsoever, redefined sandstone layers where we
19 find tight gas as conventional layers. They just said
20 it's conventional layers and they've invented a term
21 called conventional fracking.

22 So if a company in Germany, for example, wants
23 to extract hydrocarbons from a sandstone layer, mainly
24 tight gas, then this kind of fracking, what they call
25 conventional fracking, faces less stricter regulations
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1 than if you want to do a fracking operation in shale
2 layers which is, for the moment at least, generally
3 forbidden in Germany. So this is something that we
4 really have to keep in mind.

5 For us personally there is no such
6 distinction. So every kind of site that needs to be
7 stimulated or fractured this all falls under what we, at
8 Food & Water Watch and Food & Water Europe, understand
9 as fracking and all the risks and negative impacts that
10 we will talk about in a minute are related this kind of
11 fracking. But there are attempts to redefine fracking
12 in order to avoid stricter regulations.

13 The next slide I wanted to show, I wanted to
14 make people aware of, is that it is not about this one
15 fracking operation. It's not about one well. The
16 industry will try to get a license for an area and they
17 will start with one or two, three exploratory wells and
18 the whole debate will be about, well, don't worry, it's
19 just one well. Maybe we'll need another one but this is
20 it.

21 In most cases, and I've seen it in the UK
22 right now, they already talk about the need to develop a
23 license field. And this means drilling hundreds and
24 thousands of wells over a life time of 20 to 40 years.

25 So when a regional council, for example, or a
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1 government, makes a decision about whether or not they
2 want to open their doors to shale or tight gas
3 development they should be aware of the fact that it
4 will be about the industrialization of this whole area.

5 And in most cases we talk about the
6 industrialization of former rural areas. And this fact
7 includes having a lot of negative impact for the
8 environment because it's, of course, a totally different
9 scenario to have woods and just a few streets and roads
10 and agricultural and it's a complete different scenario
11 if you start industrializing this area.

12 And the picture that you see here is the
13 amount of wells that were drilled in Pennsylvania. We
14 talk about over 10,000 wells within a decade just to
15 give you some kind of vision what shale development
16 really means.

17 Now if we look the numbers up they themselves
18 speak a pretty clear language. So according to industry
19 reported data and the Frack Focus data base we had, in
20 the United States, at least 137,000 wells that have been
21 drilled since 2005.

22 The water use since 2005 is at least 239-
23 billion gallons. Produced toxic waste water in 2014
24 alone was at least 14-billion gallons. And this means
25 that this toxic waste water the industry needs to
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1 somehow get rid of it. And in a majority of cases this
2 means disposing the waste water underground, injecting
3 it underground and this is what has caused a lot of
4 earthquakes in states like Ohio, for example, a state
5 that wasn't really known for having a problem with
6 earthquakes before the industry started to inject large
7 amounts of toxic waste water into the underground.

8 The global warming pollution from well
9 completions in 2014 alone was at least 5.3-billion
10 pounds. And this is equivalent to the global warming
11 pollution from 22 coal fired power plants.

12 Now we also have a bunch of peer reviewed
13 studies within the same period and I think that you have
14 or will have a lot of experts that can talk much more
15 about all the outcome of the studies.

16 I just want to mention that of the 685 peer
17 reviewed studies that looked at the time frame between
18 2009 and 2015 and only looked at studies, commentaries
19 and reviews published on fracking for tight gas and
20 shale gas, so this excludes studies related to tight
21 oil, shale oil and also coal and methane but only looked
22 at them they found out that 84% of the studies on health
23 impacts identified potential public health risks or
24 actually observed poor public health outcomes.

25 96% of the water quality showed potential
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1 positive association or actual incidences of water
2 contamination associated with shale gas development.

3 87% of the studies on air quality indicated
4 elevated levels of air pollutant emissions and/or
5 increased atmospheric concentration as well as a massive
6 problem with methane emissions.

7 Before I start talking about the very, very
8 overarching big problem with methane emissions and
9 climate change I would like to just stress a few facts
10 about the problem and the competition we have in this
11 case with water.

12 A study done by the World Resources Institute
13 back in 2014 found out that 38% of the world's shale
14 resources face high to extremely high water stress or
15 arid conditions. They found out that almost 400-million
16 people live on land above shale plays, meaning increased
17 competition for water and also public concern over
18 hydraulic fracturing that will be more likely in densely
19 populated areas.

20 In China, China has a very big problem with
21 water or the lack of water, and 61% of shale resources
22 face high water stress or arid conditions. And even in
23 the United Kingdom, a country that I wouldn't have
24 thought they had a problem with water, 34% of the shale
25 plays face high water stress or arid conditions. And we
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1 see this also in a direct competition with existing
2 underground aquifers.

3 For example, in North Africa what you see here
4 is the dotted lines. These are shale plays and the blue
5 areas this is -- these are existing underground
6 aquifers. So you see there is a direct competition
7 here. Meaning that if you want to reach the
8 hydrocarbons in the underground you'll have to drill,
9 somehow, through this underground aquifer.

10 And the same is valid for big parts of South
11 America. For example, here where we have the Guarani
12 aquifer and then again you see the areas where the
13 dotted lines these are the shale layers.

14 So in both cases this is, of course, something
15 of high concern. Especially, I think, from a European
16 perspective if we think of North Africa and the problems
17 we already face there with regard to the mass migration
18 upwards towards Europe I think that if something happens
19 there and if we have some kind of massive contamination
20 of these very important underground aquifers the
21 problems we already face with mass migration will grow.

22 So when we talk about fracking and the
23 relation to human rights and climate change I think that
24 the increasing social and military conflicts that will
25 be caused by an increased global warming is something
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1 that will affect us all, will affect all of our human
2 rights, and this is something we need to keep in mind.

3 We also need to communicate this, I think, in
4 a much more -- in a way that the public understands.
5 Even the people who are maybe not really keen to switch
6 to renewables they should be aware of the fact that the
7 expansion of the fossil fuel industry, in particular the
8 expansion of the fracking industry, will definitely lead
9 to an increase in global warming. And this has its own
10 very negative impacts on us all.

11 This is a graph that shows the problem we're
12 facing at the moment and also shows the need for swift
13 and courageous actions because what we simply don't have
14 is time. What we see here is the level of global
15 warming where we should somehow stay because this is
16 something that we will somehow be able to manage.

17 So if we stay somewhere in between 1.5 and 2
18 degrees global warming this is a scenario that we can
19 handle. If we overshoot the 2 degrees global warming
20 this might lead to run away climate chaos. No scientist
21 on earth can tell you what this really means but what we
22 see already, the impact of climate change that we see
23 already, they threaten the most existential resources
24 that we need, which is fresh water, drinkable water,
25 fertile soils and also breathable air basically.
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1 And what we see on this graph here is that if
2 we do tackle CO2 alone we won't be able to stay
3 somewhere in between 1.5 and 2 degrees global warming.
4 It's only if we tackle CO2 carbon dioxide, methane,
5 which is CH4 and black carbon, will we be able to stay
6 somewhere in between 1.5 and 2 degrees global warming.

7 The problem is that we've already reached the
8 1.1 global warming in 2016. Meaning that we will reach,
9 within 12 years, the 1.5 and within 32-years will
10 overshoot into 2 degrees global warming.

11 Now because of all the field studies that were
12 done, mainly in the United States, we know that we have
13 a massive problem with methane emissions from the
14 production of shale and tight gas and shale oil and tide
15 oil.

16 What we can say is that we have methane loss
17 of up to 4% within the production of so-called
18 conventional gas but the methane loss of within the
19 production of so called unconventional gas could be up
20 to 12%.

21 Meaning that, again, if we don't pay attention
22 to this and if we don't stop the expansion of the
23 fracking industry we won't be able to stay somewhere in
24 between 1.5 and 2 degrees global warming. Meaning that
25 we will most definitely reach climate tipping points
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1 which will then lead into run away climate change.

2 This is also something that Professor Howarth
3 has illustrated and he has even shown that if we take
4 the methane losses into account and then look at the
5 climate balance of shale gas compared to other
6 hydrocarbons, shale gas looks worse than coal. And I'm
7 definitely not here to promote coal.

8 We must go off fossil fuels completely which
9 means including coal, oil and gas. But reducing methane
10 emissions meaning, for me personally, stopping
11 production and banning fracking will give us a few more
12 years, years that we need to reduce year two and then to
13 avoid runaway climate chaos.

14 A new NASA led study also recently showed that
15 the biggest increase that we realized concerning methane
16 emissions is due to fossil fuels.

17 Now, nonetheless, what we observe when we look
18 at the markets is that the industry wants to expand.
19 And the most recent phenomena that I personally came
20 across with Food & Water Watch and Food & Water Europe
21 came across, is that a lot of fracking, a lot of the
22 current expansion of the shale gas industry is directly
23 related to the production of ethane and ethane is a feed
24 stock for plastics and petro chemicals.

25 Which brings, of course, a completely new
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1 dimension to the whole pollution scenario because now,
2 for the first time, we can say that plastic pollution is
3 the visible ugly face of climate change and it's also
4 directly linked to the expansion of the fracking
5 industry in the United States.

6 At the moment we have, in the United States
7 alone, some 325 new petro chemicals investments, about
8 almost 200 billion dollars worth. And there are on the
9 way or planned, 40% are already completed.

10 Now the question was how human rights are
11 affected?

12 And I think that through what I was just
13 saying related to the slide you just saw is that we can
14 definitely say that a lot of human rights might be or
15 are already affected by fracking projects.

16 And then, again, it's really important to be
17 aware of the fact that we must take the additional
18 infrastructure, such as pipelines and LNG terminals and
19 petro chemical facilities, into account.

20 So I've created this table giving you some of
21 the legal references. I think, again, you have a lot of
22 experts out there who are able to talk much more about
23 this and also to refer to other existing conventions
24 that might play a role.

25 So what we can say is that fracking projects
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1 affect the right to life, liberty and security of
2 people;

3 The right to a standard of living that is adequate
4 for health and well-being;

5 The right to the highest attainable standard of
6 physical and mental health and well-being, including the
7 healthy development of the child, improvement of
8 environmental and industrial hygiene and prevention of
9 occupational and other diseases;

10 The right to safe and clean drinking water and
11 sanitation;

12 The right to freely pursue self-determination,
13 economical, social and cultural development.

14 Because in a lot of cases in a lot of
15 countries we see strong opposition against the
16 development of shale, against fracking projects.
17 Nonetheless we see states and non-state actors trying to
18 impose fracking upon people.

19 The right to territory is directly linked to what
20 I've just said;

21 The right to free disposal of natural wealth and
22 resources.

23 I think each one of us, each region, each
24 country, should be able to choose what they do with
25 their own natural wealth and resources. We shouldn't
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1 allow globally operating international companies to
2 extract those resources wherever they want to if the
3 people who live there decide otherwise.

4 The right to property is, of course, is directly
5 linked to that, whether alone or in association with
6 others.

7 We see, for example, in the United States we
8 have now a pipeline project called the Mariner East 2
9 pipeline. This brings wet gas, ethane, to the Marcus
10 Hook facility in Pennsylvania and from there it is being
11 transported to Europe for plastics production. And the
12 authorities are using a legal term called eminent domain
13 in order to get access to private property.

14 Now usually, as far I'm aware of, is that you
15 can use eminent domain if you need to extract the
16 resources because it's for the good of the majority of
17 people but in this case they're using eminent domain to
18 let the private company build this pipeline and then
19 simply export the hydrocarbons to Europe.

20 The right to public consultation has been affected
21 quite a few times.

22 I've seen it, for example, in Germany where we
23 have no strategic environmental assessment related to
24 fracking projects. And we have also cases in Argentina
25 and also South Africa where indigenous tribes were not
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1 consulted before licenses were given away.

2 The right to protection of motherhood and childhood
3 can be affected:

4 Right to actions preventing the risks and impacts
5 of climate change;

6 And the right to sustainable development.

7 All these human rights can and are already
8 affected in some way or another by fracking projects all
9 around the world.

10 Now we are coming to the second question which
11 is, Under what circumstances do fracking and other
12 unconventional oil and gas extraction techniques warrant
13 the issuance of either provisional measures, a judgment
14 enjoining further activity, remediation relief or
15 damages for causing environmental harm?

16 Well, our stance is pretty simple. Climate
17 change is one of the most urgent and complex threats to
18 our human rights today. And fracking poses significant
19 risks to the natural environment through loss or
20 fragmentation of habitat, disturbance of wildlife and
21 potential pollution of water courses that support
22 sensitive ecosystems and biodiversity and as a driver of
23 climate change.

24 And, therefore, nothing short of an outright
25 ban on fracking and rapid cessation of fossil fuel
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1 extraction and consumption will remedy the many
2 associated harms of the oil and gas industry.

3 Other provisional measures, a judgment
4 enjoining further activity, remediation relief or
5 damages for causing environment harm are simply
6 inadequate half-measures. Because the industry will
7 always try to avoid taking responsibility for any
8 damages and/or environmental harm they've done.

9 And I think a very good example for that is
10 the so-called Exxon, a new case, where we now have
11 evidence that Exxon Mobil knew of climate change since
12 as early as the 1980's but, nonetheless, they've tried
13 to -- lobbied against the scientific proof that climate
14 change is real and that the fossil fuel industry is
15 directly responsible for the increasing of global
16 warming.

17 The third question is what is the extent of
18 responsibility and liability of state and non-state
19 actors for violations of human rights and environmental
20 and climate harm caused by these oil and gas extraction
21 techniques.

22 Now I want to highlight just two cases from
23 the United Kingdom. I mean there are lots of cases and
24 I think you will hear of them or you've already heard of
25 them so I'll just focus on the UK and two cases related
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1 to it.

2 OK, one is related to a very specific company
3 that plays a very vital role in the fracking debates in
4 the UK at the moment. The name of the company is Ineos.

5 And the company is owned by a billionaire called Jim
6 Radcliffe.

7 So if we look at the UK, first of all at the
8 Lancashire case, we see that if we debate fracking and
9 the negative impacts of fracking projects there is this
10 huge amount of debate around public health impacts.
11 Everything related to climate change, everything related
12 to water, water usage, water contamination and so on and
13 so forth.

14 But there is also a question, a big question,
15 around the state of democracy. All around the world
16 when we talk about fracking projects, shale development
17 and the almost inevitable confrontation between state
18 authorities that unfortunately very often support the
19 private company instead of supporting the people who are
20 opposing the projects and who at least, in my opinion,
21 have the better arguments.

22 So the Lancashire case I think is pretty
23 symbolic. It might seem a small case but I think it's a
24 good example. In 2005 the Lancashire council had
25 rejected fracking plans by a company named Caudrilla but
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1 the UK government overturned the local decision and gave
2 the go-ahead in 2016.

3 Now ongoing protests followed and with almost
4 daily clashes between activists, Caudrilla's private
5 security and the police. Campaigners also launched a
6 court appeal to stop fracking in Lancashire but the
7 court dismissed it in January 2018.

8 Now so far fracking protesters have,
9 nonetheless, prevented Caudrilla from conducting the
10 first fracking operation in the country since 2011 but
11 this means a day-by-day confrontation. So they have a
12 camp nearby the fracking site and it's -- again, I
13 repeat myself it's a daily fight for every lorry, for
14 every piece of equipment that goes to the site and so on
15 and so forth.

16 And you can also see how during the summer
17 months when more campaigners are, of course, able to
18 come and work the local campaigners you can see in the
19 graph down below here how the number of arrests grow
20 during the summer months.

21 So the question, the current situation in the
22 UK raises many questions regarding moral, legal and also
23 democratic legitimacy of the whole situation.

24 The first question is why is the government
25 questioning a basic democratic decision by a local
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1 counsel. We think that local councils should decide
2 about the basic question of whether or not they want to
3 industrialize their own area.

4 Second question is why are the courts ignoring
5 the reasonable arguments put forward by campaigners
6 that, in this case, the environmental impact assessment
7 is not considered, the environmental impacts of both the
8 exploratory stage and the full production stage that
9 might be fought for in the future.

10 Because it's very difficult to decide a moment
11 in space and time when you say we don't want to have
12 more development. Meaning that you will have to take
13 the cumulative impacts into account from the beginning.
14 To have the debate from the beginning about whether or
15 not you want to industrialize the licensed area. But,
16 unfortunately, this is something that many state
17 authorities are not willing to take into account.

18 But it's related to the second question, which
19 is why are the courts ignoring the reasonable
20 arguments? The public health impacts of fracking have
21 not been properly considered according to the
22 precautionary principle. And this relates to the
23 question of the full scale development.

24 It is, of course, a totally different issue if
25 you look on the possible health impacts of one well or
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1 if you take into consideration that you will have to
2 face in space and time 100,000 wells within your area.

3 And concerns about the state of democracy and
4 human rights in the UK couldn't be high enough if we
5 additionally take into account -- and this is very
6 troublesome I would say -- anti-fracking campaigns. And
7 campaigners have been listed alongside terrorist
8 organizations, including the IRA, Al Qaeda and ISIL in
9 official counter-extremist documents from four regions
10 of the UK.

11 And Jim Radcliffe, the billionaire I've
12 mentioned and the main owner of the petro chemical giant
13 Ineos, secretly lobbied George Osborne when he was
14 chancellor of the Exchequer to muzzle the unions to cut
15 company taxes and also to back fracking. Which brings
16 us directly to the Ineos case.

17 We, at Food & Water Watch and Food & Water
18 Europe, are currently involved in a campaign, a trans-
19 Atlantic campaign against Ineos. That's the reason why
20 we've produced three issue briefs that looked into the
21 company.

22 One deals with the already mentioned
23 Trans-Atlantic plastics pipeline that brings fracked
24 hydrocarbons from the United States to Europe.

25 The second one looked into the corporate
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1 profile and history of the company. And Ineos is a
2 very, very intriguing and fascinating example because we
3 see that this company transforms from a former pure
4 petro chemical company dealing with a downstream
5 business of the production of plastics and petro
6 chemicals into an upstream producer.

7 Meaning that they want to become the biggest
8 fracker in the United Kingdom. They want to have
9 control over the whole production cycle.

10 And the third issue Brief that we've published
11 into their very checkered bad environmental frack record
12 in Europe at all their petro chemical facilities because
13 we wanted to show that this company, who down plays the
14 risks of fracking in the United Kingdom, is not even
15 able to do a good daily business within their petro
16 chemical industry.

17 The graph you see here is the one that shows
18 you this existing Trans-Atlantic pipeline. And I'll
19 stress this one again because I really want to make you
20 aware of the fact that if we talk about fracking, the
21 impacts of fracking, the role of fracking with regard to
22 climate change this new dimension of the extraction of
23 hydrocarbons, not even for energy security reasons, is
24 very important.

25 So what we see is an expansion of the existing
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1 industry but now with a totally different focus, the
2 focus of producing plastics and petro chemicals with,
3 and I repeat myself, its own negative impacts for the
4 oceans and the planet and also for our human rights.
5 Because we have studies that show that sea salt contains
6 plastic and we found plastic fibers in tap water all
7 around the world.

8 Last year we filmed plankton eating plastic,
9 meaning it has entered the food chain. So it's a very
10 important issue and it is directly linked to fracking
11 and the current expansion of the industry, especially in
12 Pennsylvania and in the United States.

13 I told you already about Ineos and that they
14 want to become the biggest fracker in the United
15 Kingdom.

16 Now there are a few more things I want to
17 highlight and to also to raise awareness about the
18 democractic deficits that we see in the United Kingdom.
19 First and foremost I've already mentioned that the
20 company is owned by a billionaire. He's now the richest
21 man in the UK. And I've gathered some quotes of him,
22 direct quotes, but also some kind of actions that Ineos
23 has done during the past two years showing us that this
24 company wants to frack no matter what. So whoever
25 stands in their way they want to push them aside.
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1 So first Jim Radcliffe talked about the risks
2 of fracking and he tried to down play the risk by saying
3 that it is just like a puncture in your car so
4 occasionally you get a puncture and occasionally you
5 have an accident in chemicals. This is as he sees it.
6 And maybe this gives us also maybe an insight into the
7 psychology of these big international companies.

8 I think their perspective is a totally
9 different one and this -- so it's even more important
10 to raise our voices and raise our concerns because what
11 might be an occasional puncture for a big company like
12 Ineos is a major catastrophe for communities somewhere
13 around the world. And we cannot allow companies like
14 Ineos and others to stomp over our humans rights as if
15 it's nothing but a field that needs to be concurred and
16 developed.

17 Another very important thing that opens or
18 gives us an insight into their perspective is the fact
19 that he talked about the symbiotic relationship between
20 the local community and the chemical plant and he said
21 that this is important because occasionally if things go
22 wrong and you need, they need, you know, we need their
23 sort of empathy from time to time.

24 This means that, and it's also directly
25 related to fracking, as soon as a company starts
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1 developing a fuel and if it's a company like Ineos with
2 such a perspective, such a vision needs, they will also
3 take over the whole economy of this region. Meaning
4 that even if something goes wrong people will be
5 dependent on them, economically dependent. Again, a
6 very important thing to keep in mind if we add the human
7 rights dimension to that.

8 And there are two other things that I want to
9 mention and then I'm done. One thing is that Ineos was
10 able to get a court injunction from a high court in the
11 UK against persons unknown, meaning basically everyone.
12 And they can go to jail for up to two years or they can
13 be find for up to 5,000 pounds for any kind of so-called
14 unlawful protest, but this includes even slow walking in
15 front of vehicles trying to prevent them from reaching
16 the site.

17 Ineos has filed a lawsuit against Scotland
18 who, after a very basic democratic process of public
19 consultation for over a year, has decided to implement
20 an indefinite moratorium on fracking. And they've also
21 filed a lawsuit against the National Trust in the United
22 Kingdom who have denied Ineos access to a nature
23 protection site, Clumber Park, basically saying that
24 they don't want the Clumber Park to be industrialized.
25 Ineos is taking them to court saying that it's their
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1 right to enter the Clumber Park and start developing
2 it.

3 And they do not even shy away from places like
4 Sherwood Forest. They have also licenses to develop
5 shale gas within and also nearby the Sherwood Forest.

6 And now the first question and I'm done. What
7 is the extent of responsibility and liability of states
8 and non-state actors, both legal and moral, for
9 violations of the rights of nature related to
10 environmental and climate harm caused by these oil and
11 gas extraction techniques?

12 Well, again, a very clear statement from Food
13 & Water Watch and Food & Water Europe, we think that
14 state and non-state actors are fully responsible and
15 should be held fully liable for, in view of the existing
16 knowledge, and this is very important evidence,
17 deliberately conducted violations of the rights of
18 nature related to environmental and climate harm caused
19 by the so-called unconventional oil and gas extraction
20 techniques.

21 Thank you.

22 MR. GILL BOEHRINGER: This is a terrific
23 presentation. You really packed a lot of important
24 things. I agree with Tom about those, those two
25 elements but I really appreciate it. Gave me a very
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1 good overview of what is happening.

2 We've had a lot of empirical studies and
3 testimonies of specific and individual cases but this
4 puts it into kind of a political economy of what's going
5 on and I appreciate it greatly.

6 It's terrific work you're doing.

7 MR. ANDY GHEORGHIU: Thanks a lot for that
8 and I hope that it will be of some kind of help.

9 MR. GILL BOEHRINGER: Oh, yeah. Great
10 help.

11

12 [youtube.com/watch?v=We6hzjJoy2E&t=4s]

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1 AUSTRALIAN EARTH LAWS ALLIANCE

2 RIGHTS OF NATURE

3 PART II

4 MAY 16, 2018 1:30-3:30

5
6 DR. MICHELLE MALONEY: Good morning

7 everyone. My name is Michelle Maloney from the
8 Australian Earth Laws Alliance. I am in partnership
9 with Lisa Mead presenting today the second part of the
10 Earth Rights session for the PPT. So I hope you can see
11 my slides.

12 So my name is Michelle Maloney and, as I said,
13 Lisa Mead will be joining me. She's on a call now.
14 She'll be joining us for this session.

15 So just a brief introduction just so that you
16 know my qualifications. I've got a Bachelor of Arts and
17 a Bachelor's of Law with honors from the Australian
18 National University and a Ph.D. in law.

19 I'm also the co-founder of the Australian
20 Earth Laws Alliance and have been working on rights of
21 nature, earth jurisprudence and ecological governance
22 issues for about seven years on top of 20-years before
23 that on environmental law and sustainability issues.

24 My organization is the Australian Earth Laws
25 Alliance, or AELA, and our mission is very simple, to
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1 increase the understanding and practical implementation
2 of earth centered governance. And by that we mean law,
3 economics, ethics, cultural.

4 And that diagram at the bottom shows that we
5 focus on a change in culture in the industrialized
6 societies as well as reconnecting law and governance
7 with nature and the matters that are at issue and the
8 issues that matter, building community, creating
9 alternatives and then transforming law and governance.

10 So an overview of our session today we hope to
11 complete our session in the time allotted, two hours.
12 We may try to go a little shorter than that because we
13 started a little later.

14 I'll do a bit of an introduction and a recap
15 on Lisa's excellent session earlier this week and then
16 I'll give an overview of the some of the emerging laws
17 around the world that recognize and support the rights
18 of nature. We feel that is an a really important
19 context for the PPT to understand why this emerging
20 space around recognizing the legal rights of the natural
21 world is relevant to our case that is challenging the
22 impact of unconventional oil and gas extraction.

23 We will then invite an expert witness Mari
24 Margil. We'll have a video footage from another expert
25 witness, Damien Maher, who I'll introduce as we bring
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1 them all on. Lisa will actually speak to a bit of
2 evidence about fracking's impacts on earthquakes and
3 seismic activity.

4 We'll then turn to our final video of the
5 session which looks at the way that the people in
6 Scotland have addressed fracking and their choice to
7 issue a moratorium and then we'll do our closing
8 statements.

9 So just to recap on Lisa Mead's session. Lisa
10 introduced our overall argument and she also talked
11 about the Universal Declaration of The Rights of Mother
12 Earth and how it's a civil society agreement formed in
13 2010 by more than 30,000 people which holds extreme
14 moral weight and an emerging law and statement of
15 principle around the fact that we are an interconnected,
16 indivisible community of life;

17 That industrial legal systems do not, at the
18 moment, reflect the fact that we rely on and are inter-
19 dependent with the natural world;

20 And in fact the UDRME is an important basis for our
21 entire case here at the PPT because it offers a
22 statement, a normative statement, of how our legal
23 system should be. And interestingly since it was
24 created in 2010, which I'll talk about in a moment,
25 quite an upsurge of laws around the world that are
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1 starting to reflect those very principles and this
2 shifting norm towards recognizing the rights of nature
3 in our legal system.

4 So Lisa talked about the UDRME and outlined
5 the rights of nature. We also heard from experts Cormac
6 Cullinan and Linda Sheehan. We also heard evidence from
7 Michelle Bamberger and Dr. David Paul on violations of
8 the fundamental rights of plants and animals to exist,
9 thrive, and evolve and the fact that fracking and CSG
10 has been violating the rights of life to exist, thrive
11 and evolve.

12 Lisa also showed evidence in a video witness
13 from Professor Gavin Mudd from here in Australia talking
14 about the impacts of fracking on water ways.

15 So what I'll do now is actually talk through
16 some of the emerging rights of nature laws around the
17 world. Again, just to give you some context I'll do it
18 fairly quickly and I'm very happy to take questions but
19 I just wanted to give quite a growing number of examples
20 of how rights of nature is working around the world.

21 This is a brief summary and then I'll have a
22 couple of extra slides on a couple of these points.

23 So in 2002 CELDF -- I'm very honored to have
24 Mari Margil from CELDF on our session today -- CELDF
25 began a push for local laws to pass for rights of nature
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1 and community rights laws in the US. And she'll talk
2 about that in her presentation.

3 In 2008 Ecuador was the first modern
4 constitution in the world, by modern I mean western
5 legal structure, to actually recognize the rights of
6 nature in its constitution.

7 In 2010 Bolivia implemented a national law.
8 In 2010 Bolivia also hosted this phenomenal gathering
9 looking at climate change and the rights of Mother Earth
10 and everybody worked together to create the UDRME.

11 Since 2016 activists and lawyers in Europe
12 have been pushing for an EEU directive for the rights of
13 nature in the European Union.

14 In 2016 interestingly not a legal structure
15 but a policy development the Greens party of Scotland
16 and a separate Greens party of England and Wales, both
17 adopted rights of nature policies.

18 2017 was somewhat of a push forward for the
19 rights of nature and legal personhood around the world
20 and attracted significant attention internationally. And
21 I'll talk in a moment about what happened with New
22 Zealand, India and Columbia.

23 There is also a lot of social movements around
24 the world as well as the work of the Global Alliance for
25 the rights of nature, all of which are bringing people
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1 together who are trying to force through a shift in the
2 legal system and also represent what people know in
3 their heart to be true, that we are completely dependent
4 on and part of the natural world. And our legal system
5 should no longer treat it as invisible but the most
6 important player in our society and our legal system.

7 Very briefly just for those who aren't
8 familiar with it. The current framing of the rights of
9 nature many people look to the work of Thomas Berry.
10 He's written a number of books. He called for earth
11 rights. It does build on a longer history of deep
12 ecology and legal writing, everything from Christopher
13 Stone, Should Trees Have Standing, et cetera.

14 There's quite a phenomenal body of work that
15 we can turn to but I just wanted to mention that the
16 theoretical framework that many of us use for the rights
17 of nature comes from some of the ideas articulated
18 really beautifully by Thomas Berry.

19 Any future governance system must recognize
20 the rights of the non-human world to exist, thrive and
21 evolve and generate.

22 Berry looked to first nations culture in law,
23 as we all do, for deep inspiration for how earth
24 centered governance and law can work and how it can
25 permeate and infiltrate the living culture of our human
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1 society. It's really important. But Berry also give us
2 a gift by challenging the western legal system to
3 actually look at this more seriously and to activate it.

4 And the other point that I would mention in
5 amongst this amazing body work that I could possibly
6 talk about today is rights of nature is a little
7 distinct to legal personhood because rights of nature
8 articulate that rights exist for life, and life
9 supporting system exists, and nature has its own rights.
10 It doesn't have to have human rights. Bees have bee
11 rights. Rivers have river rights. And these rights or
12 these arguments about how it should be maintained and
13 left to exist are really just based on the way that
14 natural systems, animals and plants work, live and
15 operate.

16 The final point on Berry is that he always
17 said that we are a community of subjects, not a
18 collection of objects. And that's a fundamental point
19 for the whole earth laws movement.

20 In a moment when I talk a bit more about New
21 Zealand, India and Columbia I'll talk a little bit about
22 legal personhood for nature but I won't go into too much
23 detail. There is a lot of material for those who would
24 like to read about it.

25 The main point that I would like to make is
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1 that legal personhood and legal rights for nature is an
2 emerging legal space but when we talk about legal
3 personhoods we're, of course, talking about really
4 taking the first step towards rights of nature.

5 In our analysis at least, within the
6 Australian Earth Laws Alliance, we see a bit of a
7 difference. Sometimes in practice it's not hugely
8 important but there is a difference in stating that
9 something has legal personhood rights by either saying
10 recognition as something like corporation, which is
11 treated more as a legal person and not sort of as a
12 human being.

13 And the difference is with legal personhood,
14 and we'll see this in the India case, there's been a
15 little bit of confusion for some people in how you
16 articulate the rights of nature when you talk about it
17 in literally in a human-centered way, legal personhood.

18 We believe that Thomas Berry's articulation of
19 bees having bee rights, a whole argument for the rights
20 of nature, is that the intricate unique system of life
21 has its own unique rights. But that said I won't go any
22 further about this but what is important about the legal
23 personhood space is that it's been a really -- it's an
24 area that is developing quickly.

25 Last year we saw this with the progression of
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1 a number of laws because it's a way for the western
2 legal system to grab a concept that it already
3 understands i.e. corporations and other entities have
4 legal rights, legal personhood rights, and moving
5 forward with that with nature. So it's offering up some
6 very interesting analysis.

7 Very quickly though Ecuador in 2008 included
8 these provisions and it's what I would say it
9 articulates the rights of nature framework, not a legal
10 personhood framework. It talks about the
11 interconnectedness and vitality of life, the indivisible
12 nature of life, the primacy of earth laws and so on.

13 There's been a number of successful cases
14 argued under the rights of nature provisions in Ecuador
15 including the rather famous Whanganui River case in 2011
16 that found for the rights of the river to flow, and
17 other cases.

18 In Bolivia the national law is, again, very
19 much focused on the rights of nature. Does not talk
20 about legal personhood.

21 I just want to briefly show a photo of the
22 Universal Declaration of The Rights of Mother Earth, the
23 UDRME. For those who don't know it was held over more
24 than a week and thousands and thousands of people were
25 genuinely engaged in crafting and writing up the
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1 documents. And Cormac Cullinan and many other people
2 were involved in that process.

3 Very quickly, again, in New Zealand in 2017 an
4 act was passed in parliament by the New Zealand
5 government that was the result of decades worth of
6 discussion and compensation, arguments between the Maori
7 people and the New Zealand government under the Treaty
8 of Waitangi. I can provide more info on this if you
9 want it but this is to just move through the slide
10 quickly.

11 What is important about the Whanganui River is
12 that it was the first time in the western colonized
13 nation that indigenous values and the recognition of
14 this living entity as a whole were embedded into a
15 modern legislative tool. It took the debate between
16 Maori people who wanted not just compensation but to be
17 returned to their spirits and their land and the Crown's
18 resistance to that argument. And it allowed somewhat of
19 a halfway house by using western tools and articulating
20 that the river has it's own legal identity.

21 And it's got two guardians, one from the Crown
22 and one from the Maori Trust as a set up to take away
23 the previous arrangement where it was just the ownership
24 of the Crown. A broader guardianship structure was set
25 up at the end of last year.

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1 And the reason I talk a little bit about the
2 Whanganui River is it is the one that has inspired
3 references from courts in the court cases in India and
4 Columbia.

5 Some people don't know that in New Zealand
6 there are now three major ecosystems that have their own
7 legal rights. The Urewara Forest is very interesting.
8 Again, after many years of debate and discuss and
9 arguments the Waitangi Treaty discussion process, legal
10 decision process, came to a new act that came out in
11 2017 where the Te Urewara will effectively own itself
12 into perpetuity.

13 And at the end of last year, and I still have
14 to do some reading on how this structure will work,
15 Mount Taranaki also has these same legal rights as a
16 person. So New Zealand has been leading the way in the
17 legal personhood development.

18 So interestingly on top of all that many, many
19 years of the developments under the Treaty of Waitangi
20 in early 2017 we saw a court case, two court cases pop
21 up in India that were really important and grabbed
22 international attention.

23 The state of -- I'm not even going to try to
24 say that at six o'clock in the morning -- in India the
25 court decided that the rivers Ganga and Yamura and all
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1 their tributaries, streams, every natural water way
2 flowing, are declared as a legal person and would have
3 the status of a legal person with all the corresponding
4 rights.

5 There's a whole range of issues that have been
6 developing around people challenging that decision by
7 the court, undergoing scrutiny, particularly around the
8 idea that nature having liabilities. But the fact that
9 this case has come into a jurisdiction that does not
10 have the legislative basis for the rights of nature is
11 extremely important and very powerful.

12 And the same with Columbia in 2017, again, in
13 that first four months of last year we saw all of these
14 river cases coming out. A court in Columbia recognized
15 the Atrato River, together with its basin and
16 tributaries, as a legal entity. And the river's rights
17 are distinct from the community's rights and its rights
18 are to protection, conservation, maintenance and
19 restoration by the state and local communities.

20 And then earlier this year it went further and
21 now the Amazon region inside Columbia has been
22 recognized as having legal rights. It's the first time
23 that a bio-region or sub-region has legal rights.

24 Just wanted to briefly mention that in
25 Australia last year there's been a new act for the Yarra
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1 River which does not give legal rights to the river but
2 it does, for the first time in Australia's sordid
3 colonial history, recognize the indigenous peoples
4 connection and spiritual connection to the river.

5 It's an interesting development and one that
6 many other communities are looking to. They are looking
7 at that and connecting it to the rights of nature and
8 seeing what can happen in Australia. And we had our
9 first public rally for river rights in Australia in
10 March in western Australia.

11 So what I wanted to say from that material was
12 really simply that we see this emerging social and legal
13 norm shift as really changing the way that people are
14 looking at the legal system. It's a way for ecological
15 governance and democracy to be shifted so that local
16 communities, particularly at the broader earth
17 community, can argue for greater standing, enforcement
18 and rights of natural systems.

19 The increasing body of law demonstrates that
20 it's a shifting norm, demonstrates that people want a
21 different system. And increasingly it demonstrates
22 civil society will not tolerate damage to ecosystems.

23 And finally we have put into our written
24 submission that we think that this growing
25 jurisprudence, which articulates rights of nature and
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1 how they can be enforced, is actually shifting what we
2 think is towards a growing evidence of a customary
3 international law by the rights of nature.

4 I'm not going to talk to these notes but I
5 just want to flag, for the tribunal, that there are many
6 issues around rights of nature, including how do you
7 speak to nature, it's about relationships, about
8 establishing the rights and duties. It can change
9 standing in a legal jurisdiction. It already has in
10 those places where the laws exist.

11 But, at the same time, it's also drawing on
12 some very conventional legal tools, remedies such as
13 injunction, compensation, restoration, and the ideas
14 around indigenous custodianship, community guardianship
15 new administrative and management structures for the
16 rights of nature.

17 So, on the one hand, it has the potential and
18 it is to turn its legal system on its head. On the
19 other hand it can be implemented in such a way that is
20 really no different than to setting up a structure to
21 support a company.

22 Another important point to make when we think
23 about the rights of nature within the context of this
24 tribunal, and if people are kind of thinking how can we
25 give rights of nature it's important to remember that
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1 every time we've expanded rights there's resistance,
2 from ending slavery in the US to introducing votes for
3 women around the world, for the constitutional
4 recognition of first nations people in Australia,
5 people resist or hasn't been there before and once those
6 laws are passed they become the norm.

7 I'm going to end my little overview of things
8 with a lovely quote from Mari Margil. It's also my
9 segue into her presentation today. An important thing
10 to note is this idea of how could we possibly balance
11 the rights of nature? We believe it's completely easy
12 to do.

13 Recognizing rights of nature, as Mari Margil
14 puts it, does not put an end to human activities, rather
15 it places them in the context of a healthy relationship
16 where our actions do not threaten the balance of the
17 system upon which we depend. These laws do not stop
18 all development. They hold only those uses of land that
19 interfere with the very existence and vitality of the
20 ecosystems with depends upon them.

21 And before I introduce Mari I would like to
22 draw on this quote to remind the Tribunal why Lisa Mead
23 and myself have brought this case and invited these
24 amazing witnesses to join us.

25 We believe that unconventional oil and gas
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1 extraction absolutely threatens the balance of the
2 system upon which we depend. The impacts it has on
3 land, the subsoil, plants and animals, particularly and
4 most obviously water and human health, absolutely
5 violate the rights of the natural system, takes out of
6 balance our co-existence with other species and should
7 absolutely should be stopped.

8 So that is the end of my overview of the
9 emerging rights of nature laws around the world. It's
10 now my really great pleasure to introduce Mari Margil
11 from the Community Environmental Legal Defense Fund.
12 She's an attorney based in the US and together with
13 Thomas Lindsey and others at CELDF have really been
14 leading the way on rights of nature law making around
15 the world. So without further adieu I would like to
16 introduce Mari.

17 Mari, would you like to give your
18 presentation?

19 MS. MARI MARGIL: Thank you so much
20 Michelle. Can folks hear me all right?

21 My name is Mari Margil with the Community
22 Environmental Defense Fund and our International Center
23 For The Rights Of Nature.

24 We are based in the United States but work
25 around the world. In the United States we've assisted
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1 more than 30 communities to establish legal rights of
2 nature and the human right to a healthy environment.
3 This includes many communities that have been fracking
4 as a violation of the rights of nature.

5 We have also met in 2008 with the Ecuador
6 Constituent Assembly as they were drafting that new
7 constitution there on the rights of nature and, as
8 Michelle said, Ecuador is the first country in the world
9 to recognize legal rights of nature within its national
10 constitution.

11 Today our organization is working with
12 Michelle in Australia, in the United States, in Nepal,
13 India and other countries to advance rights of nature
14 and legal frameworks. As we see people across the globe
15 finding that legal systems which treat nature as
16 rightless, that is without even legal rights, basic
17 rights to exist, that they're unable to protect nature.

18 Today legal systems around the world have
19 split the world into basically two categories. One,
20 either as things or property without legal rights or as
21 rights bearing entities with legal rights.

22 Treated as property we find that nature is
23 considered to be without legal rights and, therefore,
24 environmental laws which we find around the world.

25 Environmental laws authorize the use of property, that
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1 is the use of nature such as fracking through aquifers,
2 drilling through the oceans or, as we have in the United
3 States, blowing the tops off of mountains in order to
4 mine coal.

5 Conventional environmental laws therefore,
6 again, which we find around the world, they legalize
7 fracking, they legalize drilling, they legalize mining
8 and other practices, meaning environmental laws legalize
9 environmental harm.

10 Under decades of these environmental laws
11 which treat nature as property, which treat nature as
12 being without rights, the state of the environment is
13 worsening. And we see this in many ways including eco
14 system collapse such as the die-off and bleaching of
15 coral reefs around the world which support millions of
16 species. And with species we see species extinction
17 rates around the world occurring at rates that are
18 greater than 1,000 times natural background rates. And,
19 of course, climate change which is accelerating far
20 faster than even the most optimistic scientific models
21 predicted.

22 The Community Environmental Legal Defense Fund
23 began our work with communities more than 20-years ago
24 to help them protect against environmental harm,
25 including things like drilling and mining, but we ran
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1 into this system of environmental law which legalizes
2 environmental harm as well as the larger legal system,
3 which Michelle mentioned, which does things that
4 recognizes rights and protections for corporations,
5 including oil and gas corporations and other industries
6 which draft the very laws which regulate their
7 activities. That is, they're drafting environmental
8 laws which authorize their industrial activities such as
9 fracking and mining.

10 We learned, along with our communities, that
11 we can't protect nature under environmental laws which
12 authorize destruction. And with this, in 2006, we
13 assisted the first community in the United States, the
14 very first place in the world, to develop a new kind of
15 law. And that new kind of law recognized legal rights
16 of nature. This was Tamaquo Borough, a small community
17 in the state of Pennsylvania in the United States.

18 Since that time the Community Environmental
19 Legal Defense Fund has assisted more than 30 communities
20 which have done the same, recognized legal rights of
21 nature in their local legal system. This includes the
22 city of Pittsburgh, in the state of Pennsylvania, a city
23 of 300,000 people or so. It's the first city in the
24 United States to ban fracking as a violation of the
25 rights the nature.

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1 We found that communities have found it
2 necessary to recognize legal rights of nature, including
3 rights such as the right to exist, to thrive, to
4 regenerate, to be restored.

5 To recognize those legal rights of nature
6 alongside the human right to a healthy environment
7 recognizing that it is impossible to fulfill the human
8 right to a healthy environment if the environment itself
9 doesn't have rights.

10 And, for example, with fracking which
11 contaminates millions of gallons of fresh water at each
12 fracked well which harms human health and the
13 environment which, of course, accelerates climate
14 change, we found it's impossible to fulfill the human
15 right to a healthy environment under legal systems which
16 authorize the use of the environment for fracking. That
17 is, under legal systems which treat the natural world as
18 property as without rights and regulate its use to
19 conduct fracking and other destructive activities.

20 And what we found is that environmental crises
21 have extended across the globe, that there is a growing
22 understanding that we must fundamentally change the
23 relationship between humankind and the natural world and
24 recognize the highest level of legal protection for
25 nature that we have in the law. And that means the
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1 recognition of legal rights of nature.

2 Furthermore, we find that communities as
3 they're finding in the United States and in countries
4 around the globe, an increase in fracking, an increase
5 in fossil fuel extraction, of course, an increase in the
6 impacts of climate change.

7 Last year, 2017, we assisted the first
8 community in the United States, that is the city of
9 Lafayette in the state of Colorado in the Rocky
10 Mountains. We assisted Lafayette to ban fracking as a
11 violation of (1) first the human right to a healthy
12 environment and a healthy climate and, second, the
13 rights of nature to be healthy and thrive, including the
14 rights of nature to a healthy climate. They called it
15 their Climate Bill Of Rights to prohibit fracking and
16 fossil fuel development as a violation of the human
17 right to a healthy environment and the rights of nature.

18 Lastly I wanted to finish by letting you know
19 that we're also working, of course, outside of the
20 United States and other countries and partnering with
21 people, with communities, with NGOs and even governments
22 to advance legal rights of nature frameworks.

23 And this includes in the country of Nepal
24 where we've been working for a number of years to
25 advance a rights of nature natural constitutional
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1 amendment, specifically a right to a healthy climate for
2 humans and nature. And this includes the rights of the
3 Himalayas to a healthy climate.

4 Nepal is home to Mt. Everest and studies show
5 that the Himalayas are experiencing the fastest rate of
6 warming from climate change of any mountain range on
7 earth. By recognizing a constitutional amendment that
8 is the constitutional rights of nature, including the
9 rights of the Himalayas, intended to provide Nepal and
10 the people of Nepal the ability to defend the rights of
11 the Himalayas from climate change impacts from nature
12 polluters around the globe.

13 I'll end there and thank you very much for
14 this opportunity and I'm happy to take any questions.

15 Thank you.

16 DR. MICHELLE MALONEY: Thank you, Mari.

17 Does the Tribunal have any questions for
18 Mari?

19 I have a very simple one, Mari. Based on the
20 work that you've been doing I mean the nature of this
21 PPT is looking at does fracking violate human rights and
22 earth rights?

23 From your experience in the work of the
24 communities that you work with do you think fracking
25 violates the right of humans in the natural world?

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1 MS. MARI MARGIL: We absolutely believe
2 that fracking violates the rights of nature, the rights
3 of human rights to a healthy environment, the rights of
4 the natural world. And, furthermore, we see that by
5 legalizing activities such as fracking and other fossil
6 fuel extraction it stands in the way of people in the
7 their communities from not only protecting nature but
8 with putting in sustainable earth friendly energy
9 systems in their place.

10 It's impossible to have a sustainable energy
11 system in your community if fracking is taking place.
12 And, therefore, we see it as a fundamental violation of
13 the rights of nature, of the rights of human kind to a
14 healthy environment, and also a legal and practical
15 barrier to establishing sustainable systems in its
16 place.

17 DR. MICHELLE MALONEY: Thank you, Mari.

18 MS. MARI MARGIL: Thank you.

19 MR. GILL BOEHRINGER: Gill Boehringer.

20 Mari, I was wondering what has been the
21 reaction in Colorado to what the City of Lafayette has
22 done? Is there a challenge?

23 Well, yeah, can you tell us a little bit about
24 it?

25 MS. MARI MARGIL: Well, in Colorado, as
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1 in other places, the oil and gas industry, of course, is
2 very powerful. We've seen communities in Colorado that
3 have banned fracking or put moratoria on fracking. Have
4 seen both the state of Colorado, that is the state
5 government, along with the oil and gas industry sue
6 communities to override, to overturn those laws.

7 I know you spoke yesterday or the first day of
8 the tribunal regarding Mora County and John Olivas, a
9 former county commission chairman there who we worked
10 with Mora County, New Mexico to assist them to put in
11 place their ordinance which banned fracking as a
12 violation of the human right to a healthy environment
13 and the rights of nature as well.

14 And what we found in both New Mexico and
15 Colorado which are, of course, neighboring states in the
16 US, is that you have industry and government partnering
17 to stop communities from putting in place protections
18 against fracking and successfully going into court and
19 getting court rulings in which the courts are saying
20 that state law pre-empts communities from being able to
21 protect themselves as we saw in Mora County.

22 This is has not happened yet with Lafayette,
23 which I have spoke about earlier, which established a
24 Climate Bill Of Rights. But I can tell you what, in
25 Mora County which faced, as John Olivas I think
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1 explained, a challenge in federal court and the US
2 District Court, the federal court judge, Judge Browning,
3 said in his ruling which found that Mora County was
4 pre-empted in banning fracking, he also wrote in his
5 decision that Mora had quote "a legitimate county
6 interest in enacting the ordinance."

7 That is that he noted sympathy for the
8 community and said they had a legitimate interest in
9 trying to protect against fracking, to try to protect
10 the human health and the environment and nature from oil
11 and gas extraction, but his hands were tied.

12 That is he found that state law pre-empted the
13 community and he said specifically that this is
14 something that the state government and the federal
15 government and courts were going to reckon with in order
16 for the people of Mora County to protect themselves.

17 So I say that to say we see this very much as
18 the beginning of a movement. Michelle spoke in her
19 opening about this being really we see this as standing
20 on the shoulders of past peoples movements who saw that
21 government and laws were oppressive and unjust and
22 needed to have a fundamental shift in those laws in
23 order to protect people. And in this case to protect
24 nature.

25 And we see this about building a movement to
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1 do so which means confronting unjust laws and putting in
2 place laws that establish what we need to see in the law
3 even when those laws may get challenged. Because we
4 know that we have to keep pushing that forward to
5 ultimately establish in the United States, of course, at
6 the state level and ultimately at the federal national
7 level these kinds of laws including constitutional
8 rights of nature.

9 And in the United States in places like
10 Colorado where Lafayette is, which established the
11 Climate Bill Of Rights at the local level, we've been
12 working with people and communities and groups to
13 advance state level constitutional amendments which
14 would begin to codify rights of nature protection at the
15 state level. And we see it in the United States needing
16 to build upward from there, including through this local
17 law making to the state level and to the national level.

18 MR. GILL BOEHRINGER: Thanks.

19 One other question just to get it on the
20 record. We've had a number of people, including in the
21 previous session, a very strong position that fracking
22 is inherently damaging and needs to be banned. You
23 can't frack and expect nothing bad, no harms to happen.

24 So I was wondering what your recommendation is
25 to the Tribunal. Are you asking us to recommend that it
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1 be banned like a moratorium or total ban or whatever?

2 MS. MARI MARGIL: Yes. I think the short
3 answer is yes. I think it is inherently destructive,
4 inherently violative of a human right to a healthy
5 environment and to the rights of nature.

6 MR. GILL BOEHRINGER: And you say that on
7 the basis of many years of working on this issue.

8 It's not just an opinion. It's a thoughtful
9 and reasoned response to what you have seen and read and
10 understand.

11 MS. MARI MARGIL: Unfortunately it comes
12 from communities across the United States as well as, of
13 course, study upon study, which shows the environmental
14 destruction that comes from fracking but the many, many
15 people and communities and even governments that we have
16 worked with across the United States, which has seen
17 that even upon the threat of a lawsuit from industry or
18 even their own state or federal government, people in
19 their communities and local government officials are
20 moving forward to ban fracking as a violation of the
21 human right to a healthy environment and the rights of
22 nature, because they understand that it is inherently
23 destructive and inherently violative of rights.

24 And even with the threat of a legal challenge
25 they are needed to move this forward because they have
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1 no other way to protect themselves other than by taking
2 this step at the local level to establish a legal ban
3 knowing that they could be threatened with a lawsuit,
4 they could be threatened with bankruptcy at the
5 municipal community level, but they see that they have
6 absolutely no other choice under the law than to take
7 that step.

8 MR. GILL BOEHRINGER: And just to follow
9 up. I hear from the evidence and the testimony and what
10 I also know from my own experience and research, the
11 real problem here is that the corporations are so
12 powerful that they get away with ignoring the law,
13 violating the law, so that simple law reform or trying
14 to tighten up regulations and so forth cannot work.

15 Would you agree with that?

16 MS. MARI MARGIL: Yes. And we didn't
17 really have the time in the presentation to speak about
18 it but our work is broader than recognizing the rights
19 of nature and banning activities such as fracking.

20 We take a very systemic approach to protecting
21 the natural world. And by that I mean as we absolutely
22 recognize that so long as corporations have rights and
23 protections which they wield against people, against
24 communities and, of course, against nature that we
25 simply cannot protect the environment.

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1 So even if we prohibit fracking tomorrow
2 around the globe corporations will find another method
3 to extract oil and gas and fossil fuels. And so,
4 therefore, we have to understand that the system itself
5 is destructive to the natural world.

6 It's not enough to just ban fracking or just
7 to ban mining or other destructive activity. We have to
8 fundamentally change the system of law. And that means
9 in our communities, for example, in the United States
10 not only are we assisting them to recognize rights of
11 people, communities and nature, we're also, then,
12 simultaneously removing corporate constitutional rights,
13 corporate protections when they come in to violation of
14 people, communities and nature. So essentially
15 elevating the rights of people and nature over the
16 rights that corporations have.

17 Because without a fundamental shift in that
18 system, without establishing that the rights of people
19 and nature are prime, then we are unable to protect the
20 environment. And so we work with more than 30 plus
21 communities in the United States to withdraw, to remove
22 corporate constitutional rights when they will violate
23 their human right to a healthy environment and the
24 rights of nature.

25 And without doing that then you're kind of
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1 leaving out half of the equation by establishing rights
2 but without removing the rights and protections that the
3 corporations have of which they can override the rights
4 that nature has.

5 MR. GILL BOEHRINGER: Well, let me just
6 follow-up on that again. Sorry, this is very
7 interesting and important I think.

8 And I like your approach but I would say that
9 I am a little skeptical about using the law and concepts
10 of rights and so forth to control corporations given
11 their power and not only regulatory capture but
12 governmental capture.

13 And being a criminalologist I know that there is
14 a lot of power that goes along with money and that
15 corporate bodies have gotten away with murder in the
16 work place, you know, and on and on and we could go on.
17 And because there are many things in this discussion
18 about fracking that reminds one of the tobacco
19 companies, big pharma and the other who knows things.

20 Asbestos here in Australia. We had a shocking
21 example of that with Hardee's. They know and they do.

22 So maybe we should be talking about getting
23 rid of corporations in some way or moving towards a
24 cooperative community rather than one dominated by
25 corporations.

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1 MS. MARI MARGIL: Well, I think to that
2 point specifically, you know, when we work with
3 communities they understand that it's not enough to
4 prohibit fracking.

5 For example, without looking at another means
6 to create sustainable energy systems and the idea of
7 cooperatively or community owned systems, to provide
8 energy or farming or water this course is being
9 increasingly discussed and methods to implement.

10 Because I think you're quite right we just
11 can't eliminate the need of energy. We need to a way to
12 do it sustainably and locally and in a humane system.

13 And I guess I would just say one other thing,
14 if I may, that is sort of a broader idea which is I
15 understand what the Tribunal is very focused on fracking
16 which, of course, is taking place now around the globe,
17 but we also think it's critically important that we
18 don't, I guess, divide ourselves by certain kinds of
19 environmental destruction or environmental practice.

20 And by that, I mean, of course you mentioned
21 big pharma. You know, there's big oil, there's big gas,
22 there's big ag or big food. You know, there's all sorts
23 of ways that corporations and industry have divided us
24 as those who are seeking to protect the environment by a
25 particular practice, environmentally destructive
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1 practice such as fracking.

2 So which is to say that I think that we need
3 to take a very systemic view of how we treat the natural
4 world. So it's in the communities that we work it's
5 very often that they're trying to stop a particular
6 imminent threat such as fracking.

7 And so, of course, that's what they're focused
8 on prohibiting as they establish the rights of nature.
9 But they're not simply trying to protect the natural
10 world from fracking. They're trying to protect it on the
11 whole.

12 And, therefore, activities such as fracking
13 but also corporate agriculture, pesticide spraying and
14 other activities, communities and people who are
15 advancing the rights of nature in other parts of the
16 world at different levels of government, they're doing
17 it on a broad spectrum that is to protect ecosystems, to
18 establish the rights of ecosystems, the rights of
19 natural communities across the board. Not just to stop
20 fracking. Not just to stop corporate agriculture and
21 other kinds of activities recognizing that it's going to
22 take a fundamental systems change in how we treat the
23 natural world.

24 And I think it creates difficulties with us
25 within the activist or advocacy world trying to protect
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1 the environment and that we find ourselves divided by
2 these different practices.

3 And, therefore, we think we need a systems
4 based approach, not only to protecting the natural world
5 but in how we conduct our own advocacy to do so.

6 MR. GILL BOEHRINGER: Thanks. That's
7 really important.

8 DR. MICHELLE MALONEY: Thank you, Mari
9 I'm aware of time and our time allotment so we might
10 move on but I can't really thank Mari enough for
11 elaborating on the approach that they have been using
12 and the work they've been doing and really the tragic
13 consequences that they see in communities of the impacts
14 of fracking.

15 And I guess I would also like to validate the
16 approach that CELDF used and had shared with us and told
17 us about which is this local law making approach, the
18 blanket recognition of the rights of communities and the
19 rights of nature to, indeed, challenge all environmental
20 hazards and threats rather than breaking them off into
21 little bite-sized chunks.

22 Mari Margil, you're very welcome to stay on
23 this session with us. But thank you so much for your
24 time. We'll now move on. Is that OK?

25 MS. MARI MARGIL: Thanks Michelle.
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1 Thanks everybody.

2 DR. MICHELLE MALONEY: Thank you, Mari.

3 So thanks everyone for continuing to be with
4 us.

5 In our next piece of video material we're now
6 going to hear from scientist Dr. Damien Maher from the
7 Southern Cross University based in Northern New South
8 Wales in Australia.

9 Damien has done extensive research
10 particularly focusing on the gas fields in Queensland.
11 I apologize for not having a map but those not familiar
12 with Queensland it's the big pointy bit at the top of
13 Australia on the right-hand side. And the Surat Basin
14 is in the middle of that big pointy bit at the top of
15 Australia on the right-hand side.

16 I am now going to turn to my trusted
17 colleague, Lisa Mead, to show the video. I interviewed
18 Damien Maher last week and asked him about a couple of
19 specific issues.

20 We were particularly interested in his
21 research in fugitive methane emissions. So basically
22 the gases that leak up through the coal seam wells in
23 Queensland and trying to understand what are the threats
24 from those methane gas emissions, the bits that leak
25 through water and soil, its contribution to greenhouse
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1 gas emissions and its threat to water and life around
2 it.

3 So, Lisa, are you able to show that video for
4 us?

5 MS. LISA MEAD: Yes.

6 DR. MICHELLE MALONEY: Thank you. It's
7 about 15 minutes everyone.

8 MR. DAMIEN MAHER: My name is Damien
9 Maher. I'm an Associate Professor at Southern Cross
10 University in Australia. And I work in the School of
11 Environmental Science And Engineering.

12 DR. MICHELLE MALONEY: Thank you, Damien.

13 Before we talk in detail about the research
14 that you've undertaken in relation to fugitive emissions
15 and unconventional gas extraction can you please give us
16 an overview of how unconventional gas extraction
17 contributes to climate change and why it's important to
18 measure fugitive emissions.

19 MR. DAMIEN MAHER: So one way of talking
20 about unconventional gas we're talking about extracting
21 methane and methane is more potent as a greenhouse gas
22 than carbon dioxide.

23 So if we have to look at the global warming
24 potential of methane it's gotten 86 times more potent
25 over a 20-year time frame and about 34 times more potent
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1 than carbon dioxide over a 100 year time frame.

2 So essentially if we have leaks of that
3 methane during the mining process or the transportation
4 process then we need to account for that in terms of the
5 affect on climate change because we're increasing the
6 atmospheric concentration of methane.

7 DR. MICHELLE MALONEY: Thank you, Damien.

8 So now can you please turn to your own
9 research and can you give us an overview of the research
10 that you have carried out within Southern Cross
11 University regarding fugitive greenhouse gas emissions
12 from unconventional oil and gas extractions.

13 We're quite interested in knowing the nature
14 of the research, your focus areas and the geographical
15 location and what the key research parameters and
16 questions were.

17 MR. DAMIEN MAHER: Okay. So the research
18 that we've undertaken is primarily in the Surat Basin in
19 Central Queensland.

20 The research questions that we were interested
21 in were do we have higher methane concentrations in the
22 atmosphere in the gas field as opposed to outside of
23 those gas fields.

24 We've also done work looking at ground water/
25 surface water connectivity and how coal seam gas
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1 development may influence that in the Clarence Morton
2 Basin, which is also in New South Wales.

3 So some of the research questions that we were
4 really interested in is there a distinct enrichment of
5 the methane in the atmosphere in those coal seam gas
6 fields compared to nearby areas?

7 If so, what are the potential pathways of
8 those emissions?

9 So is it coming just from the wells and the
10 infrastructure or are there other pathways for that
11 methane to enter the atmosphere?

12 We're also interested in whether or not we can
13 use stable isotopes which are essentially a chemical
14 fingerprint of that methane to determine if it's coming
15 from the coal seam or if it's coming from other
16 pathways.

17 So for the ground water/surface water
18 connectivity work we did we're really interested in
19 undertaking baseline studies to understand how important
20 ground water is in surface water and river hydrology and
21 ecology.

22 DR. MICHELLE MALONEY: Thank you, Damien.

23 So particularly in terms of the fugitive
24 emissions can you talk to us a little bit about the
25 findings of your research so far?

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1 MR. DAMIEN MAHER: Yes. So essentially
2 what we found was much higher concentrations of methane
3 in the gas field, in the Surat Basin, than outside of
4 the gas fields.

5 So we used instrumentation that allowed us to
6 also measure the stable isotope ratio of those methane
7 emissions and we compared that to the stable isotope
8 ratio or the chemical fingerprint of the methane that is
9 found within the coal seams of the area and we actually
10 found that it matched as well.

11 So not only do we have higher concentrations
12 in the gas field but that methane is coming from the
13 coal seam. So it can be, obviously, other potential
14 sources of methane.

15 So in that area there are large cattle feed
16 lots and wetlands and so on but we were able to kind of
17 narrow it down to emissions coming from the coal seam.

18 So another bit of work that we were interested
19 in was kind of characterizing the pathways for that
20 methane to enter the atmosphere. And to do that we
21 measured radon concentrations in the atmosphere. So
22 radon is a radioactive gas that is formed in the soils.

23 So our hypothesis was that, you know, some of
24 these gases may be coming up through the soils rather
25 than by the infrastructure. And through our radon
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1 measurements we actually found a very strong
2 relationship between radon concentrations and the number
3 of nearby wells.

4 So it appears that this methane is not only
5 leaking through or leaking through the infrastructure
6 but also potentially coming up through the soils as
7 well.

8 DR. MICHELLE MALONEY: Thank you, Damien.

9 So I guess to recap for a layperson, someone
10 who is not a scientist, what you're telling us is that
11 your research has demonstrated a process for identifying
12 specific types of methane coming from specific sites.

13 You can actually tell through your process
14 that it's coming from the gas fields.

15 MR. DAMIEN MAHER: Yes. We can use
16 isotope fingerprinting techniques to differentiate the
17 different potential sources so through doing that we can
18 say that the dominant source of methane that was in the
19 atmosphere came from the coal seam originally.

20 DR. MICHELLE MALONEY: Thank you. That's
21 very helpful.

22 And another question, I guess, from a
23 layperson's point of view, a non-scientific point of
24 view, are you able to explain or quantify to what extent
25 or to how much of the methane that's coming out of the
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1 soil is different to what would be in the background
2 atmosphere? Like what kind of volume are we looking
3 at?

4 MR. DAMIEN MAHER: An excellent
5 question. And certainly our research we couldn't
6 quantify that yet and that's an ongoing area of research
7 that we're looking at to kind of take those initial
8 measurements where we can see that there are leaks and
9 to actually quantify how large those leaks are.

10 So we're certainly still working on that but I
11 couldn't give an answer to you now.

12 DR. MICHELLE MALONEY: Okay. Well,
13 perhaps something that would help particularly as we
14 have an international audience, can you estimate how
15 many wells we have in Queensland at the moment or in
16 Australia.

17 MR. DAMIEN MAHER: So looking as of about
18 2014-2015 I believe there were about 6,000 or 7,000
19 wells, coal seam gas wells but, yeah, since then I'm not
20 sure. But certainly the number of wells has been
21 expanding exponentially since the early 2000s.

22 DR. MICHELLE MALONEY: Yes. So if every
23 well has been proven to be leaking methane we already
24 have 7,000 to 10,000 of them in certain regions of the
25 Australia and it's only growing then, obviously, the
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1 total amount of methane fugitive emissions are
2 increasing.

3 MR. DAMIEN MAHER: Yes, it's quite
4 possibly the case but not all of the wells are leaking
5 but, you know, there certainly hasn't been analysis on
6 all of the wells. But what we can say is that there are
7 leaks and widespread leaks occurring in these gas
8 fields.

9 So other research in the US, for example, has
10 found that a lot of the leaks are coming from a smaller
11 number of the wells but, you know, I don't think we're
12 in a position here in Australia to kind of make those
13 judgments yet.

14 DR. MICHELLE MALONEY: Thank you, Damien.

15 So do you believe that given these leakages,
16 these impacts on climate change, these leaks of methane
17 into the atmosphere, can they be mitigated or completely
18 eliminated from the industrial practices of the gas
19 fields?

20 MR. DAMIEN MAHER: Well, my personal
21 opinion is that you can not stop all the leaks. There
22 will always be leaks. No matter how good the management
23 is there will always be leaks.

24 So all that can be done is that things are
25 monitored and measured and, you know, those leaks are
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1 addressed as soon as they've kind of found.

2 I guess one thing that our research suggests
3 may be happening are these methane leaks through the
4 soils. So this could be due to changes in the
5 geological structure through fracking and so on that
6 actually increases the connectivity of the coal seams
7 and the atmosphere. So we may have created cracks and
8 fissures that actually allow that gas to flow from the
9 coal seam into the atmosphere.

10 Now these leaks are far more difficult to deal
11 with. And there's an example in the Surat Basin where
12 we've done work of large methane seams in the Condamine
13 River, for example.

14 Now whether those leaks are natural or due to
15 industrial development in the area we may never know
16 because we didn't undertake baseline studies in the area
17 prior to the industry going ahead. But if these large
18 seams are due to dewatering of the coal seam and
19 fracking and so on then they may be occurring
20 elsewhere. And trying to seal up these fugitive leaks
21 is far more difficult than fixing up a leaking pipeline
22 or well, for example.

23 So, yeah, my opinion is we can't stop all the
24 leaks and it takes a lot of monitoring and good
25 management to minimize those leaks.

1 DR. MICHELLE MALONEY: Thank you.

2 And, in fact, picking up on the absence of
3 baseline information, would you say that this area is
4 under researched in Australia?

5 MR. DAMIEN MAHER: That is certainly
6 something that myself and my colleagues have been
7 calling for is the extensive baseline studies prior to
8 the development of an industry in area.

9 And certainly historically they haven't been
10 done extensively enough and, you know, it's something
11 that you really have to do to assess any changes. So I
12 would certainly say that, you know, we need to be doing
13 it and it's probably not being done as well as it should
14 be.

15 DR. MICHELLE MALONEY: Yes. Thank you
16 Damien.

17 It's obviously one of the many concerns is
18 that the industry is underresearched and we do not
19 understand its full impacts in many places.

20 So a final question is really your opinion,
21 based on the work and the places you've been and the
22 impacts you're seen, in your opinion, given our
23 understanding and the current practices in the gas
24 fields, do you think that fracking and unconventional
25 oil and gas extraction should be banned?

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1 MR. DAMIEN MAHER: Well [indiscernible]
2 need to make those decisions but certainly in particular
3 areas, say, where we have ground water dependent
4 ecosystems, very valuable ecosystems that may be
5 affected by fracking and unconventional gas extraction
6 then, yes, certainly in some areas it should be banned.
7 But a whole industrywide ban, you know, that's not for
8 me to kind of make a decision on.

9 I would say that certainly we need to be
10 assessing and accounting for the fugitive emissions when
11 we're kind of weighing up unconventional gas in terms of
12 it being a breaching fuel.

13 So a lot of the push towards using
14 unconventional gas as an energy resource has been based
15 on the fact that at the end point of combustion we
16 produce less greenhouse gases than if we were before
17 using coal or other fossil fuels.

18 However, if we start hitting on the global
19 warming potential and the leaks of methane on top of
20 those end point of combustion greenhouse gas emissions
21 then we start to see a bit of a leveling of the playing
22 field between other fossil fuels and gas.

23 So we need to kind of look at the big picture
24 scenario here when we talk about using unconventional
25 gas as a breaching fuel.

1 DR. MICHELLE MALONEY: Absolutely. Okay
2 Damien, thank you, so much for your time and we'll leave
3 it there for now. Thank you.

4 Thank you very much, Lisa, for showing that
5 video interview of Damien Maher.

6 I'm now going to return to sharing the screen,
7 just bear with me while I fiddle with the technology and
8 we'll move on to our next part of our presentation.

9 That was just a segue from the comments that
10 Mari was making about the natural world not being
11 property and the fact that around the world communities
12 like the Australian Earth Laws Alliance community and
13 others are hosting their own Rights Of Nature Tribunals.

14 We'll be holding our Rights Of Nature Tribunal
15 in October on Saturday the 27th in Australia. We'll be
16 looking at a range of issues to do with big Ag and the
17 impacts on the Great Barrier Reef and forests.

18 I'm now very pleased to hand it over to Lisa.
19 She's going to give an overview of some of the research
20 that is connected to our submission that looks at the
21 violation of the rights of nature due to earthquakes and
22 seismic activity that is believed to be caused by
23 unconventional oil and gas extraction.

24 So, Lisa, I'll move the slides for you. That
25 might make it easier but if you would like to begin.
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1 MS. LISA MEAD: So, yes, another very
2 dramatic and immediate threat from unconventional oil
3 and gas extraction to the living world is the industry's
4 causation of earthquakes and seismic activity. And
5 these are often caused by the waste water that remains
6 after drilling activities being injected back
7 underground at high pressure.

8 Now this waste water may contain chemicals,
9 many unknown or untested chemicals, heavy metals and
10 radioactive materials.

11 So in Appendix 1 of our written submission as
12 well as in our main submission document we've set out a
13 non-exhaustive list of some of the seismic events that
14 have occurred as a result of various kinds of
15 unconventional oil and gas extraction.

16 And just to give you several examples when it
17 comes to nature that we're talking about this first
18 example took place in 2011. There was a 5.3 magnitude
19 earthquake in Colorado which was ascribed to waste water
20 injection wells from coal bed methane production.

21 And the research that was carried out in the
22 Raton Basin of northern New Mexico and southern Colorado
23 but Justin Rubenstein and his colleagues in 2014, which
24 we've referenced in our Appendix 1, showed clear
25 evidence that the earthquake sequence was induced by
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1 fluid injection from that coal bed methane process.

2 So the abstract of that research stated that
3 they investigated the ongoing seismicity in the Raton
4 Basin and found that the deep injection of waste water
5 from the coal bed methane field was responsible for
6 inducing the majority of the seismicity since 2001.

7 Many lines of evidence indicated that this
8 earthquake sequence was induced by waste water
9 injection.

10 First there was a marked increased in
11 seismicity shortly after major fluid injection began in
12 the Raton Basin in 1999. And from 1972 through July
13 2001 there was one earthquake of a magnitude of greater
14 than 4.0 in the Raton Basin whereas 12 occurred between
15 2001 and 2013.

16 And they said that the statistical likelihood
17 that such a rate change would occur if earthquakes
18 behaved randomly in time is just 3%. So they said more
19 of this rate change was limited to the area of the
20 industrial activity and that earthquake rates had
21 remained low in the surrounding area.

22 And so secondly that the vast majority of the
23 seismicity was within five kilometers of the active
24 disposal wells and the seismicity was shallow, ranging
25 in depth from 2 to 8 kilometers.

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1 And in our second example in 2006 mud began
2 erupting from the ground in volcano-like fashion in an
3 urban area of Java in Indonesia. And this was 2006.
4 And as of 2015 so it was still flowing. This loosey mud
5 flow it caused almost 40,000 people to be displaced and
6 nearly three billion dollars in damages and disaster
7 management.

8 And a study in 2015 concluded that the likely
9 cause was nearby gas drilling which forced fluid into a
10 clay layer via the open well. And I think there's a
11 photograph on the next slide, or back one.

12 This was the first day it happened so you can
13 sort of see the area that got some. Just a disastrous
14 impact on that particular area.

15 So in our submission to the Tribunal we draw
16 on the rights of nature set out in Article 2.1 of the
17 Universal Declaration Of The Rights Of Mother Earth and
18 assert that the rights of the land and the subsurface
19 are being violated by these activities and, in
20 particular, the following specific rights are being
21 violated;

22 The right to well-being;

23 The right to continue their vital cycles and
24 processes free from human disruptions;

25 The right to integral health;
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1 And right to be free from contamination, pollution
2 and toxic or radioactive waste.

3 And just to say I think Cormac Cullinan
4 touched on this yesterday that the concept of integral
5 health in the Declaration Of The Rights Of Mother Earth
6 reminds us of the essential interrelatedness of every
7 aspect of the earth's community and that the health of
8 the whole system affects the health of any aspect or
9 being within it, and vice versa.

10 So this understanding is also reflected in
11 Article 1 of the Universal Declaration which states that
12 each being is defined by its relationships as an
13 integral part of Mother Earth.

14 And in this case it's clear that earthquakes
15 and seismic activities disrupt the capacity of nature to
16 provide a stable, safe place for life exist, to thrive
17 and to flourish.

18 Thank you.

19 DR. MICHELLE MALONEY: Thank you, Lisa.

20 Because of time unless, anyone has a pressing
21 query we might keep moving.

22 All right. We'll keep moving.

23 Thank you so much, Lisa. In a moment we'll go
24 to our final piece of video evidence.

25 So we were very interested when we were
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1 putting together the arguments and case that
2 unconventional oil and gas extraction violates the
3 rights of nature, to understand why communities were
4 banning or creating moratoria to stop fracking in their
5 communities.

6 So the next piece of video information is
7 basically enabling us to learn from Scotland's approach
8 to prohibiting gas fields in their communities and only
9 the most extensive review of evidence undertaken.

10 We will hear, in a moment from, Professor
11 Andrew Watterson from the University of Sterling in
12 Scotland and Dr. Wil Dinan also from the University of
13 Scotland.

14 Professor Andrew Watterson is the head of the
15 Occupational And Environmental Health Research Group and
16 a member of the Center For Public Health And Population
17 Health Research at the University of Sterling in
18 Scotland.

19 So he works in the areas of risk assessment,
20 risk management, risk regulation, in energy and
21 agricultural sectors. So his evidence is very
22 important.

23 Dr. Wil Dinan is a lecturer in Communication
24 Media And Culture at the University of Sterling. And
25 he's published on various aspects of political and
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1 environmental communication and regulation.

2 So I will unshare and, Lisa, if you could run
3 this video that would be terrific. Thank you.

4 DR. ANDREW WATTERSON: I am Andrew
5 Watterson. I work at the University of Sterling in
6 Scotland and I am in the Occupational And Environment
7 Health Research Group which functions within the Center
8 for Public Health and Population Health Research at the
9 university.

10 DR. WIL DINAN: I'm Wil Dinan. I am from
11 the faculty of Arts And Humanities Communication And
12 Media Culture. I am affiliated with the health center
13 that Andrew just mentioned.

14 DR. MICHELLE MALONEY: Can you please
15 briefly outline the research that you've carried out in
16 relation to fracking and unconventional oil and gas
17 extraction?

18 DR. ANDREW WATTERSON: In the last four
19 or five years we've been looking at unconventional gas
20 extraction that's been linked to various proposed
21 projects and developments in Scotland relating to coal
22 bed methane and also underground coal gasification, but
23 our focus has been primarily on fracking. And in that
24 context we've got a range of interests initially linked
25 to looking at health impact assessments that have been
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1 done on fracking, both in England but also further
2 afield and to get an idea about what the hazard are,
3 what the risks are.

4 DR. MICHELLE MALONEY: Can you confirm
5 the countries the research that you were looking at?

6 DR. ANDREW WATTERSON: American
7 research. We looked at Canadian research. We looked at
8 Australian research. We looked at some German research
9 as well. So we cast our net fairly widely.

10 Obviously fracking is going on in a limited
11 number of countries. And the US is the major source of
12 information and there is quite a lot of paradoxical
13 things for us because the industry was constantly saying
14 we've learned from the lessons of Pennsylvania and now
15 things are better.

16 And we were frequently reading, of course,
17 about a whole series of problems still in Pennsylvania.
18 But obviously you're looking at where the activity has
19 gone on although different countries might have had
20 different settings.

21 DR. WIL DINAN: We also looked at, just
22 very briefly, what we could find just in terms of policy
23 debated places where they were considering fracking
24 too. So, we were just looking at where public opinion
25 was on this issue in different countries to summarize a
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1 bit about the research as well.

2 DR. ANDREW WATTERSON: And we were also
3 interested in looking at the total picture surrounding
4 fracking with regard to the health of the life cycle
5 analysis of fracking.

6 So that means when the materials come in what
7 are the health implications. The technology, the
8 machinery that's developed, what are the implications?
9 The transport in and materials. The removal of products
10 and the removal of waste products at the end,
11 decommissioning and so on, the total picture.

12 We find that there are often life cycle
13 analyses of the economic impacts of energy activities
14 but there isn't one for fracking, or at least not yet.

15 And we were concerned that some of these
16 impact assessments were limited but they could be skewed
17 towards industry rather than take full note of the
18 position of the communities. And that they might even
19 reflect the view of government that had already
20 prejudged the issue of fracking and effectively was
21 engaged in gathering evidence to approve a particular
22 policy option other than making policy on the basis of
23 the evidence.

24 So we looked at scientific and governmental
25 papers. We looked at toxicology and epidemiology
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1 papers. We looked at industry and regulatory practices.

2 We were also concerned with possible
3 implications for climate change and public health,
4 mental health and well-being and where the precautionary
5 principle fitted into all of this.

6 DR. WIL DINAN: Yes. And I should just
7 add to what Andrew said there. The way that this comes
8 from studying, I suppose, that the policy process and
9 communication around this issue looking at how industry
10 would seek your consent for operating and for fracking.
11 But also I suppose how scientific expertise and
12 different forms of expertise were translated into the
13 policy debate.

14 So the results of those kind of interests
15 Andrew were laid out and that kind of formed the basis
16 for a series of articles that were published over the
17 last few years.

18 MS. MICHELLE MALONEY: Would you
19 summarize the main findings of your studies?

20 DR. ANDREW WATTERSON: Okay. So,
21 together we've done three peer reviewed papers in
22 scientific journals and we've produced two reports and
23 we've also offered information to governments and
24 others.

25 So our concern was about how that risk that
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1 related to the established hazards and some of the
2 suspected hazards that the fracking were dealt with.
3 And to do that we needed to look at a range of
4 scientific literature and, as Wil said, to look at some
5 of the policy materials to give us an idea of what was
6 going on.

7 So at the end of the day we had 14 projects or
8 papers that were looking at fracking and were providing
9 information about both public health and related issues.

10 And we looked at the processes that were used
11 to create policy. And within those paper and reports we
12 looked at 10 key characteristics linked to public
13 health.

14 So that would include occupational health. It
15 would include climate. It would include transport. It
16 would include seismicity. It would link in with the
17 economic benefits and disbenefits. And I think Wil will
18 say something about sort of the broader elements about
19 that. We also looked at regulation and industry.

20 And what we found was that, firstly, Scotland
21 was the only national assessment that had ever been done
22 of fracking. So there had been assessments in states
23 the US. There had been some assessments made in
24 provinces in Canada. There had been some studies done
25 in towns and municipal regions but the only global
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1 national assessment of fracking had come out of
2 Scotland.

3 And Scotland also addressed all of the key
4 areas that have been mentioned and brought them together
5 in the context of engaging the public as well. So they
6 had the findings. There was the evidence. They got a
7 view from the scientific community, from regulators and
8 then they presented out to the public and communities.
9 But in that sense it was quite unique.

10 But at the time it was done it was the most
11 extensive review of the literature, the most up to date
12 review of the literature. Not perfect and Wil will
13 perhaps say something about that a little bit later.
14 But, nevertheless, the best thing that we had to offer.

15 DR. WIL DINAN: Yeah, I would just add to
16 that, I mean I think really two features to that in
17 terms of the depth and the detail of the Scottish case.

18 One was the analysis of public health research
19 and public health impact strand. And that was very, very
20 detailed.

21 I think it was conducted in a way that allowed
22 other research-makers to make a serious evaluation of
23 the work that had gone into our opinion, the advice that
24 was given to government. So that was one aspect that
25 stood out that led into.

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1 The other I think really outstanding aspect in
2 terms of comparatively understanding which was that the
3 public consultation element was very, very strong. Very
4 few of the other integrated assessments we looked at had
5 such an element of public engagement.

6 Some of them had elements early in the process
7 where they kind of consulted key stakeholders and then
8 carried on.

9 The Scottish study which, I suppose, is
10 remarkable for its effort of those stakeholders early in
11 the process and then returned with this evidence to the
12 public later on for kind of a wider differentiation
13 about what this all means and then that fed into
14 policy-making. Of course policy-makers weren't bound by
15 this but it certainly informed their thinking and I
16 think that was a real, you know, a real striking
17 characteristic of the Scottish case.

18 DR. MICHELLE MALONEY: Do you think that
19 there were any things that you would have improved in
20 the way they would have approached it?

21 You said it was outstanding in some ways.

22 DR. ANDREW WATTERSON: I think they can't
23 justify their conclusions but there were big gaps in the
24 evidence about the tangent effects but it was also, from
25 our point of view, evidence of significant problems in
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1 the literature. And not all of that literature was
2 necessarily -- that was available was necessarily
3 covered at the time.

4 So at the time and since we've seen more
5 evidence about the neurological effects, about the
6 reproductive effects, about developmental effects, about
7 carcinogenicity and possible exposures, about mental
8 health and well-being damage. All of those things have
9 come out and, perhaps, could have been even stronger in
10 the reports.

11 I think we were concerned that there was
12 probably an underclaim of the mental health and
13 well-being impacts, both in proposals to fracking as
14 well as fracking.

15 And we also had some concerns about probably,
16 I think we would say, a lack of rigor in terms of
17 looking at how well regulators could deal with the
18 problem and how good industry practice was.

19 In a sense some of these things were taken as
20 a given but with all of those limits, nevertheless, the
21 conclusion of those reports was that you couldn't make a
22 strong case for fracking linked in with the things that
23 Wil mentioned in terms of the public engagement which
24 was huge. Nothing like it has occurred anywhere else on
25 the globe.

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1 I think that underpinned the decision that the
2 Scottish government took the policies issue not to
3 pursuing fracking.

4 DR. WIL DINAN: It's kind of striking
5 when you look at it in terms of what this debate is
6 really about is that there was not really a dedicated
7 Environmental Impact Assessment. So you had a really
8 striking quite detailed -- I can go into some of the
9 minutia later on but still I would say it was globally
10 quite an impressive public health impact assessment.

11 And for some reason the Scottish government
12 decided not to have an Environmental Impact Assessment.
13 They would argue it was assumed under an opinion that
14 came from the climate commission about climate impacts
15 and stuff but you still -- there wasn't the depth in
16 that approach that you saw in terms of public health.
17 So I think that's quite striking.

18 DR. MICHELLE MALONEY: What poses the
19 biggest health risks, either to humans or to animals?

20 DR. ANDREW WATTERSON: I think there's
21 probably international agreement about what the risks
22 will be. There will be air pollution. It's what level
23 will the pollutants be there?

24 The hazard is there. Nobody disagrees about
25 that. It's what the risks will be. What the exposure
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1 will be.

2 The same would be true of water, and we're not
3 just talking about accidental spills there, we're
4 talking about waste water treatments and indeed the
5 capacity, certainly in Europe and this has been flagged
6 by other researchers, the capacity to deal with fracked
7 water. So that would be an issue.

8 And then there is the problem afterwards about
9 to what extent do we understand the geology, bearing in
10 mind particularly in the central belt of Scotland is a
11 coal mining area with lots of seams and shafts, that
12 could be a major issue. I think that could be within
13 England.

14 And then we've got the soil pollution issues.

15 So I think there is, even in industry, there
16 is a recognition that there are hazards. The argument
17 is that the industry will be able to control soil, water
18 and air pollution, and it will never be at levels that
19 create a problem.

20 But that seems to ignore, from what we have
21 seen and again, perhaps, it was underplayed in some of
22 these Scottish government reports, it seems to ignore
23 the issue of low level exposure, you know. And if
24 people are focusing on parts per million or parts per
25 billion they're missing the picture because if we're
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1 looking at endocrine disruptors and some of the other
2 effects we're looking at parts per trillion having an
3 effect.

4 So the argument, well, there will only be very
5 low exposure, it won't be a problem, simply isn't the
6 case.

7 And what's perfectly clear from the work of
8 environmental scientists in the UK, highly respected
9 ones, is that the view that if we pursue this as an
10 energy source then the climate impacts are going to be
11 considerable and those impacts will adversely affect
12 public health.

13 So I think our focus has always been public
14 health. And the big global picture will come back to
15 Scotland. People in Scotland won't escape the
16 implications -- about the public health implications of
17 climate change. So the big picture is that it's a
18 no-no.

19 There are alternatives that are likely to be,
20 certainly in the middle term, again, leading to greater
21 prosperity, you know, tourism and the green image of
22 Scotland. So all of these things would be damaged by
23 having hundreds or thousands of wells. And, you know,
24 there is the threat of livelihood as a public health
25 issue.

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1 The benefits perhaps, the economic benefits,
2 that have been identified seem to be very, very small.
3 And it's not a sustainable approach even in terms of the
4 industry for more than a decade or two.

5 DR. WIL DINAN: I think I would like to
6 jump back to his last point being that the economic
7 analysis I think, but even the best projections that
8 were estimated on the impact, long term impact of
9 fracking in Scotland were still disappointingly low, in
10 fact disproportionately low I thought.

11 But, you know, it really made it difficult for
12 the Scottish government to make a case based on kind of
13 the benefit in terms of economics. So I think all these
14 issues that Andrew raised around the difficulties --
15 you know, it would almost force government into a
16 precautionary approach.

17 And I think what's really striking in terms of
18 the Scottish posture on this compared to the UK posture
19 is that the Scottish government has kind of adopted,
20 they don't use that language precisely, but there's very
21 definitely precaution in our policy-makers who have
22 proceeded with this whereas you compare it to
23 Westminster it's kind of an economical dash for cash and
24 they're doing it in the face of quite, you know, public
25 opposition. And, as Andrew pointed out, actually a huge
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1 amount of questions and evidence, comments before, that
2 really questions the sense of this in terms of
3 sustainability, economics and the kind of global
4 impacts.

5 MS. LISA MEAD: That's the end of the
6 video. Do we have Michelle there?

7 DR. MICHELLE MALONEY: Yes, I'm still
8 here. Thank you, Lisa. Thank you very much for showing
9 that video material.

10 I'll just bring up our slides again so that we
11 can move into our closing statements. Okay.

12 So I really want to thank Lisa for having that
13 discussion with the researchers in Scotland. I think
14 it's very important that we learn about all this
15 analysis the reasoning that they used to actually impose
16 this moratorium or a ban on fracking. It's a very
17 valuable report as well for the rest of us.

18 So we're very pleased to be coming to the end
19 of basically the four hours of discussion about earth
20 rights within the context of this Permanent Peoples'
21 Tribunal on the impacts of fracking.

22 What I would like to do is give a brief
23 summary of the overall case that we've presented to the
24 Tribunal and then I'll hand over to Lisa to talk about
25 what we would request the Tribunal consider and
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1 recommend.

2 So in a very brief overview of the session
3 today we've heard from Mari Margil at CELDF about the
4 work they've been doing in the United States to not just
5 activate bans on specific areas related to fracking but
6 to actually look at transforming the system by using
7 community rights and nature rights to, I guess, to
8 impose a local law that actually bans those activities
9 but also protects the right of nature.

10 We have also heard evidence about linking to
11 greenhouse gas emissions and other aspects that I'll
12 talk about. But in summary by drawing on the Universal
13 Declaration of The Rights of Mother Earth, the UDRME, we
14 argue that nature's rights are being violated by
15 unconventional gas and oil extraction in four main or
16 four significant areas.

17 It violates the rights of rivers, aquifers and
18 waterways and by linking specifically to the wording of
19 the UDRME we believe fracking violates waterways and
20 rivers in that it violates their right to continue their
21 vital cycles and processes free from human disruptions;

22 It violates the right to integral health, which
23 Lisa spoke about before as a way of explaining or
24 articulating the interconnectedness or the vital inter-
25 connectedness of the good ecological health;
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1 It also violates the right of water systems to be
2 free from contamination, pollution toxic or radioactive
3 waste;

4 We heard from Gavin Mudd in Australia where the
5 Condamine River has now quite famously been set alight
6 because it had so much gas or methane bubbling up into
7 the waterways, this in an extremely arid area.

8 We also heard that sometimes when the fracking
9 and coal seam gases process takes place no one can
10 guarantee that they can repair the aquifers, the actual
11 structural damage to the rocks and the soil and earth as
12 they break through.

13 And the interconnectivity of the waterways
14 means that when you violate the rights of a river in one
15 place that water flows and interconnects to ground water
16 and other places. So we strongly believe fracking
17 absolutely violates the rights of rivers, aquifers and
18 all things liquid in the living world.

19 We also just today heard from Damien Maher
20 about the research that's been undertaken to look at
21 fugitive emissions from coal seam gas in Australia but
22 research around the world shows that methane, which is
23 the most damaging greenhouse gas emission, is leaking
24 from coal seam gas and other forms of fracking.

25 I think the thing that was perhaps most scary
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1 about Damien's evidence is that they've got a very
2 specific process of proving that methane emissions are
3 coming from the industrial gas processes. It's not
4 background -- in the background of nature.

5 There is an absence of information. There are
6 no baseline studies undertaken about what's going on in
7 the atmosphere or many other aspects earth before these
8 coal seam gas and other gas fields are constructed.

9 We can not, at the moment, quantify the volume
10 of methane that is entering the atmosphere.

11 I find this particularly worrying that
12 scientists have been continuously stating that they can
13 prove methane is coming out, they don't know how much,
14 and if we've got 7,000 to 10,000 gas wells in Australia
15 that's tiny in proportion to what's in the US,
16 therefore, the greenhouse impacts of fracking and
17 unconventional oil and gas exploration is absolutely
18 without doubt the extent to which we don't even
19 understand.

20 This is a horrific violation of global efforts
21 to reduce greenhouse gas emissions. And it's also a
22 violation of the rights of the climate system that has
23 evolved over billions of years to provide life, to have
24 a right to integral health, to be free from
25 contamination and to support life.

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1 The third and second to last area is the
2 violation of the rights of land and subsurface.

3 Again, in today's session Lisa Mead gave a
4 good overview of some of the research presented in our
5 submission that indicates fracking and the violence of
6 pushing down through the land has created seismic
7 activities, earthquakes and some of those really
8 devastating mud pools and mud slides in other places.

9 The evidence that's emerging around the world
10 of the violation of the land and subsurface definitely,
11 from the point of view of the UDRME, violates the right
12 to well-being, the right for the land to be a place to
13 support Mother Earth, the right to continue vital
14 cycles, integral health and, again, to be free from
15 contamination, pollution or radioactive and toxic waste.

16 Finally we saw devastating information from
17 Michelle Bamberger about the impact of fracking in the
18 US on animals.

19 We heard from David Paul about, again, the
20 absence of information and significant research that can
21 prove that there is no harm from gas wells and others to
22 natural systems.

23 The impacts on water alone can have a
24 devastating impact on plants and animals. So we would
25 argue or put to the Tribunal that unconventional oil and
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1 gas extraction absolutely violates the rights of animals
2 and plants in terms of their right to well-being, the
3 right to a place, somewhere safe to live, to play their
4 role in the ongoing evolutionary functioning of the
5 earth. A right to continue their vital cycles and to be
6 free from contamination.

7 About the only other thing I wanted to mention
8 was that throughout the evidence, particularly from the
9 scientists in our session, we have seen not only the
10 violation of the natural systems but really some very
11 fundamental violations of existing international law
12 including the precautionary principle.

13 We have seen a plethora of evidence that shows
14 no baseline studies, no real understanding of the impact
15 of these stresses and in the face of a principle as
16 simple as a precautionary principle, if we are uncertain
17 as to the extent of damage but we know that there could
18 be damage we simply shouldn't go ahead.

19 When you combine the precautionary principle
20 with some of the information that Damien Maher suggested
21 at the end of his testimony, which is in light of the
22 methane emissions alone the argument used by the
23 industry to support the expansion of fracking that
24 fracking and gas is our bridging fuel I think have been
25 actually shown to be erroneous. It cannot be a bridging
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1 fuel if it's actually leaking methane into climate
2 change processes.

3 And, in fact, as Mari Margil said by having
4 these industries in place we are preventing our
5 communities and societies from shifting to clean energy
6 and clean fuel.

7 So with that I am going to hand over to Lisa.
8 We believe that the rights of nature are extremely
9 violated. We feel that the UDRME, if it was the basis
10 today of current and existing law globally and in
11 Australia, we would have legal grounds to ban fracking
12 and coal seam gas.

13 I would now like to hand it over to Lisa to
14 talk about what we would like to recommend to the
15 tribunal.

16 MS. LISA MEAD: Thank you, Michelle. Can
17 I shift down to our request to the Tribunal?

18 So we ask the esteemed judges of the Tribunal
19 to acknowledge and recognize nature's rights as
20 fundamental to the health of nature of which humans are
21 a part and of ecosystems. And we ask the Tribunal to
22 declare the continued exploitation of unconventional oil
23 and gas as entirely indefensible from the perspective of
24 climate change and we ask the Tribunal to condemn the
25 devastating impacts of unconventional oil and gas
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1 extraction on the natural world in all jurisdictions
2 where it takes place.

3 And we lastly ask the tribunal to call for a
4 cessation of all unconventional oil and gas immediately
5 and for a worldwide ban on the industry for all the
6 reasons we've stated.

7 And the next slide. So furthermore, in terms
8 of restorative measures, which is a fundamental
9 principle of earth jurisprudence, we ask the Tribunal to
10 call for a full and prompt restoration for the
11 violations of the rights recognized in the Declaration
12 Of The Rights Of Mother Earth caused by human
13 activities.

14 And we also ask the Tribunal to order that
15 governments and corporations in all affected
16 jurisdictions create a special fund which communities
17 can use to, wherever possible, restore the natural world
18 to the conditions that it was in before the industry's
19 actions took place where this is possible.

20 And in closing just a couple of final
21 thoughts. Of course, we are nature. We humans are a
22 part of nature. And this just reminded me of the street
23 slogan that emerged during the Paris Climate Change
24 talks which said we are not fighting for nature. We are
25 nature defending itself.

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1 And if we look beyond ourselves, beyond the
2 planet to the wider picture, we see that we need to
3 think systemically because everything we do needs to
4 operate within the limits of the system we are in.

5 So, of course, our economic system is just a
6 subsystem of a much larger planetary system and we
7 simply cannot keep behaving as if we can have endless
8 growth on a finite planet.

9 And, of course, the dash for gas and oil in so
10 many places at the moment is part of this ignorant
11 dinosaur thinking, with all due respects to dinosaurs.

12 So really it comes down to us recognizing that
13 nature has non-negotiable constraints that must be
14 respected and complied with. And, of course, we ignore
15 this at our continuing peril.

16 So I would like to thank the judges who have
17 been present today who have stayed with us and also for
18 the PPT for giving us the chance to present these
19 arguments and ideas on behalf of nature to allow us to
20 speak on behalf of nature.

21 So thank you also to our witnesses, our fellow
22 lawyers, to Phoebe and Cassie who helped us put our
23 evidence together. They were amazing. And really to
24 everyone who has been part of this.

25 Thank you and good night.
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1 DR. MICHELLE MALONEY: Or, in my case,
2 good morning.

3 As closing remarks if the Tribunal would like
4 to explore any of the documentation or the evidence
5 we've presented in our submission please e-mail us at
6 anytime. We would be very happy to provide you data or
7 details but on that I guess we'll close, is that right?

8 DR. THOMAS KERNS: We have time for
9 questions.

10 MR. GILL BOEHRINGER: Just one comes to
11 mind. You talked about a special fund. Did you have
12 any particular targets from whom you wanted to attract
13 the money or extract the money?

14 DR. MICHELLE MALONEY: I personally think
15 that's quite a complex issue because some of the
16 companies in Australia and the government liability
17 would have to be kind of thought through.

18 And particularly in the US it's been an
19 industry that is now incredibly extensive. So I think,
20 quite frankly, if we were to succeed in some kind of ban
21 any company anywhere that has been engaging in that
22 industry activity would be targeted.

23 MR. GILL BOEHRINGER: Yes, I agree. It
24 certainly shouldn't be the taxpayers.

25 DR. MICHELLE MALONEY: Oh, definitely
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1 not.

2 DR. THOMAS KERNS: I have a response to
3 that. Just something that I had hoped we'd been able to
4 enter in to the Tribunal. Maybe this is the place to do
5 it.

6 Mary Wood teaches law at the University of
7 Oregon who initiated the whole idea of the Public Trust
8 Doctrine that led to the our Children's Trust Cases.
9 Are you familiar with her?

10 She has a new prospectus that directly
11 addresses your suggestion there Lisa. She refers to the
12 carbon majors and that there are suits already underway
13 against some corporations for billions of dollars for
14 reparations.

15 And her prospectus put it together and I heard
16 her outline this at a law conference a couple of months
17 ago and she's summarized it into a little three or four
18 page prospectus that I would have liked to be part of
19 the Tribunal as one of the things that we could ask the
20 Tribunal judges to recommend.

21 MR. GILL BOEHRINGER: Is that available?

22 DR. THOMAS KERNS: It's available, yeah,
23 and I would be happy to enter it into the record.

24 MR. GILL BOEHRINGER: I think we'd be
25 happy to see it.

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1 DR. MICHELLE MALONEY: And we can add it
2 as an addendum to our submission as well. And I think
3 she looks more broadly across the fossil fuels and not
4 just at fracking. So I think it would be an excellent
5 suggestion. Thank you.

6 DR. THOMAS KERNS: That's right. And the
7 whole focus of it is the public trust which she sees,
8 and I kind of agree, as a human rights issue. And I
9 would be interested to hear your thoughts as to the
10 public trust ideas notion, how that connects with rights
11 of nature, if at all.

12 DR. MICHELLE MALONEY: Well, it does, and
13 I'll go first but if Lisa would like to comment too.

14 The Public Trust Doctrine is particularly used
15 in the US. It has limitations in other jurisdictions
16 because it's either not historically used or there's no
17 structure for it. So for many people in the US they
18 think it's like a generic legal thing. It's not. In
19 Australia it's very rarely engaged.

20 From the point of view of the rights of
21 nature, if I was to be a purest, I would say that the
22 Public Trust Doctrine in the US and in a few other
23 places that it engages with it's predominantly focused
24 on the government as the holder of the trust of the
25 people.

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1 So it's actually very, very powerful and very
2 useful. But if, in fact, the government is the holder
3 of the so-called property rights over nature the Rights
4 Of Nature Movement, in a way, challenges that notion and
5 looks for more ecologically democratic and guardianship
6 based structures to support the rights of nature.

7 So that's a very simple, as you can imagine,
8 simplified analysis. It's very powerful but if you're
9 to be a purest it's not the most effective way.

10 DR. THOMAS KERNS: If you were try to make
11 them compatible in some way do you think that's even
12 possible?

13 DR. MICHELLE MALONEY: Yes, of course.

14 DR. THOMAS KERNS: Because, in some ways,
15 the Public Trust Doctrine is basically that governments
16 are the holders of a trust for future generations that
17 they will be able to have the same resources that this
18 generation has.

19 So it kind of looks at public lands as stuff,
20 you know, things, to be held in trust for future humans.

21 It seems like it would be hard to fit them
22 together but if there was some way to make all three of
23 those things, human, rights of nature and public trust
24 fit together that could be a powerful --

25 DR. MICHELLE MALONEY: I would agree.
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1 But I would also suggest that you don't need public
2 trust to create powerful mechanisms to support the
3 natural world.

4 For example, what's happened with the
5 Whanganui River has nothing to do with the public trust.
6 The Maori people who see their world view as deeply
7 connected to the spirit and material values of that
8 river are now guardians in conjunction with the Crown.

9 There's no need for public trust because --
10 but, you know, the essence at the end of the day, a
11 trust structure created in western legal concepts was
12 always about creating a beneficiary and a distance
13 between the people managing it and the folks who would
14 benefit from it.

15 So we can definitely create a manner of
16 frameworks to support better custodianship of the
17 natural world and human rights. I think public trust
18 has a lot of offer.

19 And in the same way as we see legal personhood
20 as, in some ways, an easy step for western legal systems
21 to comprehend and understand or act, public trust
22 mechanisms are similar. They can be a system that can
23 move away from the excessive privatization of everything
24 and hold things in a public trust.

25 However, I would suggest that in this day and
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1 age we can't rely on governments to be the public trust
2 holders because they are so often influenced, and I'm
3 being polite here, by corporate interests. So community
4 land trusts, indigenous structures of custodial
5 responsibility enshrined in modern legal systems are
6 actually what's most exciting in the rights of nature
7 space I would suggest.

8 DR. THOMAS KERNS: Thank you.

9 DR. MICHELLE MALONEY: Thank you. I do
10 actually have to run. I'm so sorry. We've got a very
11 tight time frame this week for my activities but then if
12 you've got one more quick question and I'm happy to take
13 it or I can jump off with great humility and gratitude
14 and leave you with Lisa.

15 DR. THOMAS KERNS: Other questions?

16 Okay. Shelly is probably going to come back
17 on here in a second and say --

18 DR. MICHELLE MALONEY: Well, I think
19 we've all done marvelously. I'm very impressed that
20 it's 8:30 my time and we're finished.

21 DR. THOMAS KERNS: You even started three
22 or four minutes late I think.

23 DR. MICHELLE MALONEY: I think it was
24 more like ten minutes late.

25 [youtube.com/watchv=mwtwjse8SuU]
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1 ENVIRONMENTAL DEFENDER'S OFFICE

2 WESTERN AUSTRALIA

3 MAY 16, 2018 3:30-4:30

4
5 MR. DECLAN DOHERTY: Hello, my name is Declan
6 Doherty and this is Sarah Flynnne from the Environmental
7 Defender's Office in Perth, Western Australia.

8 We'd like to the thank the Permanent Peoples'
9 Tribunal for the opportunity to file our Amicus Brief in
10 this important inquiry and for taking the time to hear
11 our presentation today.

12 But before we begin we would wish to
13 acknowledge that we're recording this message at our
14 office in Perth, Western Australia, which is located on
15 the land of the traditional owners, the Wajuk people of
16 the Noongar Nation. We, therefore, wish to pay our
17 respects to the elders past, present and future.

18 But first some background to the Environmental
19 Defender's Office. The Environmental Defender's Office
20 of WA, or the EDOWA is a not for profit and
21 non-government organization from Perth that specializes
22 in public interest and environmental law.

23 We provide legal advice on matters of public
24 interest in environmental law and take some matters to
25 court on behalf of the community. We conduct community
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1 legal education. We actively engage in policy and law
2 reform discussions across WA and across Australia with
3 our colleagues and other Environmental Defenders
4 offices. And it all has a focus on access to
5 environmental justice.

6 And we are part of a broader network of
7 Environmental Defenders offices in Australia and a
8 network of community of legal centers in Australia that
9 focus on access to justice and human rights for
10 Australians.

11 Firstly some context about fracking in WA and
12 the resources sector generally. Western Australia has a
13 long history of dependence on the resources sector. We
14 have a history of state governments heavily supporting
15 and sponsoring the mining, oil and gas industry and it
16 continues to do that today.

17 The government does it through setting up
18 departments such as the Department Of Mines & Industry
19 Regulation whose key focus is to promote industry and
20 insure that resources are extracted as quickly as
21 possible and exported to customers offshore.

22 One of the ways that this is being done over
23 history is through state government entering into state
24 agreements or contracts that are legally binding between
25 government and industry that facilitate the development
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1 of resources and often in a way that streamlines or
2 reduces the requirements to certain regulatory approvals
3 designed to protect the environment.

4 We also have a poor record in Western
5 Australia of enforcing environmental laws. There've
6 been very few prosecutions under the main piece of
7 legislation, the Environmental Protection Act. Most of
8 the focus from agencies goes towards the approvals and
9 assessment process rather than regulation and
10 enforcement. And we don't see any sign of that
11 changing.

12 In terms of onshore gas Western Australia has
13 been estimated to hold shale gas resources of
14 approximately 34,000 billion cubic meters.

15 While hydraulic fracturing or fracking
16 production activities have not yet commenced in WA some
17 exploration has begun and approvals have been granted
18 for exploration in a very quick manner. This gives us
19 great concern given the significant potential for shale
20 gas resources and significant lobbying from the
21 petroleum industry, it's likely that the government will
22 be just as willing to support a new fracking industry in
23 WA.

24 What does give us some hope though is that in
25 September 2017 the WA state government imposed a
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1 permanent ban on fracking in the Perth metropolitan and
2 southwest regions of WA and a moratorium on the fracking
3 for the rest of Western Australia until June 2020. And
4 it also announced an inquiry into fracking, which I'll
5 turn to next.

6 So, as I said, the WA government convened an
7 independent scientific inquiry into fracking to assess
8 and report on the potential impacts arising from
9 implementation of fracking on the onshore environment of
10 WA, should it go ahead.

11 However, previous inquiries in Western
12 Australia and some other inquiries in other states have
13 not recommended a permanent ban on fracking and some
14 states have recommended permanent bans. So we're not
15 sure where this inquiry will lead to.

16 One of our key concerns for the current
17 inquiry is that the panel has a very limited scope in
18 terms of reference and powers. For example, there are
19 no public hearings or powers to compel evidence or for
20 submissions from parties to be tested and rebutted.

21 So, for example, the Environmental Defender's
22 Office would not be able to challenge claims made by
23 industry that fracking is safe. Whereas if there was an
24 independent public inquiry we might be able to do so.

25 Nonetheless, the Environmental Defender's
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1 Office submitted a submission to the fracking inquiry in
2 March of this year which was attached to the Brief that
3 we submitted.

4 Our submission focused on the regulatory
5 mechanisms that may be employed to mitigate or minimize
6 the risk of fracking and we highlighted the issues
7 regarding the inadequacy of AW's current regulatory
8 regime that would apply should fracking go ahead. That
9 is not to say that we advocated or condoned that
10 fracking should occur. We actually stated in our
11 submission that there should be a ban state-wide.

12 While the fracking inquiry in terms of
13 reference do not explicitly refer to human rights we
14 indirectly addressed the impact of fracking and their
15 regulation by WA on human rights in our submission but,
16 unfortunately, inquiries in terms of reference don't
17 extend to looking at whether there should be a permanent
18 ban on fracking across the state. Therefore, we're
19 concerned that the inquiry will recommend that fracking
20 can occur safely but with stronger regulation and then,
21 going by the track record of previous governments, the
22 recommendations for stronger regulation will not be
23 implemented or enforced but, nevertheless, fracking will
24 be allowed to continue and this gives us great concern.

25 So turning to our Brief. The context in which
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1 we have submitted our Brief is based on Western
2 Australian law and some national Australian law. And
3 our concern that should fracking proceed here the
4 existing law and its track record of implementation will
5 be insufficient to protect breaches of human rights, the
6 environmental law and the rights of nature, which have
7 been pointed out by other presentations as part of this
8 current inquiry.

9 Therefore, we have been focused on the first
10 legal question the Tribunal was considering, the
11 circumstances in which fracking activities and the risks
12 they pose to the natural environment, health and
13 community and aboriginal heritage and culture breached
14 substantive and procedural human rights protected by
15 international law.

16 Our submissions draws on the submission we
17 made to the WA inquiry and covers the climate impacts
18 and environmental public participation and social cost
19 cases.

20 We emphasize the detrimental impacts the
21 regulation of fracking in WA would have on the
22 environment and the human rights of landholders, native
23 title holders, traditional custodians and the public
24 under WA law.

25 We're particularly concerned about the impact
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1 of the provisions in WA's petroleum legislation, up on
2 the slate, known as the Packer Act, which governs or
3 purports to govern fracking activities on substantive
4 and procedural human rights.

5 This is particularly borne out by the limited
6 rights provided to landholders, farmers and aboriginal
7 and native title groups under this legislation.

8 There are significantly fewer rights under
9 WA's petroleum legislation compared even to the hard
10 rock mining or planning legislation which is, by no
11 means, perfect in WA either.

12 For example, owners and occupiers of private
13 land are afforded very limited rights in respect to the
14 initial access by fracking companies and the grant of
15 petroleum licenses on their land.

16 In our submission we note that access to
17 petroleum title holder can only be denied in very
18 limited circumstances in respect to private land.

19 For example, if it's close to a cemetery or
20 next to a substantial improvement, and there's no
21 definition of what substantial improvement is. That's
22 generally defined by the agency.

23 There's also no requirement under the
24 legislation for owners or occupiers of private land to
25 be notified of an application for a petroleum title or
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1 even the grant of title on their land. The grant of the
2 title simply occurs and land owners find out after that.

3 Further and significantly the definition of
4 what private land is is very limited. It expressly
5 excludes past re-leases and leases for the use and
6 benefit of aboriginal persons.

7 We submit that taken as a whole there is an
8 argument that this amounts to a breach of the right to
9 either own property and not be subject to the arbitrary
10 deprivation of property.

11 And also breaches accepted principles in
12 conventions such as the Aarhus Convention regarding
13 access to justice, access to information and the rights
14 of the public to participate in the decision-making
15 process.

16 Turning to emissions, to air and climate
17 change.

18 There are countless published materials that
19 have highlighted that fracking can result in the release
20 of hazardous air pollution which can impact the health
21 of people, plants and animals.

22 Fracking, of course, can lead to a large
23 deliberate and uncontrolled emissions of methane and,
24 therefore, can contribute to climate change. And we
25 note that in our submission.

1 The concern that we have with the WA
2 regulatory system in this regard is that there is no
3 specific obligation on the environmental protection
4 authority, which is intended to be independent from
5 government, to consider and assess greenhouse gas
6 emissions from fracking. The environmental protection
7 authority's track record in assessing greenhouse gas
8 emissions in WA is generally poor.

9 There's currently no coherent EPA or state
10 government policy in Western Australia for the
11 assessment of greenhouse gas emissions, from fracking or
12 the fossil fuel industry generally, which leaves
13 greenhouse gas emissions largely unregulated given there
14 is no effective national scheme for pricing or
15 regulating greenhouse gas emissions either.

16 Therefore, we submit that enabling a new
17 fracking industry in WA where there is no regulation of
18 greenhouse gas emissions would further increase the
19 effects of climate change and impact human rights of
20 individuals worldwide.

21 In relation to impacts to land and water it's
22 also well-known that fracking can cause significant
23 impacts to ground water quality. Fracking can impact
24 the quality of ground water for human consumption and
25 water for stock and environmental uses due to pollution
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1 and contamination. Our submission highlights numerous
2 published and peer reviewed sources in this regard.

3 Fracking is also a highly water intensive
4 process which puts pressure on vital water sources which
5 is a significant concern in a place such as Western
6 Australia where access to water, particularly in remote
7 areas is difficult, and water is essential for the use
8 of agriculture and aboriginal persons.

9 We submit that the impacts of fracking and
10 that fracking poses to water and air through pollution
11 and contamination and deprivation of water for the
12 environment and community risks violating the human
13 right to life.

14 The UN General Assembly has previously
15 declared that access to clean water and sanitation is a
16 human right essential to the full enjoyment of life and
17 other human rights.

18 We note that the current UN Special Rapportuer
19 On Human Rights In The Environment, John Knox, has
20 affirmed that states are obliged to take reasonable
21 justifiable measures to protect the environment and
22 related human rights, acknowledging that environmental
23 degradation can range and does adversely affect the
24 enjoyment of a broad rage of human rights.

25 However, in Australia we've got no bill of
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1 rights and we have no enforceable right, in Australia,
2 to a clean and healthy environment. We submit that
3 these circumstances create governance gaps that make
4 Australia vulnerable to breaches of substantive and
5 procedural human rights as a result of fracking.

6 Turning to public participation.

7 While the Aarhus Convention sets out three
8 pillars of procedural human rights, access to
9 information, public participation and access to justice,
10 we submit that current WA law as it would apply to
11 fracking severely limits the extent to which the public
12 can participate in the regulatory and decision-making
13 process or understand the impacts a particular fracking
14 proposal may have on their land.

15 There are numerous hurdles preventing the
16 public from understanding or participating in the
17 assessment, the approvals and compliance processes under
18 the petroleum legislation. There is a significant lack
19 of transparency in the petroleum assessment process
20 which we address in our written submission in detail and
21 also in terms of understanding whether the proponents
22 have been compliant with the law. In short it's very
23 secretive. There are few prosecutions. And to the
24 extent that enforcement action is taken it's not made
25 known to the public.

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1 This is compounded by the fact that the
2 department responsible for regulating fracking is also
3 charged with promoting the industry and ensure that
4 these resources are developed quickly for export. This
5 regulatory capture that we point out in our submission
6 creates conflicts of interest which result in
7 environmental and human rights outcomes being reduced
8 significantly.

9 While under environmental legislation, as
10 opposed to the petroleum legislation, there is more
11 opportunity for public participation, particularly in
12 the environmental impact assessment process, which is
13 covered by the EPA. We're concerned that the EPA will
14 use its ability not to undertake impact assessment and
15 just rely on processes under the more secretive
16 petroleum legislation run by the department.

17 This is what has occurred to date for the
18 three exploration proposals that have been approved in
19 WA and there is a history of the EPA diverting the
20 assessment and approval of projects to other agencies
21 rather than conducting the environmental impact
22 assessment process itself.

23 WA law also doesn't consider the assessment of
24 cumulative impacts, which is a big risk, in terms of
25 both climate change and impacts from fracking more
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1 generally as well.

2 Further under WA law there are very limited
3 rights of the public to appeal the merits of
4 environmental decisions or bring actions to enforce the
5 law such as third-party enforcement.

6 We have no environmental court, unlike other
7 jurisdictions, such as New South Wales, and there are
8 significant cost risks to the community for bringing
9 legal action as there is no ability to obtain protective
10 cost orders in Western Australia unlike other states in
11 Australia.

12 Most cases are heard by the minister in terms
13 of merits review, who also makes the final project
14 decision, which can risk conflicts of interest.

15 And finally, but by no means least, aboriginal
16 people constitute a large proportion of the population
17 in Australia and in WA living in areas vulnerable to
18 fracking. We pointed out the issues that are in
19 relation to leases for aboriginal persons and not being
20 notified of fracking activities and we're also concerned
21 that the cultural rights of aboriginal people are at
22 risk of being violated.

23 Fracking can, of course, impact aboriginal
24 heritage by degrading land or water used by aboriginal
25 people and it can also damage archeological and
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1 ethnographic sites.

2 WA's aboriginal heritage legislation is old
3 and in need of urgent reform. Even the current
4 Aboriginal Affairs Minister in Western Australia has
5 recognized this and has called for a reform of the act.

6 These laws have a poor track record of
7 protecting aboriginal sites and instead are really just
8 used to facilitate development approvals for industry.
9 Recently many, many, aboriginal sites were deregistered
10 by the agency because it wasn't sure whether it was a
11 site or not and this situation continues to today.

12 We've also noted earlier in our Brief our
13 concerns that leases for aboriginal people are not
14 included in the definition of private lands and further
15 aboriginal persons have no right of veto or a right of
16 free prior and informed consent under WA law.

17 So, in summary, the current regulatory system
18 in Western Australia is insufficient to safely regulate
19 fracking in a way that protects the environment and
20 upholds basic human rights for the WA community and
21 aboriginal people.

22 We've called on the WA government to maintain
23 the moratorium while, at the same time, calling for
24 significant improvements to WA's regulatory system and
25 how it is implemented in practice in relation to
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1 fracking, should it occur, and industry more generally.

2 We'd like to thank the panel members for your
3 time and for hearing us today. We wish you well with
4 your deliberations and we'd be very pleased to answer
5 any questions that you may have.

6 Thank you.

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8 [youtube.com/watch?v=iTf_ihu70oE]

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1 VERMONT 350

2 GREEN MOUNTAIN DRUID ORDER

3 MAY 16, 2018 3:30-4:30

4
5 MS. VANESSA BROWN: Okay. Hello

6 everyone. I'm Vanessa Brown and it's a great honor to
7 be here and to participate in this historic session of
8 the Permanent Peoples' Tribunal On Fracking, Climate
9 Change And Human Rights. I really enjoyed listening to
10 so many dedicated, compassionate and courageous people
11 from all over the world talk about these issues.

12 Today I am representing 350 Vermont and the
13 Green Mountain Druid Order. And I'm also representing
14 myself. I am a single mother and an attorney and I
15 feel that I'm deeply impacted by climate change and
16 fracking.

17 I believe, as many other people have said
18 during this tribunal, that climate change is deeply a
19 spiritual problem as well as a scientific one and many
20 people in Vermont also share those feelings.

21 And so I just wanted to tell you a little bit
22 before I get started on sharing some of the testimony
23 from Vermonsters who have been working on fracking issues
24 and climate change issues for many years a little bit
25 about my background.

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1 I am a former intern with the Spring Creek
2 Project. I have founded an organization, the White
3 River Reconciliation Project. I've worked with the
4 Institute For Energy And Environmental Research in DC.
5 I've been working on the Corvallis, Oregon mayor's
6 office on sustainability projects when I was a student.
7 I've worked with VPIRG in Vermont on their clean energy
8 program.

9 And while I was in law school I studied, in
10 addition to environmental law, I studied energy law and
11 specifically hydraulic fracturing technology and the
12 economics that are associated with it.

13 So my past work includes advising state and
14 federal government officials and other legal
15 professionals during the BP oil spill.

16 I grew up along the Juniata River in Blair
17 County in Pennsylvania in the Marcellus shale region.
18 And between 2006 and 2009 I monitored the Kiger Island
19 site for the Willamette River Keeper in Oregon.

20 So here I am today and my job is to present
21 the testimony of Vermonsters who have been leading the
22 efforts to transition our state away from fossil fuel
23 dependence and are presently challenging the development
24 of a refracked gas pipeline in Vermont.

25 Vermont was the first state in the nation to
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1 ban hydraulic fracturing and the disposal of fracked
2 waste water because of its obvious human rights impacts
3 due to the contamination of the water and the soil. And
4 I'm also going to be sharing with you the testimony of
5 the Grand River Keeper in Oklahoma who has been fighting
6 fracking down there.

7 And so after the video I will go ahead and
8 take any questions or make some recommendations but I
9 think we're ready to go. And thanks so much for having
10 me here today.

11 MR. BRIAN TOKAR: Good morning. My name
12 is Brian Tokar. I'm a lecturer in Environmental Studies
13 at the University of Vermont. Board member of 350
14 Vermont and the Institute For Social Ecology and the
15 author and editor of several books. Most recently this
16 one which is called Toward Climate Justice: Perspectives
17 On The Climate Crisis And Social Change, which first
18 came out in 2010 and was substantially revised and
19 expanded in 2014.

20 We're gathered today in a really important
21 place. This is Geprags Community Park in the town of
22 Hinesburg, Vermont about a half hour from Burlington.

23 The events around Geprags Park were the apex
24 of a four or five year campaign, which is still ongoing,
25 to stop the construction of a new gas pipeline to
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1 transport fracked gas from Canada down the western side
2 of Vermont.

3 At the same time that Vermont has banned
4 fracking for gas or oil in state, we're continuing to
5 import large quantities of gas and the gas company,
6 which is Canadian owned, had planned on continuing to
7 expand this pipeline pretty far south to connect with up
8 all the infrastructure that would allow it to eventually
9 transport fracked gas from the Marcellus shale in
10 Pennsylvania and Ohio through Vermont to Canada.

11 The campaign, at this point, has not succeeded
12 in stopping the first leg of the pipeline but a portion
13 that was supposed to go underneath Lake Champlain to
14 fuel a huge paper mill was stopped and we believe that
15 we've set things in motion that may eventually shut down
16 this pipeline -- you'll hearing a lot more about that
17 this morning -- and certainly prevent the gas company
18 from extending this pipeline any further.

19 The campaign against the pipeline here in
20 Vermont has also inspired a state-wide campaign calling
21 for no new fossil fuel infrastructure in the state of
22 Vermont. And in early March on our annual town meeting
23 day 36 towns all across Vermont passed resolutions
24 calling for an end to the expansion of fossil fuel
25 infrastructure and work toward alternatives.
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1 These campaigns have, in many ways, been
2 inspired by the themes of climate justice that are very
3 much resonant with the human rights principles that are
4 central to this Tribunal.

5 The climate justice movement, of course,
6 highlights the disproportionate impacts of climate
7 changes on those people around the world who are least
8 responsible for the problem of excess emissions.

9 It brings forward the leadership of the
10 frontline communities that are most affected and also
11 embodies an understanding that the institutions
12 responsible for abuses of the environment like fracking
13 and all of the other causes of climate change are the
14 same institutions that are responsible for a wide array
15 of other social and economic injustices that we face.
16 So we believe that climate change is fundamentally a
17 human rights issue.

18 This movement is also focused on an
19 understanding of moving toward solutions to the climate
20 problem that go beyond the realm of the technical that
21 really embrace a different outlook on how we want to
22 organize our lives, how we want to organize our
23 communities.

24 Here in Vermont we have many models of people
25 living very well at much lower levels of consumption
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1 than are considered the norm in the US and throughout
2 the industrialized world. And we continue to focus on
3 community-based solutions to allow us to live better on
4 this earth, to challenge the institutions responsible
5 for various abuses and really look toward a very
6 different kind of future.

7 MS. RACHEL SMOLKER: My name is Rachel
8 Smolker and I'm a resident here in Hinesburg. And a
9 couple of years ago I got involved in fighting this
10 pipeline that is going through the state of Vermont
11 because it was coming through this beautiful park, which
12 is our only public park in this town.

13 This land was granted to the town by Dora
14 Geprags who was a resident here for a long time. And in
15 the deed of transfer it was specified that the park
16 would be used only for educational/recreational purposes
17 or for school.

18 And when Vermont Gas came along and said they
19 wanted to build a pipeline through the middle of this
20 park it created a lot of divisions in the town and those
21 divisions are still festering and haven't fully been
22 healed.

23 We took it to the Supreme Court and the
24 Supreme Court ruled against us and the pipeline is now
25 installed over behind me in the distance there.

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1 When we sort of got to the end point with the
2 Supreme Court we didn't feel we were done fighting this
3 pipeline because we know that this pipeline has at least
4 a 50-year life span or so, and we figured if we could
5 stop it even tomorrow or a year from now or 10-years
6 from now or even 20-years from now we would still be
7 coming out way ahead.

8 We spent a lot of time researching and
9 watching how the construction was being done. And the
10 more we learned about pipeline engineering and how the
11 contracting crew was working and seeing what was going
12 on we realized this pipeline was being slap-dashed into
13 the ground as hastily as possible and with just reckless
14 disregard for our environment and our safety.

15 And we did many, many public records requests
16 and ultimately we went to the federal regulating body,
17 PHMSA. We said you need to look into this. The state is
18 not doing their job of oversight. This is a danger to
19 our communities.

20 I started out with this being a climate
21 activist for a long time and I was concerned about
22 fracking and I was concerned about the pipeline from the
23 perspective of the impacts of methane leaking from
24 infrastructure. But after learning and watching how the
25 pipeline itself was constructed my concerns now are more
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1 for the safety of people who live along the pipeline
2 route because we know that, for example, they put the
3 pipeline into the trenches that they dug too shallow in
4 some locations.

5 They didn't put the proper select backfill and
6 padding around the pipeline in some places. They didn't
7 compact the padding around the pipeline safely the way
8 they're supposed to in some places.

9 We know that they didn't install trench
10 breakers that were meant to prevent water from leaking
11 out where they crossed streams and around the edges of
12 wetland.

13 We know that they were lacking a quality
14 assurance program through much of the construction of
15 the pipeline.

16 There was regulations that the federal
17 authorities required which are considered minimum
18 standards and then the state had requested a lot of
19 improvements upon that through a certificate of public
20 good in our Act 250 Section 248.

21 And the company came and told the state they
22 were going to do all sorts of things to ensure that this
23 went far above the minimum federal standards but nobody
24 came out and enforced and looked and watched to see what
25 they were doing and ensure that they actually followed
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1 the agreements that they had made with the people of
2 Vermont.

3 And so now after very hastily getting the
4 pipeline in to the ground, turning on the gas flow,
5 telling everybody, oh, we are providing cheap,
6 affordable, clean gas for all you eager customers out
7 there, we are saddled with this very, very dangerous
8 pipeline.

9 MS. LISA BARRETT: I'm Lisa Barrett and I
10 live in Huntington, Vermont. And for just the last two
11 years I have been deeply involved in this effort to stop
12 the Vermont gas, fracked gas pipeline in Vermont.

13 And looking at it from the point of view of
14 human rights it seems to me there is a human right to
15 clean water. There is a human right not to be subjected
16 to human made earthquakes. And there is a human right
17 not to be killed for something as insubstantial as
18 corporate greed.

19 I first got involved in this fight thinking
20 that fracking was a terrible thing and it was incredibly
21 hypocritical that this state that had banned fracking
22 would allow a fracked gas pipeline. And that the state
23 government would embrace a fracked gas pipeline.

24 I also first became involved because I was
25 aware that in 2015 there was a heat wave in Pakistan and
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1 India that was definitely caused by our climate
2 emergency and that heat wave killed at least 2,500
3 people and there is no doubt that that was caused by our
4 climate change emergency.

5 Now 2,500 people that's pretty close to the
6 number of people who were killed on 9/11. When people
7 were killed on 9/11 this country pulled out all the
8 stops. Started spending billions of dollars to kill
9 people in the Middle East and to make us jump through
10 security hoops every time we wanted to do something.

11 But 2,500 people dying in Pakistan and India
12 because of a heat wave that brought the temperatures to
13 130 degrees has not caused us to do anything to stop
14 fracking, to stop fossil fuel infrastructure and the
15 hypocrisy of that is overwhelming to me.

16 People have a right to live without fear. And
17 too many people in our little state of Vermont who live
18 along the pipeline route are living in fear and they're
19 living in well-founded fear.

20 What causes them to be living in the
21 incineration zone of a compressed gas pipeline?

22 It's corrosion that causes most of the
23 explosions. We haven't had any explosions in Vermont.

24 The pipeline is brand new but we have gas under pressure
25 600 pounds per square inch. We have pipe lying on the
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1 soil. It has rocks in it that can rub holes in it.

2 We have pipe with joints that may not be
3 properly sealed and we have pipes that are running miles
4 under high voltage electric transmission lines. And
5 that electricity can be conducted by the pipeline and
6 the cathodic protection and other methods that are used
7 to protect the pipeline from carrying that electricity
8 are not working.

9 I'm one of the people, a small group of
10 people, who has pored over thousands of pages of
11 documents to see how this pipeline was built. And this
12 pipeline has been built with a risk here and a risk
13 there and a risk in another place. And when you add up
14 all those risks it is terrifying for people who live
15 near this pipeline.

16 We have to stop fracking and we have to stop
17 fossil fuel infrastructure and we have to keep people
18 from having to live in fear from a gas pipeline.

19 MR. NATHAN PALMER: My name is Nathan
20 Palmer. I own Laughing Tree Farm in Monkton, Vermont.
21 I'm one of the land owners who have been directly
22 impacted by this pipeline.

23 When they decided to lay this pipe it was in
24 2012 and they made a chart for the original route that
25 it was like so offensive to everyone that was along it.
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1 So in the process of calming down some people
2 they rerouted the pipeline and that's when it came
3 directly across our farm.

4 My immediate response was what's this going to
5 do to my soil? What's this going to do my water?

6 I called a hydrogeologist and asked him what's
7 this going to do my water? And he came over and did an
8 investigation.

9 I called an agronomist at UVM and said what's
10 this going to do to my soil or am I just freaking out
11 here?

12 And she said, well, send me the information on
13 how they're going to build this and I'll take a look the
14 at it because, you know, you are kind of an excitable
15 guy. And maybe you are, you know, getting too
16 excited.

17 I sent her the information. She came back
18 with a report and said, you know, if they do this
19 construction the way they say they're going to do it it
20 will be 20 years at least for your soil to recover
21 because I have heavy clay soil.

22 And even though I am not an organic farm I
23 farm organically and there's just no way that the soil
24 would be able to recover.

25 The hydrogeologist said the same thing. This
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1 is heavy clay soil. You cut a 5-foot trench through
2 this land you're going to change the water flow in many
3 directions, and none of them good.

4 So we took that to the testimony and presented
5 it to public service board and we were hoping that by
6 bringing this information to the board that they would
7 adjust the way the pipeline was built across the entire
8 length of it.

9 Instead they adjusted how they were going to
10 deal with our particular farm, as if our land was
11 special and no other land is special. And the reality
12 is all land is special. All water is special.

13 What I really have a problem with here is
14 that, you know, we're sacrificing our water for fuel and
15 that is a terrible situation to put society, to put
16 anyone in, where you have to make a choice between
17 whether you're going to be able to drink or whether
18 you're going to be able to drive your car.

19 Because what happens is those that can afford
20 to will drive their vehicles, heat their houses and
21 drink their water and those who are on limited income
22 are the ones who are going to have to decide do I buy a
23 gallon water or do I buy a gallon of fuel to keep my
24 house warm.

25 You know, it sounds kind of like out there a
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1 little bit but the reality is that water is precious and
2 we don't value it the way that we should. It's like a
3 commodity that we can get rid of real easily and we can
4 come up with real easily and it's obviously getting
5 harder and harder.

6 You can take that water and you can reclaim it
7 enough that you can reuse it for fracking but you'll
8 never be able to drink it. You'll never be able to feed
9 your animals with it. You'll never be able to sustain a
10 life with it. And that's really what it comes down to.

11 Are we going to have a liveable planet that we
12 can live on and enjoy their life or are we going to have
13 a place that is run, you know, by people that have a big
14 pile of money in their bank accounts and the rest of us
15 are just going to have to, you know, fend for it the
16 best way we can?

17 You know, I was really hoping that after the
18 pipe was built I could put this to bed and not have to
19 deal with it any more but the reality is that it was
20 built in a way that is so slipshod you don't even want
21 to live there.

22 You know, they told me when they first were
23 going to put this pipe through once we put this pipe
24 through you'll forget it's there. If you forget it's
25 there that's where you are going to have trouble. And
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1 it's going to get really serious.

2 MR. EARL HATLEY: I'm Earl Hatley. I am
3 Grand River Keeper for the Grand River Watershed and my
4 organization is the lead agency. I am Chickamauga
5 Cherokee. I belong to the Long Hair clan.

6 Fracking started in Oklahoma around 2007.
7 Oklahoma was lied to about what was causing the
8 increasing earthquakes over time.

9 In 2013 the earthquakes began increasing
10 tremendously. I had been fighting TransCanada and the
11 Army Corps of Engineers who were building the Keystone
12 XL pipeline southern leg from Cushing, Oklahoma to the
13 Gulf. So I really couldn't turn to that at that point
14 in time.

15 The Keystone XL southern leg was going to send
16 tarsands and fracked oil from the Bakken region up in
17 North Dakota and they had been sending it down to
18 Cushing in another way through a TransCanada spur from
19 Nebraska to Cushing.

20 Cushing is the largest terminal in North
21 America and it's the crossroads for pipelines. If you
22 saw a pipeline mapping of Cushing a plate of spaghetti
23 would look more organized. I mean it's massive and so
24 is the terminal part. And right now about half of it is
25 now Enbridge. TransCanada had a good part of it at one
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1 point in time when they were building the pipeline.

2 So in 2014 I got a letter from Devon Energy.
3 They wanted to come on to my property that I still own
4 in Payne County where most of the earthquakes were
5 occurring and explore for gas -- or for oil. And I
6 threw the letter away. And then a couple weeks later I
7 got another letter saying I didn't respond to the first
8 letter.

9 And so I looked it up and found that they
10 could come on to my property anyway. So I wrote them
11 and then I called them and I told them that I didn't
12 want any part of it and they weren't welcome to come on
13 to my property.

14 And they said, well, we'll, work around you.

15 And I said, well, I don't think that my
16 neighbors want you either.

17 About three weeks later I got another letter
18 giving me ten days to respond or they were going to go
19 to court and get authorization to come on to my land
20 anyway.

21 I organized citizens groups and the state-wide
22 group. And Stillwater, Oklahoma, which is the capital
23 seat of Payne County, passed ordinances for oil and gas
24 within the city limits which, in effect, keeps them out
25 of the city limits of Stillwater. And they passed that
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1 two weeks after the state legislature passed a law
2 saying that the cities couldn't do that.

3 And they've been threatening with lawsuits but
4 nobody has done anything so their ordinances stand. And
5 we're really proud of them.

6 I can't come on to my property any more
7 because I now have eight fracked wells in my square mile
8 in my section and a disposal well a mile and a half
9 away. And I have an autoimmune disease so when I go to
10 my property within five minutes I start getting
11 headaches and I start getting sick. And the longer I
12 stand there the sicker I get. And it takes me about
13 three weeks to recover when I go back home where I live.

14 In 2016 we had 10,000 earthquakes, maybe more
15 than that, and the USGS is saying that even if they stop
16 now we've still going to have a 6.0 or 6.5 or even
17 larger in our future. Probably several of them because
18 of all the faults that they've awakened now.

19 And some of our people that called in to the
20 corporation commission about their homes being destroyed
21 were told, well, you shouldn't -- you should be proud
22 because you're contributing to our independence on oil
23 and boys won't have to go to the Middle East to fight,
24 you know, so that's your sacrifice.

25 Most people don't have earthquake insurance
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1 because we're not an earthquake state. So their homes
2 didn't come with earthquake insurance. And the few that
3 did the insurance companies won't insure homes that are
4 damaged by man-made earthquakes.

5 You know, people are stuck with damaged homes
6 in the 14 counties where the earthquakes are happening
7 where the fracking is happening. And now fracking is
8 coming back because the price of oil is high.

9 So they're just going down and widening roads
10 and getting ready for huge infrastructure of oil and gas
11 exploration in these counties and the earthquakes are
12 going to be coming back big time.

13 Now they're drilling more shallow wells to get
14 at the oil that is more shallow. So more and more
15 ground water is going to be contaminated.

16 Thank you.

17 MS. FERN LICKFIELD: Hi. So I'm Fern
18 Lickfield and I am here from the Green Mountain Druids
19 School & Community. I'm based in Worcester, Vermont. I
20 teach a lot about how to be a steward and how to connect
21 more deeply with the spirit of place.

22 You know, before there were individual
23 religions with different Gods all of our ancestors, if
24 you've traced them back far enough, come from a place of
25 animism. And this is just understanding that everything
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1 is alive and all life is sacred.

2 And that means that we are connected to
3 everything else because the same spirit that animates
4 the tree animates us. And so when we remember this, and
5 I love the word remember, it's about pulling all of our
6 pieces back together and remembering that we're not on
7 top of this evolutionary pyramid. We're actually in a
8 web. And we are connected to everything. So that means
9 everything that we do affects everything else.

10 So it's very much about taking responsibility.
11 It's about understanding that the health of the human is
12 deeply dependent on the health of the land and on the
13 water and on the air. And it means also that health is
14 not just about this level of physical. You know, it's
15 not just our bodies.

16 We know that as humans for us to feel healthy
17 we have to pay attention not only to our physical health
18 but to our mental health and our spiritual health. And
19 so we also look at that at the macrocosm level with the
20 land. And really has a lot to do with slowing down
21 enough to listen and to hear what the land and the
22 waters need from us.

23 MS. VANESSA BROWN: So thanks for
24 listening to the testimony from Vermont folks and Earl
25 Hatley in Oklahoma.

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1 We have come together and talked through some
2 recommendations to make to the Tribunal. We don't agree
3 on all of them but we have a few that we would like to
4 suggest as far as what we think should be done.

5 We would like to see the Tribunal issue an
6 order requiring all the fossil fuel companies to
7 immediately disclose the chemicals that are contained in
8 the injections fluids. And to clean up the waters of
9 the earth;

10 We'd like all fracking operations to take immediate
11 action to tighten controls on infrastructure and prevent
12 methane leaks;

13 We would also like to see the immediate phase-out
14 of all fracking and also other fossil fuel operations:

15 We would like national and state governments to be
16 prevented from issuing new permits for fossil fuel
17 infrastructure;

18 We would like all fracking companies to, as an
19 alternative, have all fracking companies implement state
20 of the art measures to prevent leakage;

21 And we'd like to shut down fracking sites where
22 ground water protections are clearly failing;

23 And finally we'd like for the Tribunal to impose
24 steep and strict sanctions on public officials that
25 refuse to comply with these orders.

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1 So that's what we've got and I thank you so
2 much for being here and allowing us to tell you our
3 stories.

4 DR. THOMAS KERNS: Thank you. Well, I'm
5 not one of the judges but I do have a question.

6 MS. VANESSA BROWN: Sure.

7 DR. THOMAS KERNS: About the difference
8 between regulating, you know, strictly regulating
9 fracking and banning fracking.

10 Some people have argued that it can't be
11 regulated sufficiently enough to be safe and that the
12 only way to protect human and nature's rights would be
13 to ban it.

14 So where are you on that question?

15 MS. VANESSA BROWN: I would think that --
16 I would agree as well as the other individuals who
17 testified today, would agree that fracking cannot be
18 regulated and protect human rights at the same time.
19 That they're exclusive.

20 That the technology fundamentally violates
21 human rights and the rights of nature.

22 That for a number of reasons you have green
23 house gas emissions. I believe that in my Brief I had
24 highlighted some science that concluded that fracking
25 exacerbates climate change and that the emissions from
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1 it contribute, they're much higher.

2 And so if you were to regulate it it would be
3 a half measure that doesn't -- it doesn't affect CO2
4 levels in the atmosphere. So it would not get the job
5 done basically, in effect.

6 DR. THOMAS KERNS: Thank you.

7 Gill, do you have any questions?

8 MR. GILL BOEHRINGER: No. I just wanted
9 to follow-up.

10 So I take it that you're, as we say here, your
11 ambit claim would be to ban fracking but you made some
12 recommendations or requests to the Tribunal less than
13 that. And I guess, well, it must be that you reckon
14 that in addition to asking for a ban we ought to, in the
15 meantime, until that can be worked out, suggest certain
16 measures that might help to mitigate the damage.

17 MS. VANESSA BROWN: So provisional
18 measures, yes. So when we discussed an outright ban,
19 suggesting an outright ban to you, a lot of folks laughed.

20 They said, oh, we wish that would happen. You
21 know, that that would be an order that would be complied
22 with. And so we think that is what needs to happen but
23 we see that, you know, it's likely not going to
24 happen. We're not going to be, yeah.

25 MR. GILL BOEHRINGER: It's David and
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1 Goliath at the moment isn't it?

2 MS. VANESSA BROWN: Yes.

3 MR. GILL BOEHRINGER: Golaith may be
4 weakening and David may be getting stronger.

5 Just one point. I missed it. I wasn't quite
6 sure could you tell me when Earl Hatley was talking he
7 said he was a Vermont resident but the example he was
8 giving was actually from Oklahoma.

9 MS. VANESSA BROWN: That's right. Earl
10 has moved part-time to Vermont mainly because of his
11 inability to stay on his property and so -- yeah.

12 MR. GILL BOEHRINGER: Didn't want to be
13 homeless.

14 MS. VANESSA BROWN: Right.

15 MR. GILL BOEHRINGER: Okay. Thanks.
16 That's great. Really, really good.

17 I have a nephew who has a place in Vermont
18 that I visited about a year ago.

19 Actually let's say it was in the middle of --
20 it was in January. I found it very cold but I see it's
21 a place well worth fighting for and to protect. It's a
22 beautiful area.

23 MS. VANESSA BROWN: Thank you.

24 [youtube.com/watch?v=GK_qTdSWYuw]

25

1 ETHNOGRAPHIC FIELD RESEARCH

2 MAY 17, 2018. 9:00-10:00

3
4 DR. SIMONA PERRY: Hi, this is Simona
5 Perry. I'm the Ogeechee Riverkeeper in Savannah,
6 Georgia. I'm also on the board of the Pipeline Safety
7 Coalition. I want to thank you all for the opportunity
8 to present this evidence from my own experience as an
9 ethnographic field researcher today.

10 And in addition I presented the judges with a
11 set of documents entitled PPT Evidence and Source File.
12 It includes background documents related to the research
13 I'll summarize here today, independent testimony from
14 public source being (indiscernible) violation, 38 white
15 institutional reports on the various issues being
16 addressed in this Tribunal, 19 legal case documents and
17 29 peer reviewed published articles from
18 anthropologists, sociologists, political scientists and
19 human rights scholars.

20 I've also presented a series of spread sheets
21 that could serve to guide investigators and judges to
22 uncover more evidence of the widespread disregard for
23 human rights by governments and private entities seeking
24 to exploit oil and gas resources and carry them to
25 market.

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1 I'm happy to answer any questions about any of
2 this material and I encourage the judges and legal
3 experts to take a closer look at all of this evidence.

4 I want to start with a brief interview that
5 was done from Pennsylvania. And it's pretty much self-
6 explanatory.

7 [Music and text presentation].

8 In 2013 residents of Delaware and Chester
9 counties in suburban Pennsylvania learned that
10 Sunoco Logistics intended to dig a natural gas
11 liquids pipeline through their communities. Sunoco
12 called the project Mariner East. The more
13 residents learned, the more alarmed they became.
14 It wasn't just that this particular pipeline would
15 be uniquely dangerous. It was that they saw their
16 safety, property values, constitutional rights,
17 local ordinances, even their own elected officials
18 subverted by a corporation cloaking itself in the
19 guise of a public utility which had nothing to do
20 with the public good. They decided to fight.

21 These are their stories

22 [Conclusion of music and text presentation]

23 MS. MELISSA HAINES: We moved to Aston in
24 2011 because it was a nice neighborhood and close by
25 media and it doesn't have the same housing prices as it
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1 does there.

2 I've been a paralegal for 12 years. Most of
3 that time I spent doing workers' compensation claimant
4 work. So helping people with their every day lives and
5 their claims on a daily basis. I liked that work
6 because it's emotionally rewarding. It's nice to be
7 able to help people.

8 I found out about the Mariner East pipeline
9 via Facebook. One day I was on one of the local pages
10 and saw some posts from Middletown Coalition about it
11 and so I joined the group, started to pay more attention
12 to what was going on. I'm on Facebook like everybody
13 else is.

14 Once I saw a map from Middletown Coalition I
15 realized that it was coming through Aston and I found
16 that to be really concerning because it's only half a
17 mile from my house.

18 The major thing that I found concerning was
19 the safety of my son. Being in such close proximity to
20 a pipeline of that nature that has odorless, colorless,
21 high pressured contents in it was really concerning. I
22 mean even if there's not an immediate ignition scenario
23 I mean that's gotten asphyxiation risk. We travel
24 across Dutton Hill Road every day.

25 You live. You live in our community but it
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1 took awhile, I think, for me to fully understand the
2 gravity of the situation. And once I was aware of it I
3 went to a Middlentown meeting, one of the coalition
4 meetings.

5 It's been really difficult being the only
6 person, it felt like for a long time, in Aston that like
7 either knew or was concerned at all. I felt like I was
8 the only voice in Aston for a long time. Nobody here
9 was really talking about it at all.

10 I made several inquiries for information about
11 the pipeline from probably every commissioner in the
12 township where there was seven. Nobody responded to the
13 questions that I had.

14 I wanted to know when there had been public
15 comment before the township sold the easement to Sunoco.
16 I wanted to know how much money they received. I
17 wanted to know what they did with that money.

18 I also wanted to know if they received any
19 safety information from Sunoco. Like if they'd had any
20 idea what was even in the pipeline that they sold an
21 easement for.

22 After several weeks of no replies I filed a
23 Right To Know Request. A Right To Know Request is a
24 Pennsylvania equivalent of the federal Freedom of
25 Information Act. You can file a request for certain
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1 documents with local municipalities with the state
2 government entities and things like that.

3 In my Right To Know request I asked for any
4 and all documents concerning the sale of the easement,
5 including written correspondence concerning
6 negotiations.

7 I asked for information about how much money
8 was received, what the township did with the money that
9 they received and also any safety related information
10 that they received from Sunoco. I filed that request on
11 February 13th, 2017.

12 I received a timely response within five days
13 requesting a 30-day extension that cited legal review as
14 the cause. And they're within their rights to do that.

15 After I received the request for the extension
16 I never heard from them again. They let their 30-days
17 expire and when that happens your request is considered
18 denied.

19 At which point I filed an appeal to the state
20 office of Open Records who issued me a final
21 determination on May 1st granting my request for the
22 records. I have not gotten my information.

23 The township ignored, basically, the judicial
24 order from the state to turn over the records. So the
25 only recourse, at that point, is to file a lawsuit in
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1 the Court of Common Pleas to enforce. The final
2 determination is basically like filing for a contempt.
3 I definitely intend to file.

4 I think the township has ignored my Right To
5 Know request because there are certain conflicts of
6 interests amongst the elected officials there.

7 One of the commissioner's is a Sunoco retiree.
8 Another of the commissioner's is the uncle of one of the
9 Sunoco spokesman. The solicitor for the township works
10 at a firm that's represented Sunoco and yet she gets to
11 do legal review of residents Right To Know request when
12 they concern a different client of her's. I mean to me
13 those are conflicts of interest.

14 My legal experience was useful in the progress
15 but when you get to the point where you have to file in
16 the Court of Common Pleas that's a little above my pay
17 grade, especially where it concerns municipal law.

18 It's cost prohibitive to the average person,
19 you know. I was fortunate enough to find an organization
20 who is going to represent me, Penn Future. If it wasn't
21 for them I don't know how I would be able to do it.

22 I don't know that we'll be able to stop it.
23 I'd like to.

24 One of the other things that is important to
25 me as far as Mariner goes, and not necessarily Mariner
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1 2, is the proximity of Mariner 1 to Pennell. Once I
2 became aware of Mariner 2 it naturally led me to find
3 out about Mariner 1 which has already then operational
4 in Aston for two years.

5 Mariner 1 runs down Route 452 in Aston which
6 is a pretty heavily travelled road and it's also 400
7 feet from Pennell Elementary School where my son is
8 supposed to go to kindergarten next year.

9 Mariner 1 has also had three leaks in the last
10 year. School is not ready, not ready at all.

11 [Music].

12 DR. SIMONA PERRY: So that's just one
13 example of thousands of people across Pennsylvania and
14 across the country and the United States being impacted
15 by pipeline infrastructure directly related to the
16 Marcellus shale and unconventional fracking activities.

17 One of the things that I wanted to really
18 point out in this brief presentation is that the lack of
19 trust that residents have is obvious. And it's because
20 of the lack of information that is available to them and
21 also the lies that they've been told about the safety of
22 this type of activity.

23 And the industry is well aware of this lack of
24 trust. In 2012 they commissioned a report by a firm, a
25 consulting firm called Control Risk entitled The Global
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1 Anti-Fracking Movement. What it wants, how it operates
2 and what's next.

3 And in that report they found that the global
4 opposition to fracking was really the primary threat to
5 shale gas development and therein lies all the political
6 and security risks. And basically their outcome was
7 that the industry needed to do more to create more
8 winners.

9 By creating more winners what they meant was
10 creating benefits from developments that are tangible.
11 And they said, you know, had to do with well-paying jobs
12 that were there for two or three years of drilling or
13 more.

14 Their concepts of winning really had nothing
15 to do with equitable, fair or just voice in the process
16 of fracking or outcome. Certainly it did not have
17 anything to do with human rights of the local
18 communities.

19 Across North America we've seen this. I just
20 wanted to highlight one particular thing that happened
21 around 2013, October, the First Nations Community for
22 the Elisipogtog in New Brunswick there were protests.
23 They blocked the road to a Southwest Energy site. They
24 claimed that site was on illegally taken indigenous
25 land.

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1 They were told by the government to leave.
2 They refused. There were at least 40 people who were
3 arrested. There were molotov cocktails thrown. There
4 was tear gas and rubber bullets that were used on the
5 blockaders.

6 So the industry in the US and North America
7 refuses to be transparent. They've refused to allow
8 community concerns to be aired and they think that
9 public relations and community outreach stunts will
10 work. And this is another example of that that I wanted
11 to share with you.

12 During and after an accident at a Chevron
13 Appalachia well site in southwestern Pennsylvania in
14 February of 2014 where one worker lost his life and one
15 was critically injured Chevron's response to the local
16 community was to mail out gift certificates to a local
17 pizza parlor.

18 And this was construed by the local people
19 living there really as an front, as an act of disregard
20 to their lives, and really a lack of understanding the
21 seriousness with which they took their own lives and the
22 risks that were posed by having these developments in
23 their backyard.

24 So the field research that I have presented to
25 the judicial panel has been collected from over a dozen
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1 researchers, journalists and myself since 2009 and it
2 really focuses on how rural communities are grappling
3 with the implications of these developments and also
4 suburban and urban folks as you saw in that video. It's
5 about their own words and their every day lives and
6 their rights being violated.

7 In order to apply context that included, and
8 I'm not probably going to talk about it in depth because
9 I thought it was more important to hear a voice from the
10 field itself, information about the context in which I
11 did my own research starting in 2009 in a rural place in
12 Pennsylvania.

13 63,000 residents live in Bradford County where
14 I did the work. And the pace and scale of the shale gas
15 development in this county has been off the charts. In
16 Pennsylvania it's been incredible.

17 But in this one county in 2009 when I started
18 my work there, there were 103 gas wells. And by June of
19 2012, a little snapshot in time, there were 1,788 new
20 permitted gas wells in this county. Today there are
21 over 2000 permitted gas wells in this one county with
22 these 63,000 souls.

23 And most of the people who live there
24 traditionally have been dairy farmers, timber workers
25 and some small industry.

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1 The amount of water, land and other raw
2 material that would be necessary to support this type of
3 development, the pace of development, the type of
4 workers necessary, the amount of money that was being
5 offered to land owners, the amount of money being
6 invested into this development, is really off the charts
7 and out of scale with anything else development-wise in
8 Pennsylvania, even though Pennsylvania already has, you
9 know, 50,000 wells already, this unconventional fracking
10 is a different monster.

11 So this just goes through some of the local
12 impacts that we documented during my research in the
13 county. It's kind of a snapshot and an example of
14 what's happening all over rural places where this kind
15 of development is occurring.

16 I conducted over 100 interviews and also did
17 focus groups and really clearly I want to make the point
18 that there is no one here who is talking about this from
19 this project because they feel threatened. They don't
20 feel comfortable going out and speaking any more about
21 their concerns. And actually they've kind of given up.

22 A lot of them have done work in sharing their
23 information with New York state and other states in the
24 US, even internationally. But they really want to keep
25 their identities a little more private now. They've had
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1 retaliations from neighbors. They've had retaliations
2 from their county government officials and they've had
3 retaliation from the industry.

4 One of the things that leads to this is that
5 we found more than a dozen, and we think there are
6 probably many more in the county, were forced to sign
7 non-disclosure agreements when they signed leases. So
8 that led to a big silence thing.

9 So in 2013 my own field work really shifted to
10 look more at the kind of social and environmental
11 justice implications of what I was learning. And it
12 became clear really that, you know, all of these central
13 local impacts that were being documented were really all
14 about how the local authorities and elected officials,
15 even state agencies, were really dismissing the concerns
16 and those impacts.

17 And in the worst cases people were being
18 marginalized and threatened by what was happening to
19 them. So this really is the heart of why I am here
20 today.

21 So I started asking people what justice means
22 to them, what rights means to them in this county, and
23 it came across as very much an individual term, more
24 akin to rights. And people think of it like that in
25 this place.

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1 There's a clear concept of justice in three
2 categories, morality, revenge/vengeance and money.

3 And when it comes to morality and revenge
4 things such as threats to properties and future
5 generations and what that means for people's children
6 and staying on their land, which is their investment.

7 It also goes to the characterization and
8 labeling of land owners as extremists and activists by
9 the actual state governments that are supposed to be
10 regulating the industry, in a memorandum to state
11 legislators, about particular individual land owners and
12 it gives their addresses to the state legislators and
13 labels them as extremists.

14 It also goes to shenanigans that have been
15 going on in the Pennsylvania legislature trying to look
16 at how medical gag orders if you go in for something
17 that you think might be related to a gas industry impact
18 the doctor is actually not allowed to share that
19 information with other medical professionals and maybe
20 build a case about some kind of, you know, a group of
21 people in a certain place that might be impacted.

22 So the judges in Pennsylvania have ruled on
23 that and they've actually come out and said that this is
24 a threat to future generations. It's a threat rivaling
25 the environmental effects of coal extraction.

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1 And the last thing that people talked about
2 was rights in Pennsylvania, and Bradford County in
3 particular, was with starting to feel so frustrated that
4 they really wanted to take justice into their own hands.

5 And what they meant by that was running as
6 state representative and filing lawsuits. But many of
7 them, as you heard in the video, simply cannot afford to
8 do those kinds of things. And so then it comes down to
9 money and the legal system itself.

10 I mentioned the non-disclosure agreements that
11 the people sign in their leases. The governor, Tom
12 Corbett, the previous governor, served on the Marcellus
13 Shale Commission supposedly to take an objective view of
14 what the impacts were on the environment, human health
15 and communities and housing.

16 That came out and there were fees imposed and
17 there was still no tax on the industry in Pennsylvania
18 or other things being done. With that impact fee money
19 none of it is going into the actual impacts being seen
20 at the local level.

21 The other frustration people have is that
22 there have been a lot of violations of laws. In
23 Bradford County, for instance, it's a snapshot from 2005
24 to 2013 there were 700 violations logged on 260 gas
25 wells but less than 200 of those have seen enforcement
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1 action taken.

2 And then also something really troubling to
3 folks about, well, how do I get recognition of my
4 problems in Pennsylvania ifr if over 285 water well
5 complaints have been filed with the Department of
6 Environmental Protection between 2008 and August of 2013
7 but less than 150 have actually been investigated and
8 there have been a determination of cause.

9 So just to go through this really quick. I
10 think that one of the important points I want to make is
11 people living in the shale gas fields feel there is an
12 injustice in the development and that the individual's
13 rights are being neglected and violated and they're not
14 being listened to.

15 The state's governance of these activities
16 should have taken this into account but instead they've
17 been cast in some cases as the problem, unpatriotic and
18 troublemakers.

19 And the justice rights are not about only the
20 distribution of wealth or benefits, about winners and
21 losers, it's also about how people experience and
22 conceptualize justice in their daily lives and in terms
23 of all those things.

24 And if you want to indulge me for two more
25 minutes I just wanted to tell you one brief story that
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1 is more of a personal nature, but I think it's important
2 to the whole big picture, particularly in light of the
3 global epidemic of truth seekers and research activists
4 being targeted for elimination. My story is not that
5 extreme but I think it points to a trend that way in the
6 United States.

7 So in fall of 2012 I was invited to give a
8 public talk about my research in Bradford County. It
9 was given at Wilkes Barre, Pennsylvania, Wilkes
10 University. It was focused on some of the broader
11 questions around my work on how farmers were responding
12 to developments, the Marcellus shale, especially their
13 rural livelihood, their culture, community health and
14 personal health.

15 An industry funded group called Energy
16 Indepth, which you can look them up. They're funded by
17 the American Petroleum Institute, the Independent
18 Petroleum Association of America, El Paso Corporation,
19 XTO Energy, Shell, BP, Occidental Petroleum, Anadarko,
20 Marathon, Chevron, Encana, Talisman, Haliburton,
21 Chumbarjae and the Ohio Oil & Gas Association. So this
22 is a group that is funded by them.

23 They call themselves Grassroots Truth Seekers
24 and a couple of days later a blog appeared after my talk
25 on their web site that sought to discredit me. And
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1 after that I was angry and after that subsided I debated
2 with myself and I also talked to many others about how
3 or if to respond.

4 I chose silence as my response. Nothing I
5 could say would matter. I decided since the entire
6 Energy Indepth operation was first designed to discredit
7 the 2010 documentary Gasland by Josh Fox and then since
8 then it's been used to attack study after study or
9 anyone who asked questions about the true cost of shale
10 gas development.

11 So in the end I concluded that this, you know,
12 Energy Indepth campaign they're really just a bunch of
13 corporate bullies and they're very cleverly disguised as
14 grassroots and truth seekers and they just conduct smear
15 campaigns on anyone they think might pose a threat to
16 unfettered oil and gas development. So I chose to
17 ignore the bully.

18 But despite this I've been left a little
19 disturbed and nauseous as I watch other researchers
20 being attacked like this. It's not about my own
21 reputation but it's about the very real human cost being
22 paid each day by local people and the energy being
23 expended by these companies to shut up the truth.

24 This experience made me double-down in my
25 efforts to do all we can to insure those whose rights
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1 are being violated, their voices are not being heard,
2 that they are being recognized and protected.

3 Because when it came down to it I was not all
4 that surprised about the industry attacking me because
5 for three years I had, and ever since then, I've
6 witnessed the shale gas industry, their supporters in
7 Bradford County and elsewhere across Pennsylvania,
8 Colorado, Texas, try to publicly discredit and launch
9 personal attacks on farmers, foresters, housewives,
10 workers when they have concerns or simply ask questions
11 about how shale gas development would impact their own
12 lands, their water, their children's health, their
13 livelihood and their communities.

14 What troubled me was the fact that these
15 blatant disregard for the true costs the industry has on
16 peoples lives and their children lives.

17 So my question is, and why we're just seeing
18 this, is what will it take to stop this?

19 That's why I joined this effort with Tom and
20 this steering committee. I hope it makes a real and a
21 lasting difference across the world in finally bringing
22 hope and justice to those who have been silenced for far
23 too long.

24 Thank you.

25 DR. THOMAS KERNS: Questions?
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1 DR. ANDRES BARREDA: There is a question
2 from Professor Barreda. I'm going to translate his
3 words.

4 The United States coming from the period of
5 Cheney/Bush in the presidency there was a wide scope of
6 oil initiatives, very aggressive, the biofuels
7 initiative in Alberta, Canada, the tarsands initiative,
8 the pipeline, the pipeline XL, the Gulf of Mexico
9 accidents that are linked to Halliburton, so these
10 aggressions linked to fracking belong to a big movement
11 of energy crisis in the United States of loss of control
12 of hydrocarbons in the world, unfortunately. I started
13 only yesterday to take part as a judge and my question
14 is if, through this time, that there have been sessions
15 based on contextualization of the problem has been
16 made?

17 Of course, there is the coal exploitation in
18 the Appalachia that was mentioned yesterday and we will
19 have to add to these the traditional pollution from oil
20 extraction and petrochemical pollution in the southeast
21 of the United States.

22 DR. THOMAS KERNS: You're on mute Simona.

23 DR. SIMONA PERRY: I think it froze when
24 the question was asked. I don't know if I got the gist
25 of the question.

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1 In terms of the context of this related to the
2 cumulative nature of what's happening that's all I got
3 from it. So there was a freeze frame.

4 DR. ANDRES BARREDA: The question is if,
5 on the part of the petitioners, this general context has
6 been --

7 DR. SIMONA PERRY: It froze again.

8 DR. ANDRES BARREDA: The question is on
9 the part of the petitioners this general context has
10 been put forward in the course of these sessions.

11 DR. SIMONA PERRY: Oh. Is that a question
12 for the larger Tribunal?

13 Because I'm only a little piece of it and I
14 have not been able to the participate in the other
15 sessions either. I've watched them, yes.

16 I believe that as part of the steering
17 committee for this, you know, one of the ideas is to
18 bring all of these divergent voices together in one
19 place.

20 And they're not divergent in the sense of what
21 they're struggling with. That's the commonality. And I
22 think by highlighting the commonalities of our struggles
23 and those of us who are kind of documenting those
24 struggles maybe we'll have a portfolio of cases and
25 evidence that we can sort through and look at specific
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1 ways to solve this crisis. At least to bring solace and
2 justice to the folks whose rights have been violated in
3 various ways.

4 I mean you can talk about workers rights here,
5 which we don't but we should, in terms of their --
6 talking about the Gulf coast people working on rigs,
7 offshore rigs, you know, where is their voice?

8 So there's lots of different pieces of this.
9 And I think you're trying to ask how it's all going to
10 be put together? Is that correct or am I missing
11 something?

12 DR. THOMAS KERNS: And if that is the
13 question, how does it all fit together, particularly in
14 the US, we have not looked at the whole big oil and gas
15 fossil fuel, including coal, context and sort of framed
16 it altogether yet. But in this afternoon's session with
17 the attorneys and the judges that would be a rich issue
18 to bring up.

19 And I hope you expect to be there this
20 afternoon so that you could raise that question
21 personally. Thank you for asking.

22 DR. SIMONA PERRY: It's an important
23 question.

24 MR. GILL BOEHRINGER: Could I ask? It's
25 Gill Boehringer here.
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1 You said there was seven commissioners and you
2 mentioned that three of them, two perhaps indirectly and
3 one directly, had conflicts of interest. That's a
4 minority. What about the other four?

5 Well, I should ask, are those three the
6 dominant ones on the commission? Do the other four
7 just go along with it?

8 DR. SIMONA PERRY: I'm not sure what
9 exactly was the experience of the woman who was
10 interviewed in southeast Pennsylvania but it's a great
11 question because that is one of the issues IN that all
12 of these small townships are different.

13 And so it's been my observation that the
14 industry, in Pennsylvania in particular, has taken
15 advantage of that in that they leverage within the
16 commission decision-making authority at the county
17 level.

18 They try to get influence, and we've
19 documented this, I've documented this in Bradford
20 County, by either placing people who have worked for the
21 industry in a position where they have specific direct
22 line to a decision-maker or they hire away county
23 officials, county staff I should say, to work for the
24 industry so now there's this kind of a connection now
25 between the county operating and the industry operating.
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1 .

2 We also have seen where they will actually cut
3 sweet deals with county commissioners and township
4 supervisors on leases on their property to do
5 right-of-ways. So there's a money thing involved with
6 that as well.

7 But it varies across the country and it varies
8 across each state in the United States about how those
9 local levers of power are being played by the industry.
10 And myself and several other sociologists, ethnographers
11 and political scientists have been looking at that.

12 We don't have answers about it at all except
13 that we know it's pervasive in the sense that the
14 industry uses that to manipulate government
15 decision-making at the local level in particular.

16 At the state level it's more about lobbying, a
17 high powered lobbyist and influence in that way.

18 MR. GILL BOEHRINGER: Thanks. I'm
19 particularly interested because I was born and raised in
20 Delaware County.

21 DR. SIMONA PERRY: There you go.

22 MR. GILL BOEHRINGER: I know something
23 about local politics there.

24 DR. SIMONA PERRY: Right. I encourage
25 you to take a look at all of those interviews. They are
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1 on the Mariner East web site that they put together.
2 They're excellent interviews on all different topics. I
3 think there're about 30 there.

4 And if you would love for -- if you have a
5 chance to take a look at some of those I put that in the
6 spread sheet that I circulated in that link so you have
7 it now.

8 MR. GILL BOEHRINGER: Thanks.

9
10 [youtube.com/watch?v=TAOIzzelWTO]
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1 FRESHWATER ACCOUNTABILITY PROJECT

2 MAY 17, 2018 9:00-10:00

3
4 MS. MEGAN HUNTER: Hi, my name is Megan
5 Hunter. I am an attorney with Hunter & Hunter LLC, a
6 firm that I founded to increase access to justice for
7 environmental matters here in Ohio. I'm out of Akron,
8 Ohio. And I'm here today representing Freshwater
9 Accountability Project. A client of mine who -- they're
10 a grassroots nonprofit organization and they've been
11 working very hard on issues related to hydraulic
12 fracturing for, oh goodness, at least since 2010 here in
13 Ohio and they have members throughout the state of Ohio
14 as well as members in Pennsylvania.

15 And Freshwater Accountability Project's main
16 mission is really just to be a community advocate. So
17 to be a central contact for people impacted by industry
18 but also they really identify as an organization that
19 collects information. So it does all the public records
20 requests that individuals might not know how to do.
21 Pursues access to that information and acquires that
22 information, then makes it publicly available to help
23 people empower themselves to play a bigger role or any
24 role in the environmental decision-making that is
25 directly impacting them.

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1 So I submitted an Amicus Brief on behalf of
2 Freshwater and that is what I will be referencing today
3 and walking you through today.

4 So I'm not going to go through just a summary
5 of every human right that I argue has been violated here
6 in Ohio from the hydraulic fracturing industry. Instead
7 I'm just going to jump right into the meat of it.

8 So first I think it's important in terms of
9 semantics -- and you're seeing me glance to the side
10 because I have some notes just here besides me -- in
11 terms of semantics I think it's important to note that
12 while the industry might call hydraulic fracturing, it
13 might try to limit that term to mean just the reaching
14 of natural gas resources that weren't otherwise
15 available through conventional methods. Really what
16 we're talking about or when communities are impacted by
17 hydraulic fracturing, really what they're talking about
18 is the larger issue of what they sometimes refer to as
19 an occupation or an invasion by the unconventional oil
20 and gas industry.

21 And that comes in the form of mass volumes of
22 truck traffic, of pipelines, of all sorts of
23 infrastructure, compressor stations, numerous well pads
24 each spanning multiple acres.

25 So we're not just talking about a specific
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1 technique of extracting oil and gas. We're talking
2 about an industry that transforms rural communities into
3 an industrial landscape, often without them thoroughly
4 understanding or participating in what is taking place.

5 So that's, I think, is just an important
6 clarification to make in terms of when I say fracking
7 what I mean or what my clients or the individuals that I
8 mentioned the testimony about, what they mean.

9 So first and foremost, you know, I'll just
10 walk through a list of the rights that we found have
11 been violated.

12 So in terms of substantive rights, the right
13 to life, security of person and bodily integrity. So
14 the UN, the Universal Declaration of Human Rights states
15 plainly everyone has the right to life, liberty and
16 security of person.

17 Well here in southeast Ohio's gas patch that's
18 not taking place. So I submitted with my Amicus Brief
19 testimony from numerous individuals, including the
20 testimony of Kerry Bond who lives down in Noble County,
21 Ohio right in the middle of the gas patch. She owns
22 over 200 acres and has a pad on her property and a
23 compressor station very near to her home as well.

24 Kerry Bond describes being terrified to go to
25 sleep at night for fear that she'll be blown up in her
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1 sleep. And that's due to literally being awakened
2 during the night by the massive blow downs that take
3 place at the compressor station. So it's a terms of art
4 in terms of what's happening but I'm sure you have heard
5 so much of the factual basis of this now that I won't go
6 into detail about every procedure here. But they're
7 awakened by the compressor station nearby their home and
8 literally fear for their lives.

9 And that's not an uncommon occurrence here in
10 southeast Ohio. Indeed you see the media reporting on
11 that regularly. In June 2014 the Eisenbarth well pad
12 explosion resulted in people fearing for their lives. A
13 one mile evacuation notice. February 2018, again, a one
14 mile evacuation notice after another well pad explosion.

15 So these types of regular occurrences,
16 particularly from compressor stations but also from well
17 pads, truly do leave local communities fearing for their
18 lives and not feeling at all secure in their person, and
19 realistically under threat.

20 There's also, I wanted to speak about, the
21 right to health. So, again, the UN Declaration on Human
22 Rights states everyone has the right to a standard of
23 living adequate for the health and well-being of himself
24 and his family.

25 So in addition to these explosions and actual
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1 threats to, in an emergency sense, there's also just the
2 daily health impacts. And I submitted testimony again
3 from Kerry Bond as well as from Jill Hunkler and
4 numerous other individuals who lived near compressor
5 stations.

6 And I can also testify on my own behalf that
7 this is a type of infrastructure that I have most
8 frequently people coming to my office about the harms
9 from compressor stations, the air emissions and the
10 health impacts that they experience as a result of those
11 air emissions.

12 People describe, so Ms. Bond and Ms. Hunkler,
13 describe vomiting, headaches, dizziness, vertigo, eye,
14 nose and throat irritation, rashes, numbness in the
15 body, aches and pains. Just a general sense of not
16 being well.

17 So in addition to the health impacts from
18 compressor stations from other types of infrastructure
19 like the well pads you hear testimony. Ron Golla
20 testified that the well pad, emissions from the well pad
21 have caused him to have a fissure below his nose and
22 joint pain.

23 In addition to that here in Ohio we used the
24 waste for all kinds of things, wastes from hydraulic
25 fracturing operations, so brine that flows back from the
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1 operations is spread on roads as a deicer and dust
2 suppressant. When that brine dries and becomes wind
3 borne people describe eye irritation, difficulty
4 breathing, again nausea, dizziness.

5 And some people who have been diagnosed with
6 different forms of cancer have certainly raised concerns
7 that that is related to that exposure. And, again,
8 detailed testimony I submitted with my Brief but here
9 I'm just summarizing for you.

10 The right to a healthy, viable and supportive
11 environment. Principle 1 of the 1972 Declaration.
12 Adequate conditions of life in an environment that
13 permits a life of dignity and well-being.

14 So Pennsylvania, not Ohio where I'm located,
15 but Pennsylvania interestingly enough has enshrined a
16 similar value in its constitution.

17 Article 27 states that people have a right to
18 clean air, pure water and to the preservation of the
19 natural scenic, historic and esthetic values of the
20 environment.

21 Testimony from Kerry Bond as well as Mary Ann
22 Stine I submitted with my Brief, details how, in many of
23 these landscapes that are near unconventional oil and
24 gas infrastructure, be it a compressor station or wells,
25 there's literally a loss of ecological vibrancy or life
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1 in these communities.

2 People describe that the birds that they had
3 always seen every year no longer return. That their
4 farm animals have tumors. Farm animals gazing into the
5 distance before dying. Just a lot of general decrease
6 in life and ecological well-being near these sites of
7 oil and gas development.

8 The right to property. This one I'll spend a
9 little more time on just because I, as an attorney here
10 in Ohio, worked a fair bit on it.

11 So, again, the Universal Declaration states
12 everyone has the right to own property. No one shall be
13 arbitrarily deprived of his property.

14 Ohio's constitution states private property
15 shall ever be held inviolate but subservient to the
16 public welfare.

17 And the Fifth and Fourth Amendments of the
18 U.S. Constitution respectively state no person shall be
19 deprived of property without due process of law nor
20 shall private property be taken for public use without
21 just compensation. And no state shall make or enforce
22 any law which shall abridge the privileges or immunities
23 of citizens of the United States, nor shall any state
24 deprive any person of property without due process of
25 law.

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1 Well, here in Ohio that happens regularly in
2 terms of deprivation of property without due process of
3 law and the taking of private property for private gain
4 by the state.

5 Ohio is different than many other states in
6 the US in that it has a unitization law which is
7 different than a forced pooling law. So it's very
8 common, you see these laws and they've been upheld by
9 courts again and again, to have certain pooling
10 requirements where you can be forced into giving up of
11 your mineral rights just to meet spacing requirements to
12 allow for the efficient production of oil and gas.

13 And that's to avoid this problem commonly
14 thought of with conventional drilling of you just don't
15 want to stick too many straws in one bucket kind of
16 thing.

17 Unitization in Ohio is quite different than
18 that. So unitization in Ohio you have a situation where
19 if an operator can demonstrate that they own 65% of a
20 unit that they would like to develop, so they can just
21 draw a line of what unit that they would like to develop
22 is, these units can be as large as a thousand acres.

23 If they own 65% or have access to 65%, control
24 over 65% of the mineral rights associated with that unit
25 and they can demonstrate that it is more profitable than
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1 not for them to develop the remaining portion of the
2 unit, so the remaining 35%, then they can go to Ohio's
3 Department of Natural Resources, which is who regulates
4 oil and gas development in the state of Ohio, for an
5 order to take those mineral resources from unleased
6 mineral owners. So, you know, people are often shocked
7 to hear that number of 65%.

8 In terms of how these hearings go, unleased
9 mineral owners are notified that a hearing will take
10 place. They are able to attend the hearing. They often
11 do not. But they are able to attend the hearing but the
12 hearings tends to go verbatim where often times the
13 attorneys for the Ohio Department of Natural Resources
14 are almost indistinguishable from the attorneys by the
15 operator applying for the order to unitize.

16 So individuals are often left confused. If
17 they themselves are not represented by an attorney they
18 are often left confused about who is representing them
19 in such a procedure, who they can trust in such a
20 procedure, and who is representing the public at large
21 in such a procedure.

22 So after that hearing takes place, in terms of
23 the process for unitization, orders have always been
24 granted in favor of the company, consistently 100% of
25 the time in the state of Ohio. Those orders have also
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1 been identical, with the exception of a couple phrases,
2 they did start clarifying the term "gross proceeds"
3 recently and "net proceeds" in their more recent orders
4 but until that time they were all verbatim.

5 Individuals do have a right to appeal that
6 order, that order taking their property. They have a
7 right to appeal that through another hearing that is
8 also done by the oil and gas commission, which is
9 another part of the Ohio Department of Natural
10 Resources.

11 Again, they don't have to have an attorney to
12 do this but without an attorney it would be quite
13 difficult to do so.

14 And to be clear, when they appeal that order,
15 they're going up against their government. They're not
16 going up against the operator. So they're appealing the
17 government's decision to take their property to give to
18 a private company.

19 I submitted testimony by Patrick Hunkler who
20 outlines his story with unitization, how he felt through-
21 out the process as someone who had relocated and spent
22 his life working hard to relocate to southeast Ohio
23 where he "poured his blood, sweat and tears" into
24 building a country retreat for his family that reflects
25 his values, using recycled materials, conserving water,
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1 running solely on renewable energy and active and
2 passive solar.

3 So he had found the perfect homestead for him
4 and his family and he had held out and refused to lease
5 despite endless pressure, constant pressure, from
6 landmen to lease his property he had held out, as well
7 as pressure from his neighbors to lease the property so
8 they could move forward with the unit and the neighbors
9 could get royalty payments. He continued to hold out
10 only to have his government take his property from him
11 to then be handed to the oil and gas company.

12 And we hold that that is a violation of the
13 right to property, both under international standards
14 and international law, but also under US Constitutional
15 law and the Ohio Constitution.

16 In terms of challenging that all the way up
17 through an appeals process in the Ohio courts it just
18 simply hasn't yet. Nobody has been able to fight the
19 battle. It's takes a lot of financial resources and
20 when you're up against a large company like these
21 operators it becomes next to impossible for a landowner
22 to wage such a battle in the courts.

23 In addition to the unitization problem with
24 regard to the taking of private property in violation of
25 human rights standards and US law, we also see the
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1 taking, the eminent domain taking, of property for
2 pipelines. And I want to be clear that this is not
3 exclusively for natural gas pipelines but an important
4 part of the natural gas industry is also the plastics
5 industry. So natural gas liquids in the transport of
6 ethane,, to ethane crackers. So then the natural gas
7 liquids can be used in plastics production.

8 Kinder Morgan, an operator that was building
9 such a pipeline for the purpose of producing plastics in
10 Canada, filed 130 eminent domain cases to take private
11 property for the purpose of transporting natural gas
12 liquids to be made into plastics by one company in
13 Canada. So, again, the taking of public property for
14 private use, for clearly private use.

15 I'll move on from the taking of private
16 property and, again, I'm going to quickly go over some
17 of these because I feel like I can't speak to them as
18 well but they definitely are the case here.

19 So the right to respect for private and family
20 life.

21 Testimony I submitted with my Amicus Brief
22 detail how landmen repeatedly pit families against one
23 another to secure leases and this results in immense
24 turmoil. And it can be immediate families. It can also
25 be extended families, but it's a strategy that is
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1 certainly used and it's used deliberately. And this
2 would be in violation of Article 12 of the Universal
3 Declaration of Human Rights.

4 The right to peaceful assembly and
5 association.

6 People who have been impacted by the oil and
7 gas industry, I submitted testimony by Ray Kimball, Jill
8 Hunkler, Leotta Harper and Kerry Bond, have all had
9 statements made to them saying that their lives are at
10 risk because of their outspoken behavior against the
11 impacts they are suffering under oil and gas. So that
12 is certainly a human right that is threatened in this
13 current environment here in Ohio.

14 Procedural rights.

15 And, again, as an attorney practicing in Ohio
16 I can speak more here to my experience as well in
17 witnessing this taking place regularly. So some of the
18 things that the Aarhus Convention establishes is that
19 the public has a right to easy access to a wide array of
20 environmental information. To be informed of all
21 projects impacting their environment. And an
22 opportunity to participate during the decision-making
23 and legislative process. And judicial or administrative
24 remedies if the state fails to adhere to environmental
25 law or the rights to information and participation in
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1 decision-making.

2 So the Freshwater Accountability Project, who
3 I'm representing here today, regularly uses public
4 records requests to access information and citizens who
5 know to do so often will do so as well, but one thing
6 that they run up against here in Ohio is that they have
7 no rights, no legal right to ask for particular
8 information. They may only ask for specific readily
9 identifiable documents.

10 So people are often in the situation where
11 they know the information they're trying to get and they
12 can't figure out the words to, with reasonable clarity,
13 identify a document, a specific document, that would
14 contain that information.

15 And so then the agency under Ohio law is
16 required to work with the individual to help them
17 identify such documents but that can look as simply as
18 here's a list of the way we keep records or, you know,
19 very vague assistance.

20 It also can be abused by the agency if the
21 agency does not want to be forthcoming with information.
22 The requester has no way of verifying how helpful an
23 agency is or is not being. And this is a huge hurdle
24 for those trying to educate themselves on what's
25 happening in their communities.
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1 There's also just simply no centralized area
2 where you can find out what's going on in your
3 community. You can't go online and log in to the Ohio
4 Department of Natural Resources web site and suddenly
5 figure out the pipeline going in down the street from
6 you, who is putting that in and what type of pipeline it
7 is. It's extremely difficult to get that information.

8 And it takes you, often times, going to the
9 Ohio Department of Natural Resources only to be pushed
10 over to the Ohio EPA or the Ohio Department of
11 Transportation. And citizens are often trapped in this
12 position of staying on the phone for hours going from
13 agency to agency without anyone being able to provide an
14 answer.

15 This is supported by previous testimony
16 presented by attorney Rick Sahli in Ohio at the Ohio
17 Citizens Tribunal. And it also demonstrates how -- and
18 Rick spoke to, and I can also speak to, that those
19 documents that are not appealable or do not have direct
20 implications for legal recourse are often not made
21 available on the Ohio Department of Natural Resources
22 web site, whereas those that you can't do anything with
23 legally will be.

24 And so that is just another hurdle of ways
25 that it's difficult for individuals to find out when a
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1 permit is being issued. To find out how to challenge
2 that permit.

3 And then in terms of access to justice and the
4 right to equality and nondiscrimination in environmental
5 matters you have whole another issue. So even if you
6 are able to access the information in order to access
7 justice, typically you need an attorney and, quite
8 frankly, most of the people who are impacted by this
9 industry simply do not have the funds sitting around to
10 secure one. And that leaves them without legal
11 recourse.

12 And non-profit groups can do their best but
13 they are limited in what they can provide just in terms
14 of they themselves are stretched thin, which leaves
15 poorer individuals unable to access justice whereas
16 wealthier individuals may have a chance to be able to.
17 Indeed those cases that we have seen be fought in the
18 Ohio legal system are by wealthier individuals.

19 Even individuals who are able to retain
20 counsel, so I give the example here of a firm that I
21 previously worked for, Fair Shake Environmental Legal
22 Services, opened its doors in Ohio with the intention of
23 providing legal services on environmental matters to
24 modest means clients. And they've done an excellent job
25 of representing individuals who otherwise would not have
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1 access to representation and I followed in those foot-
2 steps with my own firm.

3 Even when that is taking place people who are
4 able to receive representation through people like
5 myself or Fair Shake Environmental Legal Services run up
6 against the problem of experts. So you're up against
7 oil and gas companies who have a seemingly endless
8 budget to refute your case and you're there with so few
9 resources to provide an excellent defense.

10 So we're talking about someone who is facing
11 problems in their home from a compressor station, for
12 example, to get just the noise study to find out what
13 the levels of noise are that are causing people to lose
14 sleep, that are causing heart palpitations, a study like
15 that can be as much as \$30,000.00. These are folks who,
16 you know, don't make \$30,000.00 in a year. How are they
17 ever supposed to be able to pay for something like that.

18 And the same can be true for people who are
19 suffering from health effects, other health effects
20 other than those brought about by noise. Getting the
21 air canisters out there to do the testing is expensive.

22 One would think that the government, so the
23 ODNR, the Ohio Department of Natural Resources or Ohio
24 Environmental Protection Agency, could step in and
25 provide those resources. But what we find is Ohio
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1 Department of Natural Resources has sole authority over
2 oil and gas in Ohio so they often -- first of all
3 they're underresourced. So they don't step in.

4 Secondly, they have a bias towards the oil and
5 gas industry so they do not step in. And that results
6 in you can't use the government agencies to then collect
7 the data for you that would be helpful in legal
8 recourse. So citizens are really left without the
9 ability to access justice when they are harmed by this
10 industry which is a violation of numerous, numerous
11 standards of procedural human rights.

12 So I'm not sure how I'm doing on time so I --
13 if there are any questions I want to be clear feel free
14 to interrupt me or to follow-up.

15 But in terms of how to respond to what is
16 happening with oil and gas development in Ohio, it is
17 warranted that states and non-state actors be held
18 responsible and liable for the violations to human
19 rights that are taking place.

20 So in the Guiding Principles on Business and
21 Human Rights it states that states should enforce laws
22 that are aimed at or have the effect of requiring
23 business enterprises to respect human rights and
24 periodically to assess the adequacy of such laws and
25 address any gaps.

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1 That they ensure that other laws and policies
2 governing the creation and ongoing operation of business
3 enterprises, such as corporate law, do not constrain but
4 enable business respect for human rights.

5 And that they provide effective guidance to
6 business enterprises on how to respect human rights
7 throughout their operation as well as encourage and,
8 where appropriate, require business enterprises to
9 communicate how they address their human rights impacts.

10 Here in Ohio the state is doing the opposite.
11 It's predominantly looking the other way. When
12 government receives, when ODNR, when Ohio EPA, receives
13 complaint after complaint they either do not have the
14 resources or the will to respond frequently.

15 DR. THOMAS KERNS: This probably is a
16 good time to start tying it up a little bit Megan.

17 MS. MEGAN HUNTER: I kind of agree.

18 DR. THOMAS KERNS: We want to have time
19 for questions from judges too.

20 MS. MEGAN HUNTER: Okay. So I would just
21 say that I would recommend and the Freshwater
22 Accountability Project recommends a moratorium on all
23 unconventional oil and gas development and a holding
24 that Ohio, Pennsylvania and the US government
25 responsible and liable for the violation of human right
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1 recognized and protected under international law as well
2 as damages issued to the impacted public.

3 So I am happy to answer any questions.

4 MR. GILL BOEHRINGER: Gill Boehringer.
5 I've got a couple of questions. Just a simple one
6 because I missed it.

7 What is the name of the legislation, the one
8 where the 65% they can take your --

9 MS. MEGAN HUNTER: It's a statute in
10 Ohio. We refer to it as the Forced Unitization Statute
11 but it's 1509.28, ORC 1509.28.

12 DR. THOMAS KERNS: Similar statutes are
13 operative in other states, is that right?

14 MS. MEGAN HUNTER: That's correct. I am
15 of the opinion that Ohio's is distinguishable from those
16 statutes in other states just because of that 65% number
17 is lower than you have in other states. And also the
18 units here are larger so there's no cap on units.

19 So you don't see units that are that big in
20 Pennsylvania, for example. You wouldn't see a thousand
21 acre units.

22 DR. THOMAS KERNS: And it was a surprise
23 to me it almost sounded like you said that those units
24 could be sort of gerrymandered in a way. They could
25 sort of be picked to help --

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1 MS. MEGAN HUNTER: Well, right. And
2 indeed they are but I mean the unit it does -- it has
3 to reflect truly what they are intending to develop and
4 there has to be a unit plan for development that clearly
5 lays out, you know, where the wells will be and where
6 the laterals will be. So all of that will have been
7 submitted.

8 And, indeed, often well pads are -- they can
9 be constructed and are constructed prior to such a
10 unitization order being granted. So you could have your
11 permit for construction granted, you could go ahead and
12 construct that permit, even though you need that
13 unitization order to be able to develop that well.

14 And I think that is just speaks to how much a
15 rubber stamp and a done deal this already is.

16 MR. GILL BOEHRINGER: Couple of other
17 points. So what you're saying is that in a sense, I
18 mean to conceptualize it, this is the kind of private
19 eminent domain but it's not -- but eminent domain is
20 another one that they used and they've bastardized that
21 by taking property for private corporations for private
22 use and profit.

23 Two systems that they use both look kind of
24 like eminent domain but they're not and they're
25 unconstitutional. And I'm wondering -- well, let's say
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1 I'm surprised that that hasn't been challenged. I mean
2 it seems fairly clearly unconstitutional although that
3 doesn't mean the courts would call it such.

4 MS. MEGAN HUNTER: Right. Well, I think
5 several things are happening there. I think that, you
6 know, the definition of what constitutes a public use
7 has been creeping in US law. So that is one issue. But
8 here I do think it's distinguishable in terms of this
9 clearly being for private use.

10 In terms of why it hasn't been seen in the
11 courts it's because of this appeal process is my
12 understanding is that you have -- if you have that first
13 hurdle of an administrative appeal process before you
14 can even access the state court, people often settle at
15 that administrative level and so then it never gets to
16 the next level.

17 MR. GILL BOEHRINGER: And from what you
18 say my understanding is then that really what we call in
19 Australia and other places just legal aid there is
20 significant funding for community law centers, this
21 isn't really happening in the states?

22 MS. MEGAN HUNTER: Well we absolutely --

23 MR. GILL BOEHRINGER: Sorry. I was just
24 wondering or if it does has austerity ventured onto the
25 scene and the funding dried up?

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1 MS. MEGAN HUNTER: So there's definitely a
2 strong legal aid system here in the US. In terms of how
3 austerity has impacted that funding I can not speak to
4 that.

5 I know it certainly has impacted that in the
6 criminal sector in terms of the public defenders it's
7 hurt their funding.

8 What we find with environmental law and
9 representing individuals on these types of matters is
10 legal aid simply doesn't have the expertise or the time.

11 If I'm working some of these environmental
12 cases it's all my time has gone to almost one case. And
13 in a situation with legal aid you just have so many
14 matters that people have to handle.

15 And even here with people, with attorneys who
16 are working for pay, local attorneys (1) often lack the
17 environmental law experience to bring these cases or (2)
18 they have too many connections with the industry to be
19 willing to bring these cases.

20 And that's something I didn't speak about in
21 detail but the dependence of local attorneys in these
22 small rural communities on the natural gas industry is
23 very real.

24 MR. GILL BOEHRINGER: So there's no
25 reason, in principle, why legal aid couldn't take on
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1 these cases.

2 And this is important because people are
3 saying, oh well, we just give more resources and so
4 forth. But I mean resources are limited and in a sense
5 that sector of the legal profession has a practical
6 dilemma. They basically cannot do environmental cases
7 because it takes so much time and effort and energy and
8 they're going to lose anyway.

9 So they do other kinds of cases, criminal
10 cases, et cetera, which seems to be very deserving and
11 don't take up -- they are not a sponge. They don't
12 take up all the resources. So it is a practical matter.

13 MS. MEGAN HUNTER: I would say so.

14 MR. GILL BOEHRINGER: Not by any law or
15 regulation that prevents environmental legal aid.

16 MS. MEGAN HUNTER:. Correct, at least
17 that's my understanding.

18 MR. GILL BOEHRINGER: It's interesting.
19 I went to Hastings College of the Law, but some years
20 ago, but we never even heard of the environment or
21 environmental law.

22 You're talking about lawyers who don't know
23 anything about environmental law. Presumably a lot of
24 those lawyers who would have gone to, shall we say, the
25 smaller or less well-known law schools.
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1 Is environmental law a big subject in the more
2 wealthy or prestigious law schools?

3 MS. MEGAN HUNTER: I'm not sure if I would
4 classify it that way. I think it's a niche area of law
5 that has a growing interest.

6 So you have some law schools that have
7 actually developed up around that very topic. So I went
8 to Vermont law school that is known for that specific
9 topic.

10 You know, sure, some of the Ivy League law
11 schools are better known for it but, you know, I think
12 here in Ohio you've got a great law school that is a
13 state school but it's just -- environmental law is not a
14 big focus of their program.

15 So I think it's more just because it's a niche
16 area of the law and it's only now becoming more
17 important to people.

18 MR. GILL BOEHRINGER: But, again, the
19 curricula may reflect the industrial taxation issues in
20 a particular state.

21 MS. MEGAN HUNTER: It absolutely does.

22 MR. GILL BOEHRINGER: It's not surprising
23 to me that Vermont -- does Bernie Sanders have anything
24 to do with it?

25 That Vermont has a law school that
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1 concentrates on environmental law whereas Ohio does not.

2 MS. MEGAN HUNTER: Right. And I think
3 Vermont also, you know, it has no fossil fuel resources
4 so they don't have that industry exactly. And, yeah, I
5 think that's the main point.

6 One other point is that law schools do have
7 free legal clinics where they provide legal services.
8 If you look at such clinics in West Virginia, for
9 example, the funding for these clinics specifically
10 states that they will not do certain types of work,
11 including direct attacks on fossil fuel industry work,
12 mining in particular.

13 MR. GILL BOEHRINGER: This is university
14 law schools or state law schools.

15 MS. MEGAN HUNTER: Yes.

16 MR. GILL BOEHRINGER: And they're
17 restricted, the legal aid clinics are restricted from
18 taking these kinds of cases.

19 MS. MEGAN HUNTER: So, in those cases,
20 it's not a legal aid. It is a clinic associated with
21 the law school that, yes, has restrictions on it.

22 And I know that University of Pittsburgh's law
23 school also has similar restrictions on their law
24 clinic.

25 DR. THOMAS KERNS: This might also be
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1 something that we could explore this afternoon with
2 judges and attorneys.

3 So we do need to move on to the next
4 presentation.

5 Wow! Thank you. Thank you.

6 MR. GILL BOEHRINGER: Thanks.

7

8 [youtube.com/watch?v=nng1KaqHeNc]

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1 ROGUE CLIMATE

2 MAY 17, 2018 10:00-11:00

3
4 MS. ALLIE ROSENBLUTH: Hi, everyone, my
5 name is Allie Rosenbluth. I'm a community organizer at
6 Rogue Climate.

7 Rogue Climate is a nonprofit public interest
8 group that works to empower southern Oregon communities
9 most impacted by climate change, including low income
10 rural, youth and communities of color to win climate
11 justice by organizing for clean energy, sustainable jobs
12 and a healthy environment.

13 We focus on a couple major campaigns. One
14 which I'm going to talk to you all about today, is the
15 campaign to stop the proposed Jordon Cove LNG export
16 terminal and the Pacific Connector fracked gas pipeline,
17 which is proposed in southern Oregon which is where I'm
18 based right now. I'm talking from Medford, Oregon
19 today.

20 We also move forward on clean energy projects
21 and energy efficiency programs because we understand
22 that we have to be moving forward solutions as we're
23 stopping projects that move us backwards for climate.

24 So I'm going to start my PointPower now and
25 I'm just going to talk to you all about the campaign to
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1 stop the Jordan Cove and the Pacific Connector Pipeline
2 and some of the human rights and environmental issues
3 that we have seen through our research and the impacts
4 on our communities.

5 Great. So hopefully everyone can see that. So
6 that is my name and my contact info if you need to know
7 more.

8 So the Jordan Cove proposal is proposed by
9 Pembina Pipeline Corporation, which is a Canadian fossil
10 fuel corporation. They are proposing a 229 mile long
11 fracked gas pipeline called the Pacific Connector
12 Pipeline to transport fracked gas from mostly Canada but
13 also probably from Colorado, Wyoming and Utah from
14 Malin, Oregon which is in Klamath County to Coos Bay,
15 Oregon where it would be liquified at a LNG terminal,
16 LNG stands for liquefied natural gas, shipped overseas
17 to be used primarily in Asia.

18 If built this would be the first LNG export
19 terminal on the West Coast and the third in the country.
20 Right now Cove Point and Sabine Pass are currently
21 functioning LNG export terminals.

22 So this proposal was originally proposed in
23 2005 as an import facility. In 2009 the company
24 actually withdraw the application and resubmitted for an
25 export terminal because of the fracking that was
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1 happening in North America.

2 In 2016 the Federal Energy Regulatory
3 Commission actually denied the project twice as a result
4 of massive opposition from legal residents, the impacts
5 to land owners in local communities and a lack of
6 contracts from companies willing to buy the gas.

7 So this project was one -- was really an
8 unprecedented denial from the Federal Energy Regulatory
9 Commission. I think it's the second that has ever
10 happened out of the hundreds of pipeline applications
11 that they have had to go through. So that was a pretty
12 incredible win for our community, especially for people
13 who are directly on the pipeline route who have been
14 dealing with this issue for over 13 years now.

15 So when Trump was elected in 2017 the company
16 decided that it would be a particularly good time to
17 reapply. So it was only months after FERC denied this
18 project that the company resubmitted their application
19 for the project and our communities are having to start
20 this whole battle all over again.

21 At the moment about -- from the last data
22 we've seen from FERC only 30% of land owners have signed
23 easements with the company allowing them to use their
24 property. So if this project was to go through we would
25 see a huge amount of eminent domain being used to build
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1 the pipeline.

2 So the project consists of four parts. So the
3 first there is the fracking to extract the gas. And
4 that would not be happening in Oregon. That would be in
5 Canada and in Colorado.

6 Then there's the Pacific Connector Pipeline,
7 which is the 229 mile long pipeline that would terminate
8 in Coos Bay at the proposed Jordan Cove LNG export
9 terminal where the gas would be super-cooled into LNG.
10 And then the gas would be shipped overseas in fracked
11 gas tankers.

12 So first, as you probably have heard in this
13 Tribunal this week, fracking is a process to extract gas
14 where folks are drilling deep holes and shooting
15 chemicals in water into the earth to fracture it and
16 then capturing the gas that escapes.

17 Building the first LNG export terminal on the
18 West Coast would increase the demand for fracking across
19 the continent and result in an estimated 1,000 new
20 fracking wells over the next 20 years.

21 Physicians For Social Responsibility released
22 a great piece on the impacts, health impacts that
23 communities who are fracking communities have seen. And
24 some of these include the contamination of underground
25 aquifers and surface waters. Air emissions that include
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1 volatile organic compounds which are extremely unhealthy
2 for human health and especially for workers who are
3 close to the vicinity.

4 They also note that methane leakage is a big
5 accelerator of climate change and that methane is 86
6 times more potent at capturing heat in the atmosphere
7 than CO2 is in its first 20 years of its life cycle.

8 So then we get to the pipeline. So as I said
9 earlier the gas will be transported via this 229 mile
10 long pipeline. The pipeline would be a 36-inch diameter
11 and highly pressurized.

12 This pipeline would start in Malin, Oregon
13 where it connects to the existing Ruby pipeline or GTN
14 pipeline. The Ruby pipeline comes from the Colorado
15 area from the US and then GTN is where the gas would
16 come down from British Columbia.

17 The pipeline impacts traditional tribal
18 territories, cultural resources and burial grounds. The
19 Karuk, Yurok and Klamath tribes have also come out in
20 strong opposition to the project. Three other tribes
21 have filed as interveners with FERC and have filed their
22 concerns with the agency about the project.

23 The pipeline also threatens about 400 rivers
24 and streams in Oregon including the Klamath, Rogue,
25 Umpqua, Coquille and Coos rivers. This also includes 12
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1 public drinking water sources, including Medford which
2 is the community that I'm in right now. And six miles
3 of wetlands.

4 As we know construction has major impacts on
5 water quality, fish habitat, cultural resources and
6 river dependent industries like outdoor rec and fishing.

7 Under the major rivers Pembina is proposing to
8 use a drilling technique called horizontal directional
9 drilling. One major risk of each HDD is a frack-out and
10 this is where the drilling fluids that they use to push
11 the pipeline underneath the river actually come up from
12 the river bed and poison the water downstream.

13 And we have seen this in Ohio where a similar
14 fracked gas pipeline is under construction. About
15 two-million gallons of drilling fluids have been spilled
16 into wetlands because of the use of horizontal
17 directional drilling that went wrong.

18 Also in Pennsylvania another frack-out has
19 contaminated drinking water forcing nearby residents to
20 use bottled water for both drinking and bathing.

21 The pipeline would also include a 95-foot
22 clear cut along the pipeline route. This would be one
23 of the largest clear cuts in Oregon's history. This can
24 lead to land slides and sedimentation of waterways.

25 Pipeline testing would also require 90-
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1 million gallons of freshwater from drought stricken
2 southern Oregon. After the water is pumped through the
3 pipeline and full of the construction contaminants the
4 company still has no proposed plan on what to do with
5 that contaminated water.

6 Fracked gas pipelines are highly explosive.
7 There will be above ground portions of the pipeline
8 located in wildfire prone areas of southern Oregon.

9 Pipelines actually have lower safety
10 regulations in rural communities and many land owners
11 will be responsible for monitoring the pipeline on their
12 property.

13 Hundreds, like I said earlier, hundreds of
14 private land owners would be impacted by the pipeline
15 route and many will be threatened with eminent domain if
16 they do not settle for a small payment for permanent use
17 of their land.

18 So here is a map of the existing pipeline
19 infrastructure in Oregon. The dotted line is the
20 proposed Pacific Connector Pipeline and that orange dot
21 is the proposed export facility in Coos Bay.

22 The GTN pipeline they don't show the full
23 extension here but this is the one that goes up to
24 British Columbia and then the Ruby pipeline which passes
25 over California and goes into Malin, Oregon is the one
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1 that would be coming from Colorado.

2 And then these are the companies to the left
3 that are proposing this that we see infiltrating our
4 communities.

5 So in order to connect the existing fracked
6 gas pipelines to the new proposed Pacific Connector
7 Pipeline Pembina would expand their compressor stations
8 to pressurize the gas. The compressor stations are
9 known to be extremely loud and polluting facilities
10 disrupting health and quality of life for nearby
11 communities. They pollute carcinogenic air toxins like
12 toluene, carbon monoxide and formaldehyde.

13 Earthworks has done a really great job in
14 doing research on this and I think that they talked
15 earlier in the Tribunal so I would recommend hopefully
16 you all get to hear from them about the impacts of
17 compressor stations.

18 One major concern of ours of this compressor
19 station is that it is a clear example of environmental
20 racism. Pembina is proposing to expand this compressor
21 station in Malin, Oregon. Malin is over 70% Latina
22 while the rest of Klamath County is only about 13. So
23 corporations like Pembina often subject communities of
24 color to these hazardous projects resulting in permanent
25 health impacts for short-term corporate gain.
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1 So this is a clear example of the worst
2 impacts of the extractive industry burdening communities
3 of color.

4 And then there's the export facility. And
5 Jody McCaffree, who will be on shortly who lives in Coos
6 Bay, will be going more deeply into this but I will talk
7 a little bit about it here.

8 So Pembina wants to build an export facility
9 to liquefy the fracked gas. They'll cool it to negative
10 260 degrees Fahrenheit to turn that into LNG and then
11 ship it to markets overseas.

12 The export facility is proposed on the
13 traditional territory of the Confederated Tribes of the
14 Coos, Siuslaw and Lower Umpqua. And the tribes have
15 known cultural resources at this location and are
16 monitoring and working their best to protect those.

17 The terminal poses serious safety risks to
18 communities in Coos County. Once LNG is exposed to air
19 it evaporates extremely rapidly producing an explosive
20 gas vapor cloud which can cause massive explosions if
21 ignited.

22 The terminal would be located in a tsunami
23 zone and in an earthquake prone region. I'm sure you've
24 all heard about the Cascadia subduction zone. 16,000
25 Coos Bay residents would be in a hazardous blast zone
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1 because of this terminal if it was built. And we've
2 seen, in other places, really dangerous events
3 happening.

4 In 2014 the Plymouth LNG facility in
5 Washington exploded injuring workers and forcing
6 hundreds of residents to evacuate their homes.

7 The terminal alone would become the largest
8 source of climate pollution in the state of Oregon by
9 2020 when our last remaining coal plant is shutdown for
10 pollution concerns.

11 And then tankers. So at the export facility
12 tankers would be loaded with LNG for shipping. These
13 are the largest vessels in the world. They're about
14 950 feet long which is three football fields and 150
15 feet wide. The largest -- this would constitute the
16 largest dredging project in Oregon's recent history if
17 these tankers were in the bay.

18 The impacts of dredging would be on coastal
19 resources, shellfish and water quality in the bay which
20 would really impact the communities who rely on the bay
21 for many, many, things.

22 Parts of the channel would also be closed
23 during LNG shipments impacting local shellfish industry
24 and outdoor recreation industry.

25 Spills from LNG tankers are considered to be
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1 more dangerous than oil tankers. The US Department of
2 Energy commissioned a report that found that if a tanker
3 ran aground and suffered a leak LNG could pour into the
4 water, freeze and, again, creating a large vapor cloud
5 of gas which could ignite if diluted with oxygen.

6 So recently Oil Change International released
7 a greenhouse gases estimate of the Jordan Cove LNG
8 export terminal and Pacific Connector Pipeline. This is
9 using -- you can see here the reference cases using a
10 low percentage of methane range leakage. So it could be
11 anywhere from 36.8 million metric tons of CO2 equivalent
12 to 52 million metric tons of CO2 equivalent per year as
13 resulting from this project.

14 The emissions from this project would
15 completely undermined Oregon's actions to address
16 climate change. This project, if built, the pollution
17 would account for 20% of Oregon's allotment in state
18 pollution if we follow Governor Brown's commitment that
19 she recently made to the Paris Climate Accord earlier
20 this year.

21 And considering the entire life cycle
22 emissions Jordan Cove would account for over 300% of
23 that allowed pollution under that same commitment while
24 supplying no energy to the state of Oregon.

25 And you can see in this chart right here from
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1 that same report the percentage of the emissions
2 allotted for both the Paris Agreement which is the MOU2
3 and then also under Oregon's goals for climate change
4 which were adopted in 2007. So we see we could not
5 reach either of those and supply our own energy if this
6 project was created.

7 We know that climate change disproportionately
8 impacts communities of color, indigenous communities and
9 low income communities in Oregon and around the world.

10 Additionally the continued dependence on
11 fossil fuel means a hotter and drier and more fire prone
12 Oregon and more frequent severe storms like Hurricane
13 Maria the devastating impacts of which Puerto Rico is
14 still suffering from.

15 So the fracked gas industry likes to say that
16 we need to rely on fracked gas as a bridge fuel from
17 coal and oil to renewables but we know that this is not
18 true.

19 Another report from Oil Change International
20 called burning the bridge fuel mix is really great in
21 explaining how to reach the goals that we need to for a
22 safe and liveable climate. We need to transition
23 immediately to renewable energy and we can do that if we
24 have the political will.

25 So these are four of the reasons for, and four
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1 of the points, that they put out for why fracked gas is
2 not a bridge fuel.

3 So climate goals require that the power sector
4 needs to be decarbonized by mid-century so this means
5 gas use must be phased out, not increased.

6 New gas is actually holding back renewable
7 energy. Wind and solar are now cheaper than coal and
8 gas in many regions so this means that new gas capacity
9 is displacing new wind and solar rather than old coal
10 projects.

11 New gas locks in emissions. For 40 plus years
12 companies building multi-billion dollars gas
13 infrastructure today expect to operate their assets for
14 around 40 years.

15 And then there is too much gas already. The
16 coal, oil and gas that the world is currently producing
17 and in under construction projects if extracted and
18 burned would likely take the world far beyond safe
19 climate limits.

20 And we know that we can create more jobs by
21 investing in renewable energy than we can by fracked gas
22 projects like this. There's actually three times more
23 jobs created in renewable energy per dollar invested
24 than in coal, oil and gas.

25 Exporting LNG also would raise domestic gas
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1 prices. Even a Vista senior vice-president Jason Faxon,
2 said in 2014 that exporting LNG puts pressure on prices
3 that wouldn't be good for consumers in the United
4 States. Utility price increases disproportionately
5 impact low income ratepayers and can put more pressure
6 on people who are already housing insecure.

7 The company is promising benefits to our
8 communities but history of projects like this have shown
9 that these promises are rarely kept and do not outweigh
10 the impacts on our communities.

11 The company is promising 30 million dollars in
12 tax revenues spread out between the four counties
13 impacted by the project with pipeline communities
14 getting around 5 million dollars a year. But currently
15 in Coos County Jordan Cove is currently seeking a 15
16 year tax abatement in attempts to pay far less than they
17 would normally have to pay in property taxes.

18 The company also says that they will create
19 around 200 permanent jobs and somewhere between 1,000
20 and 3,000 temporary construction jobs. Many of these
21 workers will come from outside our communities creating
22 temporary work camps that have been associated with
23 increased violence on women, particularly indigenous
24 women, crimes and drug usage and higher rents and costs
25 of living.

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1 Many communities in southern Oregon are
2 already facing housing crisis. In Coos County and
3 Jackson County we are seeing that especially and we are
4 very concerned about what an influx of temporary workers
5 will do to housing-insecure folks in our communities.

6 Another thing that is particularly concerning,
7 the company is paying for an entire LNG division in the
8 Coos County sheriff's department and will hire nine new
9 sheriffs this summer, years before construction is
10 supposed to start, to protect the facility and their
11 property.

12 In Cove Point, Maryland, Dominion Energy had
13 similar contracts with the police and this essentially
14 criminalized local opposition to the LNG export facility
15 there.

16 So this is a time line that Jordan Cove
17 proposed. It has already been pushed back and delayed.
18 So what has happened so far they have submitted their
19 state and federal permits but no comment periods have
20 opened for that and no permits have been approved at the
21 moment.

22 They are expecting FERC to approve their
23 proposal in the late summer of 2018. We're still
24 waiting for the draft Environmental Impact Statement
25 from FERC but that should be coming out this summer and
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1 then we'll hear their decision from them shortly after
2 that.

3 Construction, they're hoping that construction
4 will begin in 2019 but all the agencies who we have
5 talked to have also said that this is extremely unlikely
6 to start work that soon. And then they are expecting to
7 have the pipeline and terminal in service by 2024.

8 So there are some state permits that can
9 actually stop this project and that even if the Federal
10 Energy Regulatory Commission approves this project under
11 the Trump Administration the state of Oregon has a few
12 permits that, if this project does not comply with,
13 could stop the project for good.

14 So Jordan Cove has recently sent in their
15 application for the Clean Water Act to the Oregon
16 Department of Environmental Quality. That is still
17 incomplete at the moment. That is one of the permits
18 that if denied could stop this project for good.

19 There's actually an example of that happening
20 in Oregon. The Bradwood LNG export terminal, which was
21 proposed on the Columbia River was stopped, in part, due
22 to Oregon denying this permit. So it will be extremely
23 important for our communities to be engaged in the
24 public comment process for the DEQ Clean Water Act
25 permitting process, which is likely to open up in the
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1 next two weeks.

2 Jordan Cove also has to get a removal and fill
3 permit from the Oregon Department of State Lands and
4 that application is still considered incomplete and DSL
5 just gave the company another extension to complete
6 their application I think last month.

7 There are some other ways that Oregon has the
8 authority to stop the project but I'm not going to go
9 into them right now.

10 We're seeing that we really need our elected
11 officials to stand up for communities that are impacted
12 by this project. So right now what we are really asking
13 our communities to do is to call Governor Brown and ask
14 her to stand up against the project by directing state
15 agencies to deny permits that protect Oregon's water
16 quality and coastal zones.

17 We have also have climate pledges and things
18 like that. So people are really excited, again, to stop
19 this project for good.

20 So that is my presentation and, hopefully,
21 that was useful and exciting for you all today and I'm
22 happy to take questions. I know that we're running
23 behind schedule so let me know.

24 MR. GILL BOEHRINGER: Gill Boehringer. I
25 have a couple of questions and comments.
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1 Just a small point. You said that the company
2 was paying for more police.

3 MS. ALLIE ROSENBLUTH: Yeah.

4 MR. GILL BOEHRINGER: Nine was the figure
5 I think. What percentage of the police force would that
6 be? Do you have any idea?

7 MS. ALLIE ROSENBLUTH: I don't have an
8 idea on that number but that would that's a great
9 question. It would be an entire division that would be
10 paid for by the company to protect the export facility.

11 MR. GILL BOEHRINGER: Protected from what
12 and whom?

13 MS. ALLIE ROSENBLUTH: Yeah, so that's a
14 great question.

15 MR. GILL BOEHRINGER: I think we know.

16 MS. ALLIE ROSENBLUTH: Yeah. That's a
17 great question and I wish I had more answers to that.
18 Hopefully we'll be getting more information soon.

19 MR. GILL BOEHRINGER: It's dressed up as
20 protection of the facilities, security, et cetera, the
21 same, you know, to combat terrorism and so on.

22 MS. ALLIE ROSENBLUTH: Yeah, exactly.

23 MR. GILL BOEHRINGER: Really I just
24 wanted to comment and say your presentation was very
25 useful and it reinforces something that one of the
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1 presenters said yesterday and that is that we're talking
2 about fracking but we're talking more than just the
3 fracturing of the rocks, the wells that are going in.

4 And dredging, for example, is a good example
5 of the need for us to look at the whole landscape, if
6 you will, plus the air, to notice that there is just so
7 many costs upstream and downstream, pardon the pun.

8 MS. ALLIE ROSENBLUTH: Yeah.

9 MR. GILL BOEHRINGER: Okay. Thanks.

10 MS. ALLIE ROSENBLUTH: Thank you.

11 MR. GILL BOEHRINGER: Oh yeah, two other
12 points or questions.

13 You said that the land owners are responsible
14 for monitoring and in the rural areas the safety
15 standards are lower.

16 On the first point, the monitoring. Is that
17 in some kind of -- is that in the contract that they
18 have to sign and what are they required to do?

19 MS. ALLIE ROSENBLUTH: Yeah, so it's not --
20 I'm not sure if it's directly in their contract but
21 because of such a long length of pipeline the company
22 like won't be able to be monitor the pipeline in the 229
23 miles of really, really rugged landscape.

24 So if there is a leak the land owners are
25 responsible for reporting that to the company. This gas
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1 is not scented so it would be really hard to know if
2 there was a leak. And that's one of the big concerns
3 that we have, especially like in our very fire prone
4 southern Oregon region that land owners would not
5 actually know.

6 MR. GILL BOEHRINGER: As a lawyer when
7 people say responsible for then I ask does that mean
8 there is a legal duty or are you saying that the company
9 can't do it so if you want to protect your property you
10 have to do it yourself.

11 MS. ALLIE ROSENBLUTH: Yeah, that's a
12 great question and I haven't seen a contract in a while
13 but I would, if you want me to get back to you on that,
14 I could definitely do that.

15 MR. GILL BOEHRINGER: And the safety
16 standards I think a presenter yesterday said that they
17 used different kind of pipes, thinner perhaps.

18 MS. ALLIE ROSENBLUTH: Yeah.

19 MR. GILL BOEHRINGER: That's an example.
20 Any other examples?

21 MS. ALLIE ROSENBLUTH: Yeah. Not that I
22 can think of off the top of my head that is the biggest
23 one of concern. And I think also the length of the stop
24 valves are farther apart too in rural communities than
25 they are in urban communities, but I don't have all that
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1 at my hands right now.

2 MR. GILL BOEHRINGER: Sorry, the length
3 of --

4 MS. ALLIE ROSENBLUTH: Yeah, so I think
5 the stop valves, so these are the like the valves that
6 they turn to like stop the gas, are at a further length
7 apart in rural communities than they are like in more
8 populated areas.

9 MR. GILL BOEHRINGER: So that makes the
10 line more dangerous.

11 MS. ALLIE ROSENBLUTH: Yeah. Yeah. So,
12 for instance, if there was a fire or something I think
13 it would be like 18 miles apart or something like that
14 that you have to get to be able to stop the pipeline,
15 stop the gas.

16 MR. GILL BOEHRINGER: Okay. Thanks very
17 much.

18 DR. THOMAS KERNS: Thank you, Allie.

19

20 [youtube.com/watch?v=A6rIqTGjfgQ]

21

22

23

24

25

1 CITIZENS AGAINST LNG

2 MAY 17, 2018 10:00-11:00

3
4 MS. JODY MCCAFFREE: Hello, my name is
5 Jody McCaffree and I live in North Bend, Oregon and in
6 2004 we found out that they were proposing a liquefied
7 natural gas -- well, at that time, it was an import
8 terminal here in our Bay Area. And once I did research
9 on that I got kind of very concerned and that led to, in
10 2006, we formed a group called the Citizens Against
11 LNG. And it's just a loose knit group of citizens that
12 participate in the permitting and regulatory processes.
13 And we've been, you know, quite successful because we've
14 had FERC, who is the Federal Energy Regulatory
15 Commission, they've actually denied the project several
16 times.

17 So here we are though. The company can come
18 back again and again. And that is the frustrating
19 thing, you know, you put your whole life and soul into
20 fighting something and exposing the facts about it and
21 then you find out, well, they can just fix those facts
22 and come back. So it's been kind of frustrating.

23 I have a PowerPoint presentation that I would
24 like to present that kind of shows you what it is that
25 is going on here. And this project is directly related,
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1 at this point, to fracking because if they weren't
2 hydrofracking all this gas from shale beds we wouldn't
3 have the gas to export. This project is going to be
4 exporting that.

5 So I will connect you to my PowerPoint
6 presentation and hopefully this will work.

7 This slide right here is kind of a collage of
8 pictures. And I would like to start out with this
9 because it kind of gives you some pictures of what our
10 area contains.

11 We live here on the Pacific Coast. There is
12 an ocean in our front yard. You can go surfing, you
13 can go clamming, you can go crabbing, you can go out to
14 Charleston and there's fishing boats out there. You can
15 go past Charleston there's Shore Acres and Cape Arago
16 where you can walk on terrific trails along the beach.
17 You know, you just don't have this everywhere.

18 And the bottom part where the people are
19 riding these dune-wheelers just to the north of the
20 proposed Jordan Cove proposed facility is the National
21 Dunes Recreation Area. And thousands of people come and
22 visit that area every year to ride the dunes.

23 Like this next picture is more pictures of our
24 area just because sometimes I have to go out and just
25 realize what I'm fighting for.

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1 And these are the pictures of the bay. The
2 one in the top left, if you look, that is taken from the
3 boat ramp on what we call the North Spit. If you look
4 in the background there you will see where they're
5 proposing the facility. I'll show more of that later.

6 The person down below that picture that is
7 posing with some clams. They're clam digging right at
8 the area where they plan to dredge out for a slip dock
9 that will house these huge LNG tanker ships. And the
10 area to the bottom right that is at Sunset Bay.

11 What is liquefied natural gas?

12 I thought I should cover that because a lot of
13 people don't know. And basically what it is it's
14 natural gas, and in this instance, it would be coming
15 from hydraulic fracking of shale beds in Canada and in
16 the US.

17 And, you know, the hydrofracked gas could
18 contain all kinds of impurities including cancer causing
19 radon gas. And those gases are put into pipes and
20 they're shipped on trans pipelines and when they would
21 arrive at the facility it would be in its gaseous
22 state.

23 So at the facility they would compress and
24 chill it down to minus 260 degrees Fahrenheit and at
25 that temperature it liquefies. And at the liquefied
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1 volume is one-six-hundreth of the volume that it is in
2 it's gaseous state.

3 So they move a lot of energy this way. They
4 put it in huge tanker ships and it goes across the ocean
5 where it's regaseified at coastal import terminals
6 overseas and put back into pipelines. And the whole
7 process is very energy intense. It uses a lot of
8 energy. There's a lot of energy wasted.

9 These tanker ships are basically just big
10 thermos bottles. So when the pressure builds up because
11 this LNG is constantly wanting to go back to atmospheric
12 temperatures they have to release that excess gas or
13 burn it off.

14 It is dangerous. There's been accidents over
15 the years. In 1944 Cleveland, Ohio had a big accident
16 with a storage facility, 128 people died.

17 In 1973 some workers were cleaning a storage
18 tank that was empty and it exploded and 37 people died
19 there.

20 And in 2004 in Algeria 27 people died when
21 there was an explosion at a facility. So, you know, we
22 have some concerns.

23 The tanker ships that would be coming into our
24 area hold an average of 39 million gallons of LNG. And
25 that's far greater than the amount that leveled one
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1 squire mile of Cleveland in 1944. So these are quite a
2 bit bigger boats and ships than what we're used to
3 having.

4 Here is a picture of the Port of Coos Bay, the
5 entrance to our channel looking towards the north in an
6 area that we call the North Spit. I'll show you right
7 up in there is where the proposed LNG facility is,
8 they're proposing.

9 There is another picture down here that shows
10 a little bit the same area. The channel is quite narrow.
11 It doesn't look that way in these pictures but if you
12 look at the aerial shot looking straight down you can
13 see that it isn't that wide and the yellow push pins
14 here are where the LNG slip dock is proposed, the
15 storage tanks, and the safety center and work force
16 housing and the city of North Bend. You can see also
17 the runway, the airport there, that is very close.

18 Here's some pictures too. Like this was taken
19 at a Coos County Board of Commissioner meeting in 2015.
20 And a cargo ship happened to cross and you can just see
21 how close the buildings are to the shipping channel.

22 And if you look in the bottom lower right that
23 is just a general cargo ship that comes and visits our
24 area. You can see how narrow it is. You can see the
25 North Spit. We're standing on Cape Arago Highway, which
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1 is just to the west of the city of North Bend and it's
2 just not a very wide channel.

3 Here is a comparison this Daio paper ship to
4 an actual LNG ship and it's actually one of the smaller
5 LNG ship so you can see the size difference. And Jordan
6 Cove is saying that they will have a maximum of 120 LNG
7 carrier calls per year. And that's actually between 220
8 and 240 harbor disruptions because they have to have
9 this bubble of security around these tankers both coming
10 and going.

11 And because these tankers have a 40 foot draft
12 and because our channel is only 37 feet so they have to
13 do their transits at high slack tides, which are prime
14 tides for other Bay Area users.

15 And if you look at this, this is actually
16 looking at both the security, the 500 yard security zone
17 that they have imposed around the tankers, and the
18 reason they have that is because these tankers have a
19 huge hazardous burn zones.

20 If there was to be an incident the burn zone
21 goes out to this outer blue limit. The first zone in the
22 yellow there that you're not going to likely survive at
23 all there. The green is a mile out. People are at risk
24 of receiving second degree burns in 30 seconds at a mile
25 out and you're still at risk farther, but it will take a
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1 little bit longer. So there's extreme hazards if there
2 was to be an incident. So there should be some real
3 concerns here.

4 Other ports have not allowed these facilities
5 because of this hazard but a lot of people here do not
6 have the experience in this kind of a type of industry
7 so they are not really up on it.

8 The Coast Guard in 2008 had a Water Stability
9 Report and they said that no vessel could enter this 500
10 yard safety and security zone around the tanker ship
11 without first getting permission from the Coast Guard,
12 the captain of the Coast Guard. And, of course, and
13 then in our instance because we're rural that person is
14 in Portland, which is several hundred miles from here.

15 So this could have a real negative impact on
16 our fishing and other bay users that use Coos Bay.

17 Back in 2003 there was a congressional
18 research service report that showed that the public cost
19 to secure the first LNG tanker ship back to the Everett
20 terminal after 9/11 was around \$80,000.00. And the
21 cities back there they estimated, Boston and Chelsea,
22 that it was 37,500 out of their public city budgets to
23 safeguard that first vessel. And that's in addition to
24 what the terminal owner provides. So this is an expense
25 on your public services.

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1 According to the Jordan Cove DEIS they stated
2 that 31,560 trips per year occurred from recreational
3 boaters in the Coos Bay and a lot of that is for
4 fishing. And the Oregon Department of Fish and Wildlife
5 has stated that in the coastal communities up to 20% of
6 the total net earnings in our communities come from
7 fisheries.

8 And if you look at that picture, it's not
9 really a good one on the bottom of the screen, there's
10 about six boats out there, a lot of recreational boats,
11 and this is right looking right where Jordan Cove is
12 being proposed. So there would be an impact to this
13 recreational fishing.

14 Ocean acidification. A lot of people talk
15 about climate change as what could happen. But ocean
16 acidification is already happening and we've already had
17 it cost our oyster industry in the Pacific Northwest
18 nearly 110 million and it's jeopardized about 3,200
19 jobs.

20 And what happened is in 2006 they noticed that
21 they had 80% die-off of their baby oysters at the
22 Whiskey Creek shelters hatchery in Oregon. And about
23 the same time they were having the same problems up in
24 Washington at a hatchery they have up there.

25 And what was causing it? After two years they
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1 discovered that it was actually the ocean ph. That the
2 ocean, the acidic nature of the ocean had actually
3 changed and caused the -- it was so acidic that the
4 baby oysters couldn't build their shells so they
5 basically were dying because of that.

6 And, you know, they were able to solve these
7 problems by getting tanks and now like our local oyster
8 companies they put their baby oysters in these tanks and
9 keep the ph until they're big enough that they can make
10 it in the estuaries. But you've got to realize there's
11 lots of clams and oysters and crabs that they don't have
12 a tank to go in have to their baby oysters be saved from
13 this.

14 In January of 2018 the Oil Change
15 International did a briefing and they determined that
16 the Jordan Cove LNG project would be Oregon's largest
17 greenhouse glass polluter, equivalent to 15 times the
18 2016 emissions from Oregon's only remaining coal plant.

19 So this is not a clean fuel. It's not a good --
20 they wanted to have it as a bridge fuel but it's
21 actually, as far as greenhouse gases, we can see it's
22 worse in some cases. And the briefing also found that
23 there was no real evidence to support that the project
24 would replace coal in global markets. That is in with
25 my Brief if you want to read this report.

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1 And I do hope that you will look at the Brief
2 I provided because there's no way I can go over all the
3 stuff that is actually in that Brief.

4 I'm going into some other areas. This
5 dredging is directly related to the Jordan Cove Project
6 because their tanker ships are so large they would have
7 to dredge the bay. They are wanting to remove 5.6
8 million cubic yards of material just to build their slip
9 dock and access channel.

10 They also have about 700,000 cubic yards of
11 material that they would be removing from the
12 navigational channel.

13 In addition to that though the Oregon
14 International Port of Coos Bay is also proposing the
15 removal of 18 million cubic yards of material. So
16 that's a direct result of Jordan Cove.

17 And just to give you an example the 5.7
18 million cubic yards of dredge material would be
19 equivalent to 26.88 football fields built 100 feet high
20 with dredge material. That is an enormous amount of
21 material that would leave our estuary and it would not
22 do so without having negative impacts.

23 The dredging is a problem because when
24 sediments gets in the water we have a pretty swift tidal
25 actions here and oysters are filter feeders and they
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1 cannot take large volumes of dredging sediment in the
2 water and actually it will have big die-offs.

3 And our oyster growers have had some problems
4 with this sometimes, you know, for other reasons. When
5 it's really stormy they have to go lift the oysters up
6 even to get them off the floor. So it's a serious
7 problem.

8 And also dredging there's some studies that
9 show that it's harmful to the Dungeness crab which
10 represents a valuable fisheries on the West Coast. So
11 I'd encourage you to look at that stuff in the study in
12 my Brief, in my briefing.

13 Coos Bay actually has -- is a big travel --
14 people come here to enjoy our beaches and to recreate on
15 the North Spit and see our adventure coast. And in 2016
16 they spent, in Coos County alone, \$265,000,000.00, which
17 is a big part of our economy here.

18 In fact the last four years it was over a
19 billion dollars that came into our local economy. And
20 it's directly related to 3,280 local jobs here. These
21 jobs will be negatively impacted by this project.

22 There's also an issue with the airport. On
23 May 7th, the FAA released 13 determinations of presumed
24 airport hazards with respect to this proposed project.

25 Nine of those involved the transitioning of LNG tanker
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1 ships.

2 And in the bottom right you can see the
3 airport runways and where these storage tanks would be.
4 And the facility itself is -- has a problem because it
5 releases -- when you liquefy natural gas there is a lot
6 of heat that is expelled into the air and this creates
7 another hazard with what they call a thermal plume
8 because the planes can't see it and it can actually flip
9 a plane on take-off and they're too low to the ground
10 for them to be able to recover. So there's some serious
11 issues here with the close proximity of our airport to
12 this proposed project.

13 Here is a picture of the runway, the east-
14 west runway, and how close it is to the navigational
15 channel there in the blue. It's just really not that
16 far from planes coming and taking off.

17 There is other local impacts too. In Kitimat
18 housing prices and rents have as much as tripled. And
19 also in my Brief, this is more detailed in my Brief, I
20 show this graph where the oilsands, as the expenditures
21 increase so did the housing and rent prices.

22 And this is kind of difficult for an area like
23 our area because we have low income here and I know in
24 places like Sakhalin Island where they also have a
25 proposed LNG facility the local people, the prices went
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1 so high that local people couldn't afford them.

2 And we know right now we have only a 1%
3 vacancy in our renting and so that can be a real problem
4 with 2,000 workers coming in that will be building this
5 facility. It's also shown that crime and other health
6 impacts on our health care facilities and stuff it will
7 all be impacted because that is a big influx of people
8 coming into a rural area.

9 The Jordan Cove Project also has a 229 mile
10 36-inch pipeline that is going to operate at 1,600-lbs
11 per square inch. It will be transporting 1.2 billion
12 cubic feet of gas per day either on the GTN network that
13 comes down from Canada or the Ruby pipeline that goes to
14 the midwest. Pembina, which is a Canadian company, is
15 100% owner of the Pacific Connector gas pipeline.

16 About 148 miles, 65% of the proposed pipeline
17 route, would cross private property and this can be
18 taken by eminent domain and that would be via a Canadian
19 owned and operated company. And a lot of land owners
20 are pretty upset about this.

21 We have people that have ranches and timber
22 people that depend on their timber. This clear cut it
23 would be a 95 foot clear cut through Oregon and, you
24 know, people don't feel that a Canadian company should
25 have the right of eminent domain.

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1 The Pacific Connector or the proposed Pacific
2 Connector would cross five rivers. Several these of
3 rivers it crosses more than once. That's the Coos, the
4 Coquille, the Rogue, the South Umpqua and the Klamath
5 Rivers.

6 The pipeline would impact or cross about 342
7 streams and many of these are spawning ground for salmon
8 and steelhead. So you can see the impact to the
9 fisheries with the pipeline also.

10 About 148 miles of the pipeline is privately
11 owned and 62 miles of that are held by timber
12 companies. And here are some pictures of some of the
13 trees that would be permanently removed and taken out of
14 production.

15 There will be a permanent 30 feet clear cut
16 through our forest zones, our forest lands, and the
17 result is about 4,947 acres of disturbance overall.

18 Here's some of our history. And Jordan Cove
19 began in November 2004. FERC vacated the first order
20 that they'd done in April of 2012. Jordan Cove
21 reapplied in 2013. We went through the whole process
22 again, which is a federal process, state process and
23 there's dozen of local processes.

24 So FERC on March 11th actually denied the
25 applications and here on September 21st, 2017, Jordan
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1 Cove came back again and refiled an application and were
2 once again back in the federal energy regulatory process
3 for drafting an environmental impact statement which
4 will be out at some point here for review and comment.

5 Once again we spent hours and hours and hours
6 commenting and putting stuff into records. And then we
7 have to challenge them if the decisions are not made in
8 the best interest of the public.

9 And here is just a list and this is not even
10 half of the local permits we've had to do. And what
11 happens is we challenge them. We show the flaws and
12 Jordan Cove goes and fixes the flaws and they come back
13 and then we have to go through this whole process again
14 and again and again and it is just wearing. It's so
15 unfair to people.

16 We have raised money, hired lawyers, but we're
17 up against millions of dollars. In fact this year alone
18 \$135,000.000.00 that we will be up against Pembina that
19 they're going to invest in these processes.

20 Here's what the North Spit looks like right
21 now today and, you know, it's an area where people
22 recreate and they can do lots of things.

23 And this is what, you know, some people want
24 it to look like in the future. And, you know, is it the
25 jobs' answer?

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1 We think there is a better way to go than
2 this.

3 So that's the end of my presentation and if
4 you have any questions I'll be happy to take them.

5 DR. THOMAS KERNS: I can testify that
6 Jody has spent years on this just spending her energies
7 and resources down to nothing working on this, just over
8 exhausting herself. So her testimony here is
9 informationally worthwhile and personally very, you
10 know, personally earned.

11 MR. GILL BOEHRINGER: Jody, Gill
12 Boehringer. Just one question and perhaps no one knows
13 the answer.

14 I was just wondering what percentage of the
15 product of fracking, let's talk about the LNG, what
16 percentage of that is being used for energy and what
17 percent is being shipped out for profit, shipped out
18 overseas? Do you have an idea or just an estimate?

19 MS. JODY MCCAFFREE: Well, in the Brief I
20 filed there is a page where I talk about, well, what's
21 lost in the shipping, you know. Because really natural
22 gas should be consumed on the continent that it's
23 produced on and by putting it in a ship and shipping it
24 you do lose a considerable amount.

25 It's in there from a study that I quote they
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1 say how much is lost but I don't know overall but I
2 could get that information for you. You know, it really
3 depends on how much volume they're exporting and I'm not
4 an expert in those. We'll have to find people that are.

5 That's the problem. We're just citizens
6 trying to fight.

7 MR. GILL BOEHRINGER: Yeah. Yeah. I'm
8 sorry, I'm not sure I put it clear enough.

9 I was just wondering what percentage of the
10 LNG stays in the country for energy and what is shipped
11 out to get profit, shipped out to other countries.

12 MS. JODY MCCAFFREE: It's all for export,
13 every last little bit of it.

14 They tried to say, oh, we're going to take an
15 off shoot of the gas and have it go somewhere but when
16 they really, when you're looking at the volumes they're
17 asking the Department of Energy to export it's actually
18 more than they are applying to FERC to put in the
19 pipeline.

20 And we just last week, that's one reason why I
21 feel like I wish I had more time to work on this, but
22 last week we had a deadline with the Department of
23 Energy they wanted to increase the volume of gas that
24 they would export. So it's right at one-billion cubic
25 feet a day for non-free trade agreement nations and the
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1 Department of Energy also agreed 1.2-billion cubic feet
2 a day to free trade agreement nations.

3 So basically you're talking that is the whole
4 amount of gas that would be in the pipe that they would
5 sell it 100% for profit for a private company to export.

6 MR. GILL BOEHRINGER: So that's another
7 reason why it's not really a bridging fuel as far as the
8 United States goes. I mean it could have been an
9 irrelevant fuel except for the damage that it's causing.

10 MS. JODY MCCAFFREE: Yes. It's a
11 considerable damage to America.

12 And the reason that this is a Canadian company
13 and they're down here and they're trying to put a LNG
14 terminal here is because they can't get the pipeline
15 through the First Nations Territory up there to their
16 coast line in Canada. They have lots of issues up there
17 too. People won't allow these facilities.

18 They consider Oregon a weak link because we do
19 not have the environmental protections at the state
20 level like the state of Washington and California do and
21 also Canada.

22 Oregon used to be a leader in protecting the
23 environment but our land use has not been updated and
24 what we're finding is that's not the case any more.

25 I mean we have seen, and it's been frustrating
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1 to me, because I think, well, somebody is looking out
2 for this, somebody is protecting us, and they're not
3 really.

4 I mean I'm not saying they're not people that
5 try to do that but the agencies overall what we see is
6 rubber stamping going on. It's particularly at the
7 local level. They just rubber stamp anything and it's
8 like who is protecting this? I don't know.

9 I thank god that FERC said no. I mean because
10 they finally looked and saw this project is so flawed
11 that they couldn't even accept it as being acceptable.
12 And I pray that that is it again.

13 But why should we have to keep coming back?
14 I have said the same thing to a lot of these permitting
15 processes over and over and over again all my time.
16 It's 100% takes all my time. I don't know how much
17 more, you know, that I could keep doing this but it's
18 very frustrating.

19 MR. GILL BOEHRINGER: Well, your
20 presentation was impressive and what you've done is
21 marvelous but one can understand the frustration and
22 wearying nature of the impending further disasters that
23 you and your people face.

24 It's interesting because we've been talking
25 about the system. I mean, let's face it, we're talking
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1 about capitalist corporation and they want profits and
2 as Marx and Engels said in the communist manifesto they
3 chase all over the world to find the resources and the
4 markets and so forth.

5 And I like the use of the phrase "weak link"
6 because in a previous PPT we were looking at the garment
7 industry in Asia and one of the problems there, of
8 course, for the workers and local people is that the
9 factory owners want to pay the cheapest labor they can.
10 So they look for a weak link and it became Bangladesh.
11 And we know what happened in Bangladesh at Rana Plaza.
12 More than 3,000 people were killed.

13 So it's definitely a system and it's not just
14 in one industry. It's in every industry in this system
15 which now dominates the economy of the world.

16 Thanks very much. It was very helpful.

17 MS. JODY MCCAFFREE: Yes. They're here
18 because, you know, they saw people that would just roll
19 over on the cheap thinking this was jobs. And it's
20 really even not that many jobs. It's actually only
21 going to be 180 jobs in Coos County. I mean that's not
22 that many jobs for the huge impacts this facility would
23 have and the negative impacts.

24 We're actually going to lose jobs, I think,
25 overall between our tourism and other industries that we
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1 have here because of the impacts, you know. And the
2 people don't know. They're not smart enough to ask the
3 right questions. That's what so frustrating.

4 MR. GILL BOEHRINGER: And presumably part
5 of the propaganda or, as they would say, the PR is that
6 there's going to be more jobs.

7 MS. JODY MCCAFFREE: Yes. They claim all
8 these secondary jobs.

9 MR. GILL BOEHRINGER: You know, Izzy
10 Stone, the late lamented Izzy Stone once said that all
11 governments lie. And I suspect if he were alive today
12 and still writing he would say all corporations lie
13 certainly in this industry.

14 And that seems to be suggested by the evidence
15 we've been receiving.

16 MS. JODY MCCAFFREE: Yes. And what we've
17 found here too is that what they've done is they come in
18 here and they bought elections. I mean they can put out
19 money. You know, we are not that well-off. People
20 can't do that.

21 So they took over our commissions and then
22 they changed the rules and it's very frustrating because
23 you're up against so much money and then people get
24 elected and you have no voice then.

25 DR. THOMAS KERNS: Thanks Jody.
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1 MS. JODY MCCAFFREE: Thank you for having
2 me.

3 DR. THOMAS KERNS: You were very
4 eloquent.

5
6 [youtube.com/watch?v=s5vB202451s]

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1 CENTER FOR THE HUMAN RIGHTS AND THE ENVIRONMENT

2 MAY 17, 2018. 11:00-12:00

3
4 MR. DANIEL TAILLANT: Hello, my name is
5 Daniel Taillant. I'm the Director of the Center For
6 Human Rights and the Environment, an NGO that was
7 originally founded in Argentina in 1999 and we moved to
8 the United States for political reasons, among others,
9 in 2015. So we've been in Florida now for three years
10 almost, a little bit more.

11 We would like to speak to you today about
12 fracking and specifically about some recent work that
13 we've done to look at emissions from the oil and gas
14 sector that have to do with fracking but also with
15 conventional oil and gas and the impacts that these
16 emissions have on communities and also a little bit
17 about the technology that we've utilized to register
18 these emissions and the implications that they entail,
19 not only because this is something relatively new but
20 because this is something that really is occurring
21 across the sector and all around the world. And we
22 think it's very important that individuals that are
23 engaged on fracking issues and oil and gas more
24 generally should be taking up.

25 The Center For Human Rights and the
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1 Environment has worked for several decades now on
2 bridging the human rights and environments field.
3 We've worked on things like climate change, corporate
4 accountability, mining impacts, right to water, these
5 have been some of the central focuses of our work.

6 We've been more engaged recently on glacier
7 protection and oil and gas specifically in large part
8 because in Argentina a very big shale play was
9 discovered a few years back called Vaca Muerta, or the
10 dead cow, and this is creating quite a bit of
11 controversy in Argentina. We've been engaged on some of
12 the issues related to this topic.

13 And I'm happy to begin if you're ready to go.

14 The title of the presentation is called the
15 Human Rights Impact of Unchecked Emissions From The Oil
16 And Gas Sector. It's prepared by myself at the Center
17 For Human Rights and the Environment and I would like to
18 suggest and to inform you that parts of this
19 presentation come from Priscilla Villa and Pete Dronkers
20 of Earthworks with whom we've done a lot of the field
21 work that is included in the presentation and by
22 Jonathan Banks who has provided some of the technical
23 information about methane impacts in the oil and gas
24 sector.

25 We have four central questions which you are
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1 already familiar with so I won't spend time going over
2 them. But to conclude before we begin on some of the
3 main elements that we will speak about in this
4 presentation are ongoing field work that has begun
5 recently has revealed systematic and very significant
6 emissions, leaks, from conventional and non-conventional
7 oil and gas operations.

8 These are emissions or leaks that neither
9 government nor industry monitors. Generally there's no
10 data collected regarding these leaks and in most cases
11 the companies and the governments are not conducting any
12 repairs or taking any action to stop these leaks and
13 avoid them in the future.

14 In some cases the leaks are fugitive emissions
15 which we'll consider emissions that are not intended,
16 maybe it's a loose pipe or some joint that is leaking or
17 a part of the equipment that is leaking and is omitting
18 these emissions to the atmosphere. In other cases it
19 may be that the leaks or the emissions are actually
20 intentionally emitted into the atmosphere. This has to
21 do in most cases with outdated technology or the very
22 system utilized by the oil and gas industry which
23 incorporates moments of leakage or emissions into the
24 atmosphere.

25 In the cases that we've looked at these leaks
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1 or emissions are highly toxic, both to human health and
2 are very impacting to the atmosphere, accelerating
3 climate change tendencies as we know them today. And
4 for these reasons they are very particular to this
5 presentation.

6 A summary of our findings before we move
7 forward, and we'll come back to these issues during the
8 presentations. The emissions or the leaks in this case,
9 are placing the human rights of workers of the industry,
10 people that work on these sites and nearby residences,
11 at great risk. They are affecting their human right to
12 a healthy environment. Their right to life. Their
13 right to health. And their right to information,
14 because, in most cases, few people or no people know
15 about these leaks.

16 The severity of the leaks of these emissions
17 from the sector absolutely warrant provisional measures.
18 They can be stopped. We must work to stop these toxic
19 fugitive emissions because we can do it and it's
20 possible to do.

21 And they require companies to take steps to
22 monitor, measure and more importantly to cease these
23 emissions. And they require governments to intervene to
24 protect communities and force companies to comply with
25 the law and reduce or even fully eliminate these
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1 emissions. And also to provide information about the
2 emissions past, present and future, to communities.

3 Companies are absolutely liable. They are
4 fully aware of these fugitive emissions and yet they do
5 nothing to curtail them or to cease them.

6 States are liable, as they should be enforcing
7 emissions standards and insuring that the companies are
8 not allowing fugitive emissions or placing communities
9 or workers at risk.

10 And knowing that these fugitive emissions,
11 particularly methane gas, and we'll get into that a
12 little bit more in the presentation, are many more times
13 destructive to the atmosphere even up to 100 or more
14 times impacting than CO2 in terms of their climate
15 impact. And particularly because of recent agreements
16 signed by many governments, such as the Montreal
17 Protocol or the Paris Agreement to reduce these
18 emissions, states are responsible for the climate
19 impacts that are caused by these emissions, particularly
20 if they're not doing anything.

21 Quickly to look at a fracking site and some of
22 the areas or equipment that might be emitting that we've
23 looked at with the technology that we'll get into in a
24 moment. This may occur a fracking tower that is
25 actually conducting fracking. It could occur at a water
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1 storage facility or produced water facility, as you see
2 in the back right of the image, in condensation tanks,
3 in drilling and fracking equipment, in trucks.

4 It could also exist in infrastructure used for
5 compressing gas, which is not in this image, and these
6 emissions include methane but also may include volatile
7 organic compounds such as VOCs or a particulate matter
8 or CO₂ or black carbon. These are all very toxic
9 emissions. They're not good for people and not good for
10 the environment. In the case of methane certainly not
11 good to prevent climate change.

12 These emissions occur at traditional oil and
13 gas well pads. They occur in flaring, they occur in
14 compressors, in gas processing plants, in transmission
15 equipment and storage equipment and in distribution
16 inside cities, outside of cities at oil and gas sites
17 wherever they may be.

18 Oil and gas is the No. 1 industrial source of
19 methane pollution which is a powerful greenhouse gas.
20 It's also a major source of toxic emissions that lead to
21 ozone smog and fine particulate pollution making them
22 also very concerning to human health and to the
23 environment.

24 Methane for those that have looked a little
25 bit into it has a very high global warming potential up
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1 to 100 times more than CO₂. In the near term, and this
2 is especially important for taking action, in the near
3 term it has a much higher impact than in the long term.

4 And this means that dealing with methane
5 leakages and stopping them in the short term can be
6 extremely important to avoid immediate impacts to our
7 climate. It could have a very, very, very large effect,
8 positive effect, if we are able to reduce these methane
9 leakages in the short-term.

10 And some of the scenarios looking forward into
11 the many decades to come the targets that we have at a
12 global level to keep global climate change and warming
13 to 1.5 percent really depends on addressing short life
14 climate pollutants of which methane is one. So we
15 really need to include short life climate pollutants in
16 this reduction if we want to reach global climate change
17 mitigation objectives and targets.

18 The International Energy Agency recently found
19 that around 40% to 50% of current methane emissions
20 could be avoided at no net cost and 75 percent of the
21 emissions can be cut at a reasonable cost.

22 This is a very important point especially if
23 we're considering intervention or legal intervention in
24 the sector. Actually addressing these emissions is very
25 viable, it's very feasible. The technology exists and
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1 it's not expensive for the industry.

2 In fact, addressing these emissions can
3 actually save the industry money and even generate a
4 profit. So not addressing methane leaks just does not
5 make business sense and it's also providing a climate
6 benefit and reducing impacts to people in terms of the,
7 not only methane, but other emissions that are emitted
8 as well as then it's a win/win situation for everyone.

9 The oil and gas industry releases a wide range
10 of chemicals that are known for probable carcinogens.
11 This is in addition to methane. Remember that methane
12 is not necessarily a chemical that is impacting human
13 health. Although if we were to breathe a lot of methane
14 then we would have respiratory problems in terms of lack
15 of oxygen. But the real problems here, the immediate
16 problems, are the carcinogens that are also emitted
17 alongside of methane.

18 These are pollutants that are either emitted
19 as a component of raw natural gas or a by-product of
20 natural gas bunching that occurs at these sites.

21 And studies based on air measurements have
22 identified elevated levels of benzene, hydrogen sulfide,
23 formaldehyde, near oil and gas sites. In fact if you
24 have visited oil and gas sites sometimes you smell
25 rotten egg smell, this is common in these areas, and
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1 this is, of course, coming from these emissions that are
2 occurring.

3 Benzene has been linked to cancer. Ethyl
4 benzene is associated with respiratory and eye
5 irritation. Hydrogen sulfide is found generally near
6 wells producing sour gas and in high concentrations it
7 can cause severe respiratory irritation and even death.

8 We know of cases, of people, that work at oil
9 and gas sites that have been exposed to some of these
10 emissions and have died on the spot because they've
11 breathed in very large amounts of these gases.

12 The oil and gas industry dumped millions of
13 tons of methane and other pollutants like VOCs into our
14 air each year. Pollutants from the oil and gas supply
15 chain contribute to the formation of ozone or smog
16 pollution which blankets many world cities in the warmer
17 months and VOCs and methane then leak from the oil and
18 gas supply chain and nitrogen oxides, formed by gas
19 flaring and engines at natural gas facilities, react
20 together in the presence of sunlight to form ozone smog.

21 So these are just some of the problems that
22 are related to these emissions, when inhaled ozone can
23 impair lung functions and trigger asthma attacks and
24 aggravate conditions for people with bronchitis and
25 emphysema, in some cases leading to premature death.

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1 Children, the elderly and people with existing
2 respiratory conditions are most at risk from ozone smog
3 pollution. And, of course, if you work at these sites
4 and you're there day after day you're also extremely
5 vulnerable.

6 Fine particle pollution in CO2 emissions are
7 also extremely significant in the sector, not only from
8 some of this equipment but also from the trucks and the
9 transport of these chemicals and agents as they go in
10 and out of oil and gas operations.

11 This is a slide that suggests that a lot of
12 these impacts are actually disproportionate for
13 minorities and affect, for example, Native Americans or
14 other poor communities more so than they would richer
15 communities.

16 Some of the things that we can do to address
17 these emissions impacts, certainly detect leaks. Now
18 this is something that is lacking in the sector. For
19 many, many decades the sector has simply allowed these
20 leaks to occur. Has not even included efforts to stop
21 the leakage or doesn't really even understand the volume
22 of the leakages.

23 I spoke recently to the head of research of
24 Argentina's primary oil and gas company and asked him
25 about methane leakages from industry and his answer,
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1 which was quite comical was, what leakage?

2 Now, in many cases, they don't even know that
3 this is occurring because there aren't systems in place
4 to measure them.

5 Certainly companies and states should be
6 working to eliminate or minimize venting. They should
7 prioritize the capture of gas, not the flaring of gas,
8 minimize flaring, capture, reuse, recycle and send to
9 market.

10 These engines that are used in the process
11 should have pollution controls. There should be a
12 regular monitoring, measurement and reports as well as
13 verifications by third-parties to make sure that their
14 objectives are being met in terms of mitigation,
15 reduction and elimination.

16 Regardless of the emission source there is
17 almost always a cost effective regulatory path which few
18 countries have taken but which more and more are now
19 beginning to embark on.

20 States like Colorado, California and others in
21 the United States or also Canadian states and even trade
22 agreements like NAFTA are beginning to address methane
23 leakage from oil and gas and to establish commitments of
24 reducing these emissions as part of their climate change
25 strategies or simply as part of their environmental
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1 objectives to clean up dirty industries.

2 States and companies around the world have
3 recognized the problem and are moving in the right
4 direction to address these leakages.

5 And now we get to some of the advocacy work on
6 the ground, which is really what I wanted to show you
7 because it really has been stunning and our own
8 experience along with some of our partners and local
9 communities over the past year have really changed our
10 own perspective and knowledge about these issues. And
11 it's really the material that we would like to present
12 today.

13 And it begins with something called the FLIR
14 technology. It's a hand held camera that looks a bit
15 like an old video recorder but that little guy, when you
16 power it on, it drops to about 250 degrees below zero
17 and has a very highly sensitive sensor that is able to
18 capture gases in the atmosphere.

19 Now this is not a heat sensing camera. It
20 actually is able to detect some 20 different gases of
21 which methane, benzene and xylene and toluene and others
22 are a part. And just by holding it in your hand and
23 pointing it at infrastructure you're able to see
24 emissions.

25 The FLIR GF 320 is a camera we used in two
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1 field visits that we did in Mexico and Argentina. This
2 is state of the art technology utilized, not only by us
3 in this case, but is the common technology used by
4 industry to measure your methane leakages.

5 Few countries have these in their institutions
6 that are doing controls but more and more companies now
7 have this technology to detect methane leakages. They
8 detect volatile organic compounds as well as methane
9 gas.

10 The price of the camera, which is quite
11 prohibitive, is about \$150,000.00 and that would make it
12 quite prohibitive for NGOs, for example. And this is
13 something we're working on to try to get these cameras
14 and this technology into the hands of local communities
15 that are engaged with the oil and gas sector.

16 If you look at some of these images you'll see
17 right away what we're talking about. The image on the
18 right this is in Colorado right next to a school where a
19 fracking tower exists. When you look at it if you were
20 to walk up to the site you would see absolutely nothing.
21 But if you put on the camera, turn it on and point it to
22 the tower you'll immediately see voluminous quantities
23 of gas right next to the fracking tower.

24 This is a plume of emissions that is going
25 into the atmosphere right around the school and the
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1 local neighborhood.

2 This is an image taken in Mexico in October of
3 2017. We went down to Veracruz and looked at about 15
4 different sites belonging to Pemex, the country's main
5 and practically only oil and gas company.

6 And if you look at those tanks, and this is a
7 photo taken at the very moment right as we were turning
8 on the camera, you see absolutely no emissions but a
9 moment later with the camera on you can see the copious
10 amounts of emissions coming right out of the tanks.

11 Now this looks like steam but these are
12 actually gases. There could be methane gas. There
13 could be volatile organic compounds in the plume of
14 emissions coming from the top of those two storage
15 facilities.

16 This is an image taken in Neuquen Patagonia,
17 Argentina. This is where the Vaca Muerta oil play, oil
18 and gas shale play, is located and there we have the
19 operator with a local community member looking through
20 the camera pointing at the storage facility and showing
21 emissions. If you look at the right image you can see
22 the emissions coming right out of the tank.

23 And the next image another tank in a joint
24 venture operation by Odeval and YPF, Argentina's state
25 owned company. Again you see absolutely no emissions at
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1 the tank. If you were to visit the site you would think
2 it was very clean and working in great condition but
3 when you look through the view finder of the FLIR camera
4 you immediately see the plume of smoke coming from the
5 exhaust pipes.

6 Now this is one of those cases where the very
7 technology of the industry, if you look closely at the
8 image, and you may not see it very well. There are two
9 little yellow dots right on top of the tank, those are
10 the venting pipes that are designed to leak these
11 emissions rights into the atmosphere.

12 In modern technology and state of the art
13 technology you would not have these vents going actually
14 into the atmosphere.

15 Another site in the Vaca Muerta shale play
16 very, very, large amounts of emissions coming from these
17 three or four tanks that you see there at the end.

18 If you look closely you'll see in the middle
19 of the image towards the bottom a worker is walking
20 right next to the tanks. No gas mask or anything else
21 to avoid breathing in the emissions coming from the
22 tanks.

23 Another tank also in Argentina. Here you see
24 the two vent pipes, again right at the top they're more
25 visible. This is outdated technology that should not be
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1 used where they vent directly into the atmosphere.

2 Here you have the plume coming out of the
3 tanks, extremely, extremely intense. This is one of the
4 worst tanks that we saw.

5 You could see how, in the image, there is a
6 dark and light part of the tank. The camera is actually
7 able to see where the fluid is inside the tank without
8 having to go into the tank by the temperature reading.

9 And you can see in the more sensitive
10 registration of this image how big that plume is. And
11 if you were actually to look at it blowing downwind it
12 was about a mile and a half long.

13 I put a map here to show the location where we
14 did the filming and a town that is nearby that is only
15 two kilometers away, the exact same direction as the
16 plume of smoke that you saw in the previous image.

17 One thing that I would like to stress, and I'm
18 coming almost to a close of my presentation, is the
19 importance of sharing this information with local
20 communities.

21 What you see in the image, and you'll see a
22 gentleman with a beret sitting behind a table right next
23 to his little home in a rural part of Patagonia. This
24 is Mr. Molina. He's 92 years old. He's been living at
25 this location for about 50 years and he tells us that
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1 he's been there since the oil and gas sector showed up.
2 He lived there previously to its arrival. And since its
3 arrival he's noticed foul smells near his home, a
4 deterioration in the quality of his plant life around
5 his home, death of his animals. He has trouble sleeping
6 at night, constant headaches. And this is the first
7 time that these people have been told about the
8 emissions coming from this plant.

9 Now Mr. Molina also happens to be a member of
10 the Mapuches indigenous tribe. He is a leader of his
11 tribe and several the people in the image are also
12 leaders that had come out to listen to our presentation
13 and actually accompany us to the sites.

14 And there's Mr. Molina with his family again
15 and some of the indigenous leaders. His granddaughter
16 is the girl in the black shirt and she's taken up much
17 of the advocacy and will be a Mupuche leader in the
18 future in this area.

19 What's very interesting is when you put this
20 technology in the hands of the local community, this is
21 another tribe leader, a different part of the country
22 there, who went with us and who also, for many years,
23 has been visiting these sites and didn't realize that
24 there were emissions coming from the equipment. And
25 he's looking through the FLIR camera. You see how easy
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1 it is to operate and looking at some of the emissions
2 coming out.

3 The woman to his right is our colleague from
4 Earthworks. And right behind her is another indigenous
5 leader that worked with us.

6 Here is Pete Dronkers of Earthworks who
7 operates the camera. And I will say Mr. Dronkers is a
8 certified technician. When you buy this \$150,000.00
9 camera it comes with a training.

10 So Mr. Dronkers actually went to a FLIR
11 training, which took about a week, and he is an
12 authorized and knowledgeable user of this camera and his
13 testimony is actually valid in court.

14 So if you were to register these emissions or
15 if he were to register these emissions they could be
16 used as testimony and he is an authorized expert to be
17 able to interpret the data.

18 So we know from his training and his use of
19 the camera that what we were looking at is actually
20 toxic emissions. Here he is showing other community
21 members how the camera works and showing them the
22 emissions coming from the various facilities.

23 You'll also see around his neck a little
24 indicator that is used in cases where toxic emissions
25 are so strong that you shouldn't actually be walking
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1 around near the facilities. He carries that at all
2 times because in some cases it has gone off and that
3 suggests to him that he needs to move away quickly from
4 the facility.

5 Here is another picture that, for us, is
6 extremely important. These are two workers in the blue
7 helmets that actually came up to us while we were
8 filming. They were extremely curious as to what we were
9 doing. They weren't actually operators of the
10 equipment. They were workers that were digging trenches
11 and doing different types of public works right around
12 those three tanks that you see there in the background.

13 And they had no idea that they were being
14 exposed to these emissions. They had no knowledge of
15 how these equipment worked. They simply do work 24/7 all
16 the time around these facilities whenever they're called
17 to do so and they are being exposed.

18 So one of the things we would like to talk
19 about the right, human right to health and to life of
20 the very workers that have to be at these facilities all
21 the time.

22 If you look underneath the image there is a
23 FLIR registration of the emissions coming out from those
24 tanks at the exact moment that we are looking through
25 that camera. So you can see the copious amounts of
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1 emissions coming from the tower.

2 Another indigenous leader who lives downwind
3 from this facility, this is a processing plant where
4 they compress gas, and you can see in the image no smoke
5 but if you look to the right it looks almost as if it
6 were on fire. And this is also the camera able to
7 capture emissions as they are occurring at the facility.

8 And this is a facility that operates 24/7.

9 Behind him is a local leader from an NGO that
10 works with the community on various issues related to
11 oil and gas.

12 So, to summarize, the human rights impacts,
13 and this is getting to the end and to the conclusion of
14 this presentation.

15 Fugitive or intentional emissions from the oil
16 and gas operations place human rights of workers, of the
17 industry and nearby residents, at great risk. It
18 affects their human rights to a healthy environment,
19 their right to health, the right to life and the right
20 to information particularly because, in most cases,
21 communities are completely unaware that this is going
22 on.

23 The right to information is violated by
24 companies that knowingly do not provide information
25 about these emissions and/or the resulting impacts and
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1 risks that workers and communities face.

2 The severity, or in some cases the potential
3 severity, if they are lesser, of fugitive or intentional
4 emissions from the oil and gas sector can be extremely
5 harmful to human health causing a range of impacts
6 including skin, eye and respiratory problems, long term
7 cancer complications and even sudden death as cases that
8 we know of have occurred at sites.

9 Testimonials from residents like that of Mr.
10 Molina and workers living near oil and gas operations
11 receive persistent and regular foul odors at or near
12 their homes, which they attribute to the oil and gas
13 sector but don't always know or can't always prove that
14 it is the sector that is generating them.

15 They indicate also a steady loss of
16 vegetation, a deterioration of their animals and general
17 decline in the quality of their environment and
18 accompanied by problems with sleep, recurrent headaches,
19 cancer amongst their friends, peers and family, et
20 cetera.

21 And some of the human rights that are
22 potentially affected by emissions from oil and gas, the
23 right to life, the right to health, the right to safe
24 working environment, the right to a healthy environment,
25 the right to information we've stressed several times,
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1 the right to development, the right to remedy. You
2 know, this needs to be addressed and needs to be
3 resolved.

4 The right to livelihood of -- you can see the
5 deterioration of working and living environment, the
6 right to agriculture, the right to property, the right
7 to culture, the right to land, the right to climate, to
8 atmosphere and to air, the right to self-determination
9 and in the case that we see in Argentina the rights of
10 indigenous peoples are also greatly affected.

11 So going back now to answer the four questions
12 that were posited by the panel, under what circumstances
13 do fracking and other unconventional oil and gas
14 extraction techniques breach human rights protected by
15 international law as a matter of treaty or custom?

16 Well, in part, due to the unchecked fugitive
17 emissions or intentional omissions from the oil and gas
18 operations in fracking but also in conventional
19 extraction and production does affect the health of
20 workers and communities nearby as well as the conditions
21 of the atmosphere and the climate.

22 The second question. Under what circumstances
23 do fracking and unconventional oil and gas extractions
24 technique warrant the issuance, by their provisional
25 measures, a judgment enjoining further activity,
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1 remediation relief or damages for causing environmental
2 harm?

3 Well, if fugitive emissions are detected,
4 provisional measures should be sought immediately to
5 cease production, to oblige a company in the state to
6 identify gases that are leaked and their risk to people
7 and to the environment and to introduce the necessary
8 filters, equipment or other actions to stop leakage.

9 Third question. What is the extent of
10 responsibility and liability of state and non-state
11 actors to the violation of these human rights and for
12 environmental and climate harm caused by these oil and
13 gas extraction techniques?

14 Well particularly as these fugitive emissions
15 are common often times the technology utilized presumes
16 that they will emit. While failure to upkeep and
17 monitor equipment will also likely result in leakage and
18 because company and state actors know or should know
19 about them, both the company and the state are
20 responsible and liable for human rights violations if
21 they do not take the necessary steps to detect leaks and
22 introduce action to stop them.

23 Both companies and states are also liable for
24 not providing information about risks and impacts to
25 workers and local communities who are most likely to
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1 suffer these impacts.

2 I will say in both cases, Mexico and
3 Argentina, our travel there with Earthworks and Clean
4 Air Task Force and with the local community was the
5 first time this was ever done. It was the first time
6 they put a FLIR camera up to this equipment. It was the
7 first time anyone knew about this information, about
8 these emissions. So if an NGO can do it shouldn't the
9 state and shouldn't the company also be doing it?
10 Absolutely.

11 Finally the last question. What is the extent
12 of responsibility and liability of states and non-state
13 actors, both legal and moral, for violations of the
14 rights of nature related to environmental and climate
15 harm caused by these unconventional oil and gas
16 extraction techniques?

17 Well it is extensive. We have known for some
18 time now that methane gas leakage is extremely harmful
19 to our atmosphere and can cause up to 100 times or more
20 impacts to climate change trends than CO₂. And
21 companies are responsible for and liable for these
22 impacts.

23 Their emissions are causing climate change.
24 And here is a technique and information about something
25 that is occurring that is causing direct impacts to
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1 climate change.

2 One of the great challenges that we've had in
3 attributing responsibility for climate change to oil and
4 gas companies is that we didn't really have information
5 to pinpoint which emissions are coming from which
6 companies. Well this, with this information, has now
7 changed.

8 We have the technology that allows us to see
9 how much individual non-state actors are actually
10 emitting and we have the evidence to prove that they are
11 contaminating. We can quantify. We can show that it is
12 occurring and in that way we can also hold states
13 accountable for not taking measures to control these
14 emissions.

15 A few final links that you can find out more
16 information about these issues. We published a few
17 years back on UN Guiding Principals on Human Rights and
18 Business: Approach to Understanding Human Rights in the
19 Fracking Sector. And we've also prepared an Amicus
20 Brief, it's very brief, that summarizes some of the
21 arguments presented in this presentation to the panel in
22 the form of an Amicus Brief document and you can get
23 that also on-line.

24 There has being some press coverage, and
25 you're welcome to see those links and consult those
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1 press releases. I encourage you to see some of the
2 video footage. It's quite impressive. It's far more
3 impressive than the images I've shown here today. And
4 I'm sure they will fully convince you that this is of
5 great concern and something that we need to attend to
6 into the future.

7 Our next stop will be Columbia. We'll be
8 working there to do similar field work as we've done in
9 Argentina and Mexico. We will be sharing our findings
10 with local actors there. We will be introducing
11 technology to advocates, to NGOs and to others that are
12 interested in engaging the sector to hold it
13 accountable.

14 We will be trying to instill capacity to
15 utilize this FLIR technology. We will try to help local
16 groups to acquire these cameras for their own local
17 advocacy. And we're already thinking about and studying
18 potential litigation in places like Argentina, like
19 Mexico or maybe Columbia to address, not only the risks
20 and the impacts that this is causing to local
21 communities and the state duty and corporate duty to
22 address them but also looking at climate change or
23 possible climate change litigation to hold companies
24 accountable for their emissions.

25 And with that I conclude the presentation and
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1 I would be happy to take any questions or comments that
2 you may have.

3 MR. GILL BOEHRINGER: Daniel, Gill
4 Boehringer. Thank you very much for the wonderful
5 presentation. It was most interesting but to me very
6 surprising in one aspect. Most of what you said is
7 consistent with things that we've heard from other
8 presentations for the last three or four days, which is
9 not to say that it isn't valuable. But the one thing
10 that surprised me was that you were saying that if
11 everybody does the right thing there will be no problem.

12 And I find that really difficult to
13 understand. Would you like to comment on that?

14 What I'm talking about is you were several
15 statements about how it can all be fixed. That we have
16 the technology, et cetera, et cetera. The leaks can be
17 stopped and the fugitive emissions and intentional.

18 If they're intentional I really don't
19 understand how they can be stopped but the fugitive ones --
20 well, I just find it hard to believe to be honest.

21 MR. DANIEL TAILLANT: Sure. Thank you
22 for this comment. This is a fundamental to our work and
23 to the reactions that we also get locally about what to
24 do with the sector.

25 First of all we believe that we should not
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1 have a future with fossil fuels. That is our first
2 opinion.

3 And today, you know, we have about a 80/20 mix
4 between fossil fuel and renewables and we would like to
5 see that, over time, inverted and eventually have a move
6 that is complete to renewable fuels that are
7 non-contaminating. In the meantime we do have an oil
8 and gas sector and that will be with us for awhile.

9 In the meantime there should not be
10 intentional emissions.

11 In the meantime we need to reduce the
12 emissions that are occurring.

13 So while we would like to love to see all the
14 oil and gas people leave we don't have an immediate
15 solution to that problem that can be resolved in the
16 short-term.

17 So we, at the very least, need the oil and gas
18 to stop polluting and killing people.

19 So, you know, we don't want to say that if you
20 fix this everything is fine. We would rather hear, you
21 know, you need to fix this right now and we need to see
22 a plan in the next 50 years where you're phasing out of
23 oil and gas.

24 And we certainly don't want fracking because
25 that's just expanding the horizon. But it doesn't
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1 change the fact that we do need to stop the problems
2 that do exist in the sector that can be resolved
3 immediately and that will save lives, it will improve
4 health and it will reduce the impact.

5 MR. GILL BOEHRINGER: So just to come
6 back to that. I guess we have a different idea and I am
7 an innocent abroad here.

8 I actually normally think of people as not
9 being evil so, therefore, when I think of intentional
10 emissions I assume that you were talking about the
11 necessary ones in the process in order to stop pipes
12 from blowing up and so forth.

13 So I would like to have you comment a little
14 bit more on what intentional emissions are so I will
15 understand how they can be stopped.

16 And the second thing is fugitive emissions, it
17 seems to me, is very unlikely that they all can be
18 stopped. And I guess that relates to the point you
19 made, which may or may not be the case, that stopping
20 all these emissions is going to be beneficial for the
21 corporations. I mean they must be really stupid if they
22 haven't figured that out by now.

23 But, yeah, go ahead. Please go ahead.

24 MR. DANIEL TAILLANT: Yeah, so I try to
25 believe the same thing that you do that people are not
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1 evil but I've run into a few evil people here and there.

2 MR. GILL BOEHRINGER: Especially boards
3 of directors of corporations.

4 MR. DANIEL TAILLANT: Yes. Well, you
5 know, I think everyone thinks that they're doing the
6 right thing and some people may be doing the wrong thing
7 knowingly and those are the ones that I would consider
8 evil.

9 But I think part of the problem with the
10 sector is that this is just how they've done things for
11 a long time. And, you know, emitting invisible gases
12 into the atmosphere you get away with because no one
13 sees them, right?

14 And if you didn't really realize how much is
15 being emitted you might, you know, in a different state
16 of mind than we have today, you might not really care
17 that there is product being lost.

18 In a world now where we are recycling
19 everything and we're really working on the minimal
20 fractions of profit that are to be made it just doesn't
21 make economic sense to emit these gases.

22 And so the industry needs to realize this.
23 Sometimes the problem is that the amount -- even if
24 it's a profitable venture to not emit the gases it may
25 not be that profitable. They may only make a very small
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1 marginal amount.

2 If there is no incentive to make the company
3 do this then they're willing to continue emitting
4 unabated. And that's where the regulatory work comes
5 in.

6 Governments that today, unlike 20 years ago
7 where they really didn't care what their emissions were,
8 that today have climate change strategies that are
9 aiming to reduce emissions 40%-50% in the next decade or
10 two. They're trying to find where they can reduce.

11 And like I said in one of the slides the oil
12 and gas sector is one of the major sources of methane
13 emissions for industry. And if that's where you can do
14 your reduction and it's cost efficient why not do it.

15 As a government regulator it makes sense and
16 as a company you should be willing to comply. And if
17 you're not then maybe you are evil.

18 DR. THOMAS KERNS: Let's make room for
19 Maria to ask a question here.

20 MS. MARIA FERNADA CAMPA: I too.

21 DR. THOMAS KERNS: Are you there Maria?

22 MS. MARIA FERNADA CAMPA: Please you and
23 then--

24 DR. THOMAS KERNS: No, no. I said let's
25 make room for Maria to ask a question.
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1 MS. MARIA FERNADA CAMPA: Okay. Thank
2 you. Did you apply this camera in United States oil and
3 gas example?

4 MR. DANIEL TAILLANT: Yes. So not me
5 personally but Earthworks, the organization that took
6 the camera that owns the camera, they've done about 700
7 site visits, most of which have been in the United
8 States, some in Canada. And every single time in every
9 one of their site visits they have found problems.

10 So this is one of the things that I said
11 earlier. This is a systemic problem for the oil and gas
12 sector. Some are very bad and some are not so bad. But
13 in almost all cases they find emissions whether they're
14 fugitive or intentional.

15 MS. MARIA FERNADA CAMPA: Okay. Because
16 the fracking hydraulic technology is really very, very
17 bad for environment and for the people. Thank you.

18 MR. DANIEL TAILLANT: In particular on
19 this point of fracking, because most of the presentation
20 was, you know, both fracking and conventional but in
21 fracking at the moment of extraction there is a lot of
22 loss of gas.

23 When they leave the produced water there is a
24 lot of emissions from the water that is exposed to the
25 atmosphere. And then just like in conventional once they
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1 start processing the gas and separating it that's where
2 a lot of leakages, the fugitive leaks are going to
3 occur.

4 MS. MARIA FERNADA CAMPA: Okay. Thank
5 you.

6 DR. THOMAS KERNS: We have to come to a
7 conclusion because of the next presentation but I want
8 to just clarify Gill's question a little bit more about
9 regulating versus banning.

10 So this is a human rights court and so the
11 standards on which they're making judgments are human
12 rights standards rather than regulatory standards.

13 And this court is going to make some
14 recommendations. It's going to have an opinion about
15 things. It's not making a binding law ruling or
16 anything. It's establishing an opinion.

17 So if when you ask this court to make a
18 recommendation about the future are you recommending to
19 the judges that they urge corporations to regulate and
20 states to regulate better or are you asking the judges
21 to recommend that states ban fracking?

22 MR. DANIEL TAILLANT: Right. So that is
23 a great question.

24 And I would say where there is no fracking
25 today I would say no-go zone. No more fracking. I
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would be very strong to oppose any expansion of fracking.

You know, that's not going to happen in some countries and in some cases. To tell the Texans to not allow for fracking is going to be a hard sell, especially under this government.

So, in some cases, you may have to go the regulatory path. One way that regulation can help ban fracking is just to make it so complicated and so expensive that it doesn't make economic sense.

That's what we are seeing in Argentina.

Fracking is very expensive because they don't have all the technology, they don't have all the infrastructure and the know-how to make it profitable.

So at \$50.00 a barrel it's not going to happen. At 100 it will. And so we have some room there to try to make it more expensive and if we can do it maybe that is an indirect way to ban fracking.

DR. THOMAS KERNS: Well, thank you.

Thank you very much.

[youtube.com/watch?v=cWY55W2nvNU]

1 COALITION TO PROTECT NEW YORK

2 MAY 18, 2018 9:00-10:00

3
4 MS. MAURA STEPHENS: Good day. My name
5 is Maura Stephens. I'm a journalist, educator and
6 activist based in the central part of New York state in
7 the United States of America.

8 First I would like to thank Tom Kerns and his
9 colleagues and all of you jurists and participants for
10 this very important tribunal. And for shedding light on
11 the egregious harms done by this destructive industry of
12 fracking to people around the globe.

13 The testimony we present here and the evidence
14 earlier submitted will be in support of our argument
15 that fracking is clearly in violation of numerous
16 articles in the Universal Declaration of Human Rights
17 and in the Universal Declaration of Rights of Mother
18 Earth.

19 I won't take time to restate them here but I
20 have excerpted some of them on this slide. This is not
21 a presentation of technical evidence. We have submitted
22 that in exhibits with our Brief but we will share
23 information that might not have come to light in other
24 presentations.

25 I'm speaking today on behalf of myself and the
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1 Coalition To Protect New York and all the people who
2 volunteered their time, energy, resources and big hearts
3 to our regional grassroots organization and its
4 affiliated local groups.

5 I want particularly to credit the smaller
6 group of co-contributors to our Amicus Curiae Brief
7 filed in March with the Tribunal.

8 We have kept each other going through many
9 failed campaigns, grief and despair even though we've
10 also shared joys, delights of Mother Nature and a few
11 small victories.

12 Many of us have been engaged in what some
13 people call non-violent direct action but which I like
14 to call CPR, that is creative peaceful resistance, for
15 people and the planet.

16 I'd like to acknowledge these contributors
17 here, Kate Bartholomew, Doug Couchon, Betty Ek, Jack
18 Ossont, David Walczak, Susan Walker and Dwain Wilder.

19 The Coalition To Protect New York is
20 determinedly grassroots and 100% volunteer and we are
21 self-funded. We thrive to protect the water rich,
22 wildlife abundant, clear air filled, fertile lands on
23 which we're fortunate to find ourselves.

24 We bear the burden of the knowledge that these
25 lands we love so much were seized in what we would
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1 certainly now consider criminal acts by European
2 colonists. And we recognize and honor the original
3 human inhabitants of those lands, the Haudenosaunee
4 Confederacy or the People of the Longhouse. In their
5 governance structure nature, law and society are equal
6 partners, each playing an integral role.

7 That makes sense to us. The Haudenosaunee
8 Confederacy is known as the longest participatory
9 democracy on earth. Its first Five Nations, the Cayuga,
10 Mohawk, Oneida, Onodaga and Seneca were later joined by
11 the Tuscarora and became known as the Six Nations. Some
12 of the beautiful finger lakes in our area have adopted
13 the names of these nations.

14 I want to give you a sense of where we are on
15 Mother Earth. This is North America. Now we'll zoom in
16 a little closer to show some of the southern eastern
17 Canada and the northeastern United States. As you see
18 New York state's northern border is Canada as well as
19 lakes Ontario and Erie, two of the five great lakes, the
20 largest group of freshwater lakes on earth by total area
21 and second largest by total volume.

22 They contain 21% of the world's surface
23 freshwater by volume. That is rich indeed and we are
24 very aware that we live in the one of the places most
25 blessed with freshwater in a time of decreasing water
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1 around the globe.

2 Most of our region falls within the Great
3 Lakes watershed. We are in the central and southern
4 part of the state, which includes the Finger Lakes. The
5 region is mostly rural but we do have a few cities,
6 including Binghamton, Syracuse and Rochester and the
7 smaller cities of Corning, Elmira and Ithaca.

8 We work very closely with allies throughout
9 the rest of New York state, including New York City,
10 which is about four hours drive to the southeast.

11 We also maintain close ties with people in
12 other states and countries, most notably our very next
13 door neighbors to the south in Pennsylvania, about whom
14 we will talk at length in a little while.

15 The Finger Lakes region has become famous for
16 not only the beauty of the landscape, rolling hills,
17 gorges and rivers and water falls, middle growth
18 forests, farmland increasingly devoted to organic crop
19 growing, but also for its festivals and cultural
20 offerings and especially the vineyards that makes the
21 region one of the top wine producing areas on the North
22 American continent. Tourism and agriculture are among
23 our biggest industries.

24 But lest I make it seem like a mecca there is
25 a dark side to all of this loveliness. The region has
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1 been in an economic depression for years. Rural poverty
2 in the region is desperate, as is urban. And like in
3 other parts of the world the two populations don't
4 interact or seem to want to.

5 Census data released in 2015 show that in the
6 biggest central New York City, Syracuse, half of the
7 children, 50.2% live in poverty. Syracuse was poorer
8 than all the other major upstate cities at 34.4%
9 poverty.

10 This is New York state, home to the symbol of
11 capitalism, Wall Street, and some of the biggest
12 concentrations of wealth on the planet. Politicians,
13 both in downstate New York City and in its suburbs and
14 in upstate, the best rest of the state of which we
15 constitute a part, like to pit us against one another
16 when it comes for competing for dwindling resources.

17 And we have found that financial insecurity
18 rampant in our area, as in most parts of the country,
19 makes world dwelling people more susceptible to
20 believing or refusing to not believe that leasing their
21 land for fracking or other fossil fuel infrastructure
22 projects or working in the industry will make them rich
23 and not hurt their families.

24 This has helped to widen the rift that is in
25 our communities just as the rest of our nation has
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1 become polarized to the point of paralysis.

2 I'd like to add that the people who work
3 within the Coalition To Protect New York are not all
4 scientists, although a few are, and only a few have law
5 degrees and only a few are medical professionals or
6 engineers. Some have been activists for decades. Some
7 would have never considered themselves environmentalists
8 until fracking made them pay attention to what is
9 happening to people and other species above ground and
10 the rocks the other ecosystems below us.

11 Some would never have become activists until
12 their own land, home, family or community was
13 threatened. Some are pure NIMBYs, that is, Not In My
14 Backyard, and freely admit when they defeat an immediate
15 threat they'll go back to business as usual, perhaps a
16 little more cognizant of their own climate change
17 footprint.

18 In any case by now most of us have spent years
19 researching, studying, reading complicated technical
20 medical, engineering and legal documents. We have
21 learned from the professionals and become experts in our
22 own right, no less important contributors to the
23 conversation and the policy-making that will affect the
24 future of us all, even those without impressive
25 pedigrees.

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1 We have also learned from people on the
2 ground. We've learned especially from our neighbors in
3 Pennsylvania, so many of whose residents suffer from
4 PTSD, that is not "post" but "permanent" traumatic
5 stress disorder.

6 They, in their natural environment, and
7 members of other species that have paid a terrible price
8 because their state officials first permitted fracking a
9 little over a decade ago.

10 For the first few years they were as if shell
11 shocked, too stunned to know what was hitting them. It
12 happened so quickly. As in other places the industry
13 had prepared years in advance, often securing permits
14 before anyone knew what was happening.

15 Wells were contaminated. More and more people
16 got sick. An entire neighborhood in Dimock just a few
17 miles southeast of where I sit today lost access to
18 clean water when their wells were poisoned.

19 They tried to fight back registering thousands
20 of citizen complaints but their state's department of
21 "Environmental Protection" and their legislators and
22 governors seemed more interested in enabling more
23 drilling.

24 These good people and many other
25 Pennsylvanians began sharing their stories with us north
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1 of the border hoping to keep our state from becoming the
2 next fracking zone.

3 At that time one of them said to us, "We are
4 already collateral damage. Our lives are ruined but
5 yours don't have to be. Fight back."

6 We have seen some of them, victims of greed
7 and hubris, sicken and die. Some with almost certainly
8 fracking contamination related illnesses, cancers and
9 others but, of course, that can never be proven.

10 The wonderful grassroots activist Jenny Lisak
11 began compiling the List of the Harmed, a document that
12 when we submitted it as an exhibit to the Tribunal in
13 March 2018 contained 22,320 officially reported cases of
14 people, homes, communities and lands that had been
15 harmed by fracking around the United States.

16 Among them was Terry Greenwood whose story was
17 among the first I learned during travels to
18 Pennsylvania, Ohio and West Virginia in 2008. The
19 farmer, Terry and his wife, had bought their beautiful
20 property with ponds and woods and fields back in the
21 1970's.

22 They learned, to their horror, three decades
23 later that a lease in perpetuity had been signed by a
24 previous owner in the 1920's and they tried to fight it.

25 In the end they were forced to watch their land be
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1 fracked, their cows and calves die mysteriously, and
2 their children forced to move away despite life long
3 plans to build houses on their parents' land.

4 The story is even more heart rending than I
5 have time to relate here. Terry came to New York on
6 several occasions to share his story and many of us were
7 very fond of him. He contracted a very rare form of
8 cancer himself and died in 2014.

9 Throughout all their suffering many of the
10 Pennsylvania families who were harmed, whose children
11 had unexplained rashes, respiratory infections, gastro-
12 enterological disorders, bleeding and other symptoms,
13 whose homes lost all their value even when they had to
14 continue paying mortgages on them, whose stress levels
15 were through the roof, continued to seek redress to hold
16 the offending corporations accountable.

17 But the courts and other remedial bodies sided
18 again and again and with the offenders. That's because
19 in New York law and United States law, corporations have
20 been enshrined as "persons" and because the corporations
21 have found it all too easy to buy off local officials
22 with a few thousand dollars here and there, buying
23 baseball outfits for the school team or throwing the
24 occasional community hot dog barbecue with
25 entertainment.

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1 Sometimes the long suffering people have been
2 forced to take a buy-out from the corporations being
3 left with no alternative. Every time they have been hit
4 with gag orders.

5 In 2012 the Pennsylvania legislature even
6 enacted a law forbidding doctors treating people for
7 possible chemical contamination from fracking from
8 telling the patient's family or the patient herself what
9 the chemical might have been. This was later over-
10 turned but the mere fact that it was passed was most
11 telling about whose rights were being respected.

12 Only a few stalwarts among the Pennsylvanians
13 persecuted and prosecuted by the fracking industry have
14 been able to hold firm, including Ray Kimball, whose
15 home is surrounded by fracked wells and who has cancer
16 and other illnesses.

17 And Vera Scoggins, the citizen journalist, who
18 has given scores of what she calls frack tours of
19 Pennsylvania to people from around the world and somehow
20 continues to soldier on despite having been hit with
21 lawsuits by the industry she monitors.

22 We honor all of these people, too, in this
23 presentation and indeed in all of our work. We fight
24 not just to keep fracking from New York but to bring
25 them relief and peace as well, all of them.

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1 We have been visited by people from other
2 areas of the country and the world who have been
3 affected by fracking and those who are fighting to keep
4 it from ruining the places that they love.

5 Some of those beloved homelands will, in the
6 not too distant future, cause them to become climate
7 refugees. They may be coming our way.

8 That is another reason we all need to protect
9 the clean water and air currently enjoyed by regions
10 that still have them. Newcomers by the tens of
11 thousands will need to be fed, sheltered and welcomed
12 into these communities.

13 We have had visits to and from people in the
14 fracked sand exploitation states of Wisconsin, Ohio,
15 Minnesota and Illinois, from fracked Texas, Colorado,
16 Michigan, Ohio, Oklahoma and from Alberta, Canada, from
17 frack-fighters in South Africa, England, Ireland and
18 Australia and other regions that I don't have time to
19 list. We honor and speak for them, too, because we
20 understand how interconnected we are. And how our
21 fights are always interconnected, understanding the
22 butterfly effect, but even more so in this time of
23 global capitalism and our shared threats of
24 environmental destruction and hastening climate change.

25 Early on the Coalition To Protect New York
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1 realized the intersectionality and universality of
2 fracking. We used fracking from 2008 on to mean all the
3 processes involved in this extractive process. But we
4 also recognize how much other fracturing this
5 unconventional drilling and its off-shoots encompassed.

6 Fracturing not only of our air, water and crop
7 lands, of our health and our property values, for those
8 who owned homes, but also of our local state and federal
9 legislatures, our judicial system, our media, our sense
10 of safety and perhaps most insidiously, our communities,
11 our friendships and often our families, in some cases
12 our marriages and life partnerships.

13 Our human rights are being violated on so many
14 levels, our ways of life, our very future and the future
15 of our next generations were being fracked.

16 Over the next few years, thanks to the work of
17 scientists, including Robert Howarth and Anthony
18 Ingraffea of our own local Cornell University, we
19 learned that fracking is also a huge fracture in
20 hastening catastrophic climate chaos.

21 A lot of people celebrated in December 2014
22 when Governor Andrew Cuomo announced his so-called ban
23 on fracking in New York state. This was an insidious
24 misinformation campaign.

25 Although the threats from one type of
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1 unconventional shale gas drilling might have been halted
2 until the governor or the legislature or the next
3 governor changed his mind, many former activists went
4 home thinking the job was done. But other drilling
5 persisted around the state unabated as you can see in
6 this recent map by FracTracker. Meanwhile industry had
7 been planning all sorts of fracking projects in poor and
8 even relatively rich communities around the state.

9 We and our allies have been fighting thousands
10 of miles of fracked gas pipelines and their attendant
11 compressor stations and paraphernalia.

12 This is a project that we participated in and
13 continued to help update called the You Are Here map
14 spearheaded by our allies in New York City in the same
15 energy project especially the great artist activist Kim
16 Frauchek.

17 One of these pipelines runs under the
18 beautiful Hudson River to our east where it passes just
19 yards from the decrepit Indian Point nuclear power
20 plant.

21 We have bomb trains taking tarsands oil from
22 Canada to near New York City for export passing just
23 across the river from that plant.

24 Fracking brine from Pennsylvania is spread on
25 New York roads. New York landfills accept radioactive
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1 fracked waste from Pennsylvania which, amazingly, is not
2 permitted to be dumped in its own borders.

3 To our eyes all such fracking activities were
4 crimes against people and nature and we thought they
5 should be crimes in the law as well with serious
6 consequences as opposed to the tiny slap-on-the-wrist
7 fines that were being levied against fracking companies
8 in Pennsylvania where thousands of spills, leaks,
9 explosions and other violations were taking place each
10 year even without fracked waste dumping.

11 We signed on to Peoples Law No. 1 written by
12 our sister group Sovereign Peoples Action Network and
13 Frack Busters of New York of which some of us, including
14 myself, were also founding members as was the late great
15 historian, author and thinker, Richard Grossman.

16 This innovative law criminalizes fracking and
17 related industrial activities and infrastructures in New
18 York state law. It calls for mandatory prison sentences
19 and very heavy fines for the principals of corporations
20 that are found guilty of causing harm to humans and
21 natural communities.

22 We were left out of all sorts of forums,
23 including several run by big green organizations whose
24 leaders seemed to have lost sight of their missions.

25 But subsequently people have come to agree
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1 that these activities are crimes and those who
2 perpetrate them are criminals who should be punished to
3 the full extent of the law. But in current governance
4 structures we are being prevented from introducing, let
5 alone implementing, this law written by We The People
6 for the benefit of us all and of our natural
7 environment.

8 That brings me to the most critical underlying
9 point of our participation here today. We do not
10 believe the laws as written, either in our own country
11 or internationally, are worthy or viable under present
12 conditions.

13 No law is worth the papers its printed on if
14 it won't be rigorously enforced by transparent and
15 capable regulatory agencies or entities.

16 In the United States we have witnessed the
17 erosion of our legislative, judiciary, executive,
18 electoral systems federally and on the state and local
19 levels. And the increasingly rapid roll backs of rights
20 and protections that those of my generations and even of
21 a couple of generations after mine have always
22 considered inalienable.

23 Many of us have been arrested and persecuted
24 for exercising these basic so-called guaranteed rights
25 to life, liberty and the pursuit of happiness.

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1 We have seen our national government defend
2 its practice of torture, debase and ignore international
3 law that defends human rights and walk away from
4 important and hard won environmental treaties on so many
5 occasions and in so many arenas.

6 Although it seems to us only basic common
7 sense that people should not want to commit mass
8 suicide, which is what ecoside is as well, and it seems
9 insane for people to engage in such activities that
10 hasten their own demise, yet that is what we all see
11 before us.

12 We do not believe that current systems of law,
13 politics and economics in the United States and
14 internationally are pertinent. A growing number of
15 people worldwide seem to support this view.

16 We hope that this Tribunal recognizes as well
17 that it is imperative upon us all to swiftly find
18 methods by which to make human rights and the rights of
19 nature first and foremost in the minds of policymakers.

20 Who gets to decide our fate? If we leave it
21 in the hands of corporate capitalists and their
22 political cronies we may remain their victims in a
23 deadly game. We must stop being acquiescent in our own
24 demise.

25 So we must seize this moment and muster our
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1 numbers, however small, and became more assertive or
2 dare I say more aggressive in our demands and in our
3 actions.

4 I will stop here and invite questions or
5 comments. Thank you.

6 Thank you everybody. Blessings on you all.

7 DR. THOMAS KERNS: Thank you.

8
9 [youtube.com/watch?=zp4eOzjQsfE&t=81s]
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1 CLOSING ARGUMENTS AND RECOMMENDATIONS

2 MAY 18, 2018 10:00-11:00

3
4 MS. REVEL POINTON: Greetings from
5 Australia. It's an honor to be presenting to you the
6 closing submissions to the Permanent Peoples' Tribunal
7 on Human Rights, Fracking and Climate Change today.

8 My co-lead attorney, Dr. Evan Hamman,
9 unfortunately, has to send his apologies as he is off in
10 China on a business matter and he regrets not being able
11 to participate in the closing days but assures the
12 judges that if any further help is needed then please do
13 contact him.

14 So we've had significant submissions before
15 the Tribunal this week raising serious concerns and
16 providing more examples of the issues of concern around
17 the world from fracking and climate change and their
18 particular impacts on human rights.

19 While I am honored to be in this role of
20 providing the closing submissions for the PPT I also
21 recognize the significant responsibility that this role
22 has of appropriately collating and doing justice to the
23 significant and powerful testimonials and evidence put
24 before the tribunal this week.

25 I know that I could never do it justice to the
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1 extensive experience and knowledge that the Tribunal has
2 before it in these submissions, both written and oral,
3 the testimony and the evidence and particularly in just
4 one hour this morning. And so I ask that the judges do
5 take time to deeply consider all of the submissions and
6 evidence it has received to duly inform its
7 deliberations and recommendations.

8 I'm going to provide here just a snapshot of
9 the arguments put before the Tribunal to hopefully
10 assist the judges as they coalesce their findings into
11 recommendations.

12 So just by way of overview I thought I would
13 start by reminding us of what the purpose of the
14 Permanent Peoples' Tribunal is just to set up a bit more
15 context and also the fundamental legal questions that
16 we're looking to answer through the Tribunal.

17 I'll then be providing an overview of
18 submissions that are particular to the questions that
19 the Tribunal has been asked to consider. And if there's
20 time I'm going to try to answer some of the questions
21 that the judges put to the attorneys later this week but
22 we'll see how we go.

23 So as we know the Permanent Peoples' Tribunal
24 is an internationally recognized civil society human
25 rights tribunal and it functions independently of state
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1 authorities. And therein lies its benefit in actually
2 providing for a space, where state authorities are
3 failing, to put on a forum for those whose voices can't
4 actually be heard in normal legal or governance
5 frameworks.

6 The frame of the Permanent Peoples' Tribunal
7 is on human rights and particularly for this one on the
8 issues of fracking activities and associated climate
9 change impacts. But we'll also be hearing and have
10 heard this week about the impacts to the rights of
11 nature.

12 The Tribunal, as I mentioned, plays a really
13 important role in filling that space that is not used
14 sufficiently by state authorities to properly account
15 for human rights impacts that activities are having or
16 actions are having that we're condoning in our society.

17 And it's a very important role to empower
18 those voices that aren't able to have their chance to
19 have their concerns or issues heard in our legal and
20 political frameworks as I mentioned.

21 So, as you know, as judges for this PPT you've
22 been asked to apply the standards of international human
23 rights law and render an advisory opinion on the
24 following four fundamental legal questions associated
25 with the impacts of fracking and climate change.

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1 So firstly the question is, Under what
2 circumstances do fracking and other unconventional oil
3 and gas extraction techniques breach substantive and
4 procedural human rights protected under international
5 law as a matter of treaty or custom?

6 Secondly, Under what circumstances do fracking
7 and other unconventional oil and gas extraction
8 techniques warrant the issuance of either provisional
9 measures, a judgment enjoining further activity,
10 remediation relief or damages for causing environmental
11 harm?

12 Thirdly, What is the extent of responsibility
13 and liability of states and non-state actors for
14 violations of human rights and for environmental and
15 climate harm caused by these oil and gas extraction
16 techniques?

17 And fourthly, What is the extent of
18 responsibility and liability of states and non-state
19 actors, both legal and moral, for violations of the
20 rights of nature related to environmental and climate
21 harm caused by unconventional oil and gas extraction
22 techniques?

23 The focus of the investigation is on states
24 since they're considered to be the primary duty bearers
25 for protecting the human rights of their citizens
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1 compared to less easily demonstrated but still apparent
2 duty that exists for corporate citizens to protect human
3 rights. However, fossil fuel corporations may have been
4 implicated in witness testimony put before the Tribunal.

5 As we go through a summary of some of the
6 evidence that led into each of these questions this
7 morning I'll take the opportunity now to remind us that
8 we're doing so through the lens of six different cases;

9 Impacts to human health, including human physical
10 and mental health;

11 The climate impact case that addresses all the
12 human rights and earth rights dimensions for both
13 present and future generations;

14 For fracking and climate change, including
15 government's continued subsidization of fossil fuels;

16 The environmental ecosystem, hydrological and
17 seismicity cases;

18 And we'll address the human rights and earth rights
19 dimensions of adverse environmental ecosystem and
20 wildlife impacts as well impacts on air, surface water,
21 ground water and earthquakes. So the general
22 environmental impacts;

23 We'll then look at the public participation case,
24 which includes the human rights dimensions of public
25 participation or the lack thereof in decision-making
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1 around the industries concerned and policy-making
2 concerning that industry;

3 And the fuels infrastructure case will address the
4 human rights and earth rights dimensions of exploration,
5 drilling, fracking, extraction and delivery processes as
6 well as the infrastructure needed for transport, storage
7 and exporting product of waste and the social and
8 cultural impacts and costs;

9 We'll look at the human rights dimensions of
10 these costs and impacts on individuals, families and
11 communities.

12 These cases have been addressed through
13 various submissions and testimonials in different ways
14 and not always quite directly. So it's good to keep
15 them in mind if that helps the judges in formulating the
16 way the four questions are answered.

17 I'll also use the opportunity in these closing
18 submissions to attempt to provide an answer to the
19 questions, potentially through the submissions
20 themselves and, as I mentioned, if we have time at the
21 end.

22 So getting into the questions.

23 The first question, as we mentioned, looks at
24 what circumstances fracking and other unconventional and
25 oil and gas extraction techniques breach substantive and
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1 procedural human rights protected by international law
2 as a matter of treaty or custom?

3 This might be paraphrased as how or when has
4 it been demonstrated that unconventional oil and gas
5 techniques breach human rights? The Tribunal has
6 extended its investigation into fracking to any
7 unconventional oil and gas extraction technique. So I
8 thought I might give a very brief reintroduction to
9 these techniques should it assist us as we work through
10 the testimonials.

11 So unconventional oil and gas resources don't
12 appear in traditional formations but they use
13 specialized extraction or production techniques to
14 obtain fuel from the deposits. So shale gas, coal bed
15 methane, coal seam gas and tight oil, which is locked in
16 extraordinarily impermeable high rock making the under-
17 ground formation extremely tight, these are all
18 unconventional gas products or oil products.

19 This is compared with conventional oil and gas
20 which can be extracted from geological formations using
21 standard methods that are much cheaper and are more
22 straight forward.

23 So unconventional oil and gas extraction is a
24 very complex process that involves a higher level of
25 risk than your normal standard conventional oil and gas
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1 products.

2 As stated for the purposes of this Tribunal
3 the term fracking has sometimes been used in
4 testimonials more broadly than hydrologic fracturing and
5 refers more to general unconventional gas or oil
6 extraction techniques. But more formally hydraulic
7 fracturing, or fracking as it's known colloquially, is
8 known as the process of injecting a high pressure mix of
9 water, sand and chemicals into subterranean rocks, bore
10 holes, et cetera, so as to force open existing fissures
11 and extract oil and gas.

12 Fractured fluids are used to extend fractures,
13 add lubrications, change gel strength and whatnot. So I
14 have a bit more information than that but I'm sure that
15 if the judges would like to, at the end, we can go back
16 through the processes for fracturing and discuss what's
17 actually involved if that's necessary but I might move
18 on to the testimonials in case that has been
19 sufficiently covered this week.

20 I will just start by saying, in answer to one
21 of the questions posed by the Tribunal being, are there
22 differences between the fracking and other
23 unconventional oil and gas extraction techniques which
24 the Tribunal should consider?

25 Can any of them be carried out in a manner
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1 compatible with respect for human rights and the
2 environment?

3 While I'll attempt to answer the second
4 question later in the statement I'll try to answer the
5 first now.

6 So not all unconventional gas and oil
7 extraction requires fracking. All of the activities
8 pose risk, particularly to our ground water basins and
9 increasingly climate change but in slightly different
10 ways.

11 So coal seam gas reservoirs that are exploited
12 are generally shallower and have a higher concentration
13 of gas than shale reservoirs. Shale reservoirs always
14 require hydraulic fracturing while perhaps only half of
15 coal seam gas reservoirs require fractured stimulation
16 or fracking.

17 There are numerous proven risks and impacts
18 related to the development of fracking projects such as
19 heavy freshwater consumption, water and soil
20 contamination and public health impacts.

21 The Concerned Health Professionals of New York
22 and The Physicians For Social Responsibility conclude in
23 their fifth edition of the compendium, which is the
24 before the Tribunal, that that emerging data from a
25 rapidly expanding body of evidence, continue to reveal a
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1 plethora of occurring problems and harms that cannot
2 sufficiently be averted through regulatory frameworks.
3 There is no evidence that fracking can operate without
4 threatening public health directly or without imperiling
5 climate stability upon which public health depends.

6 In 2012 the UN Environment Program issued a
7 global alert on fracking concluding that fracking may
8 have environmental impacts even if done properly.

9 There are still significant reserves among
10 conventional natural gas deposits in many countries that
11 appear to be increasing their reliance on gas as a
12 perceived transition fuel to move around coal.

13 And I know one of the questions otherwise from
14 the judges was where we might find data on current
15 expansion of fracking and other known conventional forms
16 of oil and gas extraction in the world?

17 I recommend having a look at the International
18 Energy Agency World's Energy Outlook. While they are
19 not forecasting their scenarios and they are named
20 according to that and provide a really good idea of what
21 the predicted and current use of oil and gas in the
22 world is under different policy scenarios it's probably
23 the most respected and used outlook source for gauging
24 oil and gas extraction along with other resources
25 around.

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1 It could be compared to the BHP. They have a
2 similar economic outlook that it's good to compare the
3 data against each just to have an even more accurate
4 understanding of the predictions of oil and gas
5 extraction. I'm happy to provide a little more
6 information if necessary around that too.

7 So when do activities breach substantive and
8 procedure human rights?

9 Substantive human rights being, as we know,
10 are rights considered to exist for its own sake and to
11 constitute part of the normal legal order of society.
12 Whereas procedural human rights existing more to provide
13 a means to enforce substantive rights through legal and
14 governance processes.

15 So we'll look at substantive rights first.
16 The testimonials have found numerous substantive human
17 rights that could be picked up through impacts of
18 fracking and climate change during the proceedings this
19 week. They include the right to life, security of
20 person and bodily integrity; right to health, right to a
21 healthy, viable and supportive environment; right to
22 safe water; right to respect for private and family
23 life; the right to property; the right to peacefully
24 enjoy one's possessions.

25 I might start out with a quick review of the
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1 question of where the basis of these human rights comes
2 from. And happily we'll go through this in more detail
3 at the end if necessary.

4 So the Universal Declaration of Human Rights
5 in 1948 was, I believe, the first genesis of clearly
6 articulated internationally recognized human rights and
7 it provided member states with the requirements to
8 respect and observe human rights and fundamental
9 freedoms for all.

10 It's mainly a statement of moral rather than
11 legal obligations, however, the status of these rights
12 was elevated in 1966 when two other documents, the
13 International Covenant On Civil And Political Rights and
14 the International Covenant On Economic, Social and
15 Cultural Rights were adopted by the United Nations to
16 give a legal and enforceable status to most of the
17 rights recognized in the Universal Declaration.

18 Among the substantive rights recognized in the
19 International Covenant On Civil And Political Rights
20 relevant to fracking, the right to self-determination,
21 including the pursuit of economic, social and cultural
22 goals to manage and dispose of one's own resources, and
23 the right not to be deprived of the means of subsistence
24 or the inherent right to life, including an increase in
25 life expectancy.

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1 Whereas for the International Covenant on
2 Economic, Social and Cultural Rights the following
3 rights might be relevant. The right to work under just
4 and favorable conditions, including safe working
5 conditions. The right to an adequate standard of
6 living, including the continuous improvement of living
7 conditions. And the right to the highest attainable
8 standard of physical and mental health, including access
9 to safe and potable water and an adequate supply of safe
10 food free from adverse substances. And healthy
11 occupational and environmental conditions.

12 In 1972 the UN Conference On The Human
13 Environment in Stockholm, Sweden resulted in another
14 declaration that was the first recognition of the right
15 to a healthy environment as essential to the enjoyment
16 of the basic human rights and the right to life itself.

17 The Declaration starts with the principle that
18 man has the fundamental right to freedom, equality and
19 adequate conditions of life in an environment of a
20 quality that permits a life of dignity and well-being
21 and he bears a solemn responsibility to protect and
22 improve the environment for present and future
23 generations.

24 The current United Nations Special Rapportuer
25 On Human Rights And The Environment, John Knox, has also
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1 affirmed that states are obliged, under international
2 human rights law, to take reasonable and justifiable
3 measures to protect environment related human rights,
4 acknowledging that environmental degradation can and
5 does adversely affect the enjoyment of a broad range of
6 human rights.

7 The Aarhus Convention came later in 1998 with
8 the Convention on Access to Information, Public
9 Participation in Decision Making and Access to Justice
10 in Environmental Matters. So more the procedural rights
11 focusing on the interactions between government
12 decision-makers and the public.

13 It establishes governance by disclosure and
14 has the three pillars of, access to information, public
15 participation and access to justice. This Convention
16 has been signed by around 50 countries, however, the
17 United States and Australia have not signed this
18 Convention.

19 So let's get to the submissions.

20 So the Tribunal heard the evidence and
21 testimonials gathered from various pre-tribunals around
22 the world, particularly in Ohio and Charlottesville in
23 the United States and also in Australia.

24 So Rick Sahli presented the findings of the
25 Athens and Youngstown, Ohio pre-tribunals in which the
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1 jurors found that the testimonies heard established
2 violations by the fracking industry and by the federal
3 and Ohio state governments of the following human rights
4 recognized in international law.

5 Right to life, security of person and bodily
6 integrity. Right to health. Right to a healthy and
7 viable and supportive environment, to safe water, to
8 respect for private and family life, to property, to
9 peacefully enjoying one's possessions.

10 Testimonials presented cases of increased
11 medication demands and illness such as splitting
12 headaches, nervous system tremors, respiratory issues,
13 nose, eye and throat irritation, insomnia, mental trauma
14 and so on due to the stress of noise, vibration and
15 odors of living around these unconventional oil and gas
16 production areas.

17 There were loud noises, reported smells and
18 air emissions, including dust plumes that were so strong
19 from the nearby facilities and traffic that residents
20 were forced to leave their houses or remain in doors.

21 We heard submissions around trucks passing
22 every 13 minutes, 24 hours ever single day.

23 Fracking and dumping of toxic fracking wastes
24 in the poorest region of the states, the Appalachian and
25 Ohio, and the inability of the people there to decide
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1 for themselves whether to allow fracking waste dumping
2 or not.

3 We heard the forced evacuation of lands to
4 avoid health risks.

5 There was a claimed unfair highly complex
6 process of violating the rights to life and liberty to
7 possessing property and to safety.

8 And complaints that elderly with no ability to
9 access computers were often being exploited by energy
10 companies.

11 Impacts to climate stability through both
12 clearing of vegetation and methane emissions were of
13 concern.

14 And also the locally grown food producers were
15 extremely concerned that the safety of the food grown
16 close to fracking operations was at risk and the
17 reduction of viable uncontaminated farm land caused by
18 fracking was actually under risk as well.

19 These local chemical-free agricultural food
20 movements are particularly vulnerable to potential
21 contamination by fracking accidents or emissions. And
22 their products have been placed in the food system
23 without testing all of the impacts on this industry on
24 their food sources.

25 Obviously they risk losing the organic
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1 certification and removal from the market if they are
2 found to no longer meet the standards required of them.

3 So various findings from the extensive
4 submissions put before the pre-tribunals in Ohio lead to
5 a recommendation that a moratorium should immediately be
6 issued preventing exploratory and extensive fracking
7 wells, fracking waste water, disposal injection wells
8 and associated operations and infrastructure until such
9 time as a full publicly funded industry independent
10 evidence-led human rights impact assessment has been
11 properly undertaken and published in the public
12 interest.

13 The evidence of extreme health impacts of
14 fracking and its associated operations support the
15 urgency of considering the human rights impact
16 immediately and various recommendations around what the
17 assessment should include.

18 The pre-tribunals in Australia heard
19 testimonials from a range of stakeholders and experts
20 including many land holders directly affected by
21 unconventional oil and gas exploration; Doctors For The
22 Environment, who are a group of doctors who advocate for
23 the need to protect our environment by adequately
24 protecting our health; clinical psychologists and also
25 previous regulators.

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1 And the testimonials in the Australian case
2 found that the Australian government has failed to
3 protect the human right to attain the highest possible
4 standard of physical and mental health by failing to
5 insure a safe, clean and healthy environment through
6 various key issues.

7 These were the failure to undertake prior
8 baseline assessment of the possible environmental
9 impacts of proposed projects and policies, including
10 their potential effects on the enjoyment of human
11 rights;

12 A failure to ensure effective enforcement of
13 environmental standards;

14 A failure to protect the rights of those who are
15 most vulnerable to the risks proposed by these
16 industries;

17 And a failure to comply with the obligations to
18 indigenous peoples and members of traditional
19 communities including failing to recognize and protect
20 their right to be consulted with and have obtained from
21 them free prior and informed consent.

22 So there were ongoing concerns raised around
23 safety and being free from threats and harassments and
24 intimidation and violence, which people complained of
25 being subject to.

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1 We did have the unfortunate death of a farmer,
2 George Bender, and as a result partly of, I understand,
3 intimidation and violence -- well, not necessarily
4 violence but intimidation -- and extreme difficulty in
5 ease of trying to negotiate with the gas industry from
6 what I've heard.

7 So the testimonials claim that there is no
8 legal requirement for the government to consider the
9 health impacts of the industry on the people expected to
10 host, which is a clear issue around the failure to
11 recognize the human rights to have your health impacts
12 considered and then assessed before you're allowing
13 these industries to go ahead and then when they're going
14 ahead that these health impacts are being protected
15 continuously.

16 The testimony considered that there was a lack
17 of scientific investigations. We have very few baseline
18 studies or health impact assessments being undertaken
19 prior to the industry going through.

20 Particularly where I live in Queensland the
21 industry came through in a big sweep very fast in the
22 last decade without the regulator necessarily being
23 ready and without any sufficient baseline studies of how
24 the environments were before and how they interact,
25 particularly ground water basins, how they interact with
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1 each other to understand properly how this industry is
2 actually impacting on our environment and the
3 communities around it.

4 And then that obviously creates difficulties
5 when you're trying to regulate them to know what was
6 already in the environment around them versus what was
7 actually a cause of the industry being introduced.

8 There was a failure to do preliminary testing
9 of children's homes that were actually adjacent to the
10 gas fields and concern that they were exposed to a range
11 of carcinogenic and neurotoxic chemicals associated with
12 the unconventional gas industry.

13 And doctors gave evidence of a remarkable
14 increase in hospitalization of Darling Downs residents
15 between 2007 and 2014 for acute respiratory conditions
16 which more than doubled hospitalizations for acute
17 circulatory conditions also more than doubled at the
18 same time that CSG emissions increased in the area with
19 particulate matter up 6,000%, oxides of nitrogen
20 increased 500% and formaldehyde increased by 160 tons.
21 So really significant impacts to the air quality in
22 those regions.

23 Obviously there is also a loss of property
24 value through the impacts of the industry and practices
25 and often in a way that is just not able to be
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1 compensated. And impacts to farmers with one doctor
2 estimating a loss of an average of 2.70-million dollars
3 to the mining of coal seam gas for farmers.

4 Reportedly even firefighters are being put at
5 risk by not being provided with detection equipment or
6 training them should they go into gas fields compared
7 to, I understand, where the US has firefighters equipped
8 with personal gas detectors to escape lethal areas.

9 And one key thing that's come through a lot of
10 the submissions is a failure of the precautionary
11 principle to be properly applied. It seems to be a key
12 theme for the concerns around this industry that
13 approvals are being awarded without proper knowledge of
14 the ecological impacts on terrestrial ground water and
15 marine environments and insufficient upfront
16 consideration of cumulative impacts.

17 The Australian Human Rights Commission states
18 that by not insuring that human rights are incorporated
19 into the judicially enforceable legislative frameworks
20 backed up by comprehensive implementation policy it has
21 enabled industry to manipulate decision-making processes
22 and outcomes in a manner that basic human rights are
23 ignored and breaches are not subject to adequate
24 corrective measures, monitoring or reporting.

25 So these submitters have requested that the
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1 Tribunal, in considering the evidence provided and the
2 20 to 40 years of impacts ahead of the existing industry
3 in Australia, and also the impacts still to occur from
4 the rapidly expanding industry, they're asking that the
5 Tribunal consider potential future harm as part of their
6 considerations of the industry and not merely harm
7 committed to date.

8 Then we had the Charlottesville pre-tribunal,
9 which was an excellent example of how money and social
10 class have impacted the location of unconventional gas/
11 oil production where communities are facing the Atlantic
12 Coast Pipeline and Mountain Valley Pipeline, pipeline
13 infrastructure to transport fracked gas.

14 So both pipelines almost entirely impact rural
15 people and their communities regardless of the
16 mountainous elevations, the poverty end or the African
17 American/Native American/Appalachian majority involved.
18 So rural routings apparently have enormous cost benefits
19 to pipeline developers but they also go through some of
20 the more economically disadvantaged areas.

21 Expert testimonies included evidence from
22 historians and environmental scientists on fracking gas
23 infrastructure, medical experts on the health impacts of
24 compressor stations and pipelines, economists on the
25 cost benefits of racism and inequality. So the
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1 communities face significant far-right demonstrations
2 and violence in Charlottesville, Virginia and I believe
3 it was last year they were so significant that it
4 prompted UN investigations. So it's a serious issue out
5 there.

6 Their evidence demonstrated the truth that in
7 their region that infrastructure associated with oil and
8 gas activities is disproportionately sited in non-white
9 and low income communities.

10 The pre-tribunal conclusions and
11 recommendations from judges provides a snapshot of the
12 findings from the testimonials stating whereas
13 indigenous peoples, people of color, descendants of
14 freedmen communities, Appalachian communities and
15 vulnerable populations have been blatantly targeted and
16 will most certainly be and, in some cases, already are
17 negatively impacted by the Atlantic Coast Pipeline and
18 Mountain Valley Pipeline, as evidenced through the
19 tribunal testimonials. I was going to read them through
20 but I might just give a bit of a summary.

21 Whereas numerous and diverse examples of
22 cultural attachment and historic preservation atrocities
23 exist, violations of religious and cultures practices
24 and beliefs and so on;

25 Whereas consistent and pervasive lack of public
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1 participation, lack of opportunities for public input
2 and access to information such as denial of access to
3 the wireless tower has occurred, numerous threats to the
4 built environments including places of faith, roads,
5 highways, driveways and homes, many of which were
6 existing in a blast zone and where water is put at grave
7 risk because of the continuous crisscrossing of the
8 proposed pipelines through rivers, streams, ground water
9 and wetlands, and witnesses testified to the release of
10 greenhouse gas from pipelines and compressor stations
11 which are just adding to the climate change impacts that
12 we're facing as a world;

13 And whereas the insults negatively impact the
14 health of humans and all living things, especially the
15 most vulnerable, they recommended a request be put to
16 the Tribunal that strongly recommends that the states of
17 West Virginia, Virginia and North Carolina but also all
18 environmental agencies around the world, should suspend
19 all unconventional gas and oil extractions and
20 pipelines, undertake necessary thorough investigations
21 such as environmental, cultural and health impacts
22 assessments with real voice and real vote for the
23 community and immediately cease and desist eminent
24 domain actions.

25 So they also strongly recommend that the
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1 Tribunal should recommend that the United Nations Human
2 Rights Council should put the United States on trial for
3 crimes against human rights.

4 Moving on to quickly summarize the submissions
5 of Earthworks, which is an NGO that uses science to
6 educate the public and promote solutions, they found
7 really interesting data through their projects,
8 particularly in terms of the community impact studies
9 they've undertaken which have led them to three central
10 conclusions.

11 (1) That contaminants that are associated with
12 oil and gas development are present in air and water in
13 areas where residents are experiencing health symptoms
14 consistent with such exposure.

15 (2) There is a strong likelihood that
16 residents who are experiencing a range of health
17 problems would not be if wide spread gas development
18 were not occurring.

19 And (3) by permitting widespread gas
20 development without fully understanding its impacts to
21 the public health and using that lack of knowledge to
22 justify regulatory inaction, Pennsylvania and other
23 states are risking the public's health.

24 In their studies they found 75% of the
25 interviewees had health issues reported such as
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1 neurological problems, forgetfulness, confusion,
2 dizziness. 50% reported respiratory problems. And 89%
3 expressed concern for environmental impacts on their
4 health. So really significant statistics coming out of
5 their studies.

6 And they've made a range of recommendations
7 themselves around more regulatory improvements that need
8 to be made to rectify these substantive human rights
9 impacts that are being made.

10 I might go on, given the time, to question 2.
11 I didn't realize this would take so long. I apologize.

12 I wanted to cover quickly on procedural
13 rights. I might just mention that the Ohio pre-
14 tribunals' various submissions provided for procedural
15 rights breaches that were occurring around fracking and
16 climate change mainly around access to information and
17 public participation in environmental decision-making
18 just not being effective. And the right to justice and
19 access to justice.

20 So having the ability to actually rely on a
21 legal framework and a regulator that is well-resourced
22 and able and willing to uphold their human right or even
23 the rights they have under their subnational and
24 national laws.

25 So the experience of the Nuiqsut in Alaska is
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1 a good example of a failure of the human right to access
2 justice in the public service where traditional owners
3 are not able to rely on their department of conservation
4 to address the complaints they're putting in around
5 harmful air emissions from local unconventional gas
6 because the department hasn't been given sufficient
7 funding to undertake monitoring that would be necessary
8 to actually enforce their laws.

9 So there's a substantial issue with their
10 ability to access justice in that instance as well as
11 access information. There are countless examples.

12 I know in Australia the submissions that we
13 put forward and Associate Professor Amanda Kennedy, I
14 believe, presented to you dealt with the issues around
15 the lack of meaningful public participation and access
16 to justice here. Especially trying to get data on
17 impacts to ground water or impacts to air emissions.
18 It's extremely difficult for the public to do so
19 depending on how the conditions are framed. There's no
20 absolute right to this information.

21 So there are various recommendations that have
22 been made to protect procedural rights and they
23 basically are around those issues of insuring that the
24 public actually has the right to access information that
25 is necessary for them to understand the impacts that
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1 they're experiencing to their health and also the
2 environment that they've concerned about.

3 That there is a guaranteed access to justice
4 with the appropriate bodies, be that a regulator or a
5 community legal center system ably funded to support
6 people to access justice as needed. And for countries
7 such as Australia and the US to, at the very least,
8 ratify the Aarhus Convention to ensure that those
9 pillars of the Convention are actually insured to be
10 upheld in their jurisdictions and that the people can
11 rely on those to hold their governments to account.

12 I'll try to move a little more quickly.

13 So question (2) Was under what circumstances
14 do fracking and other unconventional and oil and gas
15 extraction techniques warrant the issuance of
16 provisional measures, judgments enjoining further
17 activities, remediation relief or damages?

18 So it could be paraphrased as when has it been
19 demonstrated that relief might be required or penalties
20 might be required due to the impacts of unconventional
21 oil and gas?

22 So I have discussed various human rights that
23 have been affected by the industry in question already
24 in No. 1. I would like to argue then to all of the
25 instances are breaches of human rights so it would be
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1 circumstance giving rise to some kind of relief or
2 penalty to account for the breach.

3 The extent of the breach would, of course,
4 determine the extent of the relief or penalty required
5 in any given situation. But various submissions have
6 particular comments and suggestive mechanisms for
7 addressing the impacts of the unconventional oil and gas
8 industry.

9 For instance, Megan Hunter from Freshwater
10 Accountability Project, provided submissions which argue
11 that both state and non-state actors should be
12 responsible and liable for the various violations
13 claimed by this industry under internationally accepted
14 human rights norms.

15 This was on the basis of their evidence from
16 clients that they work with on significant impacts to
17 their life, security and even bodily integrity after
18 things like accidents of the industry in Ohio where
19 residents feared for their life after explosions or
20 significant fires or even exceedingly loud noises for
21 long periods of times.

22 But it can also extend to death threats from
23 the industry where people were speaking out or human
24 health impacts generally or loss of clean drinking water
25 amongst many other things.

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1 So Megan was arguing that the widespread and
2 egregious nature of these violations warrant
3 sufficiently the issuance of an advisory opinion by the
4 Peoples' Tribunal declaring that, first, recognition of
5 the violations taking place and recognition that both
6 state and non-state actors are responsible. And, once
7 again, asking for a moratorium on further unconventional
8 gas or oil developments immediately implemented and the
9 remediation and damages should be awarded to the
10 affected public in order to redress the human and
11 environmental rights that have been done to prevent
12 further harm and to ensure further actions to uphold
13 human rights.

14 Andy Gheorghiu of Food And Water Watch
15 considers that, "Nothing short of an outright ban on
16 fracking and rapid cessation of fossil fuel extraction
17 and consumption will remedy the many associated harms of
18 our oil and gas industry.

19 "Other provisional measures, a judgment
20 enjoining further activity, remediation relief or
21 damages for causing environmental harm are simply
22 inadequate half measures," he says.

23 "The industry will always try to avoid taking
24 responsibility for any damages and/or environmental harm
25 they've done."

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1 I might also personally add that the
2 government is often supporting the industry, too, in
3 escaping liability or damages in instances we've seen.

4 So in Australia the regional governments are
5 moving generally towards a business model. So this is a
6 subtle example but it's one that we've raised concern
7 about where the businesses they regulate are called
8 their customers or clients.

9 And this is a seemingly inappropriate reframe
10 of the regulators' role which risks confusing the roles
11 and removing of the arm length distance by which they
12 should be operating when they're regulating the industry.

13 Muara Stephens from the Coalition To Protect
14 New York, who I believe you just heard from, had
15 provided submissions demonstrating the process and
16 impacts in New York and other US communities have gone
17 through from the fracking industry. And Muara
18 recommends that, by any reasonable measure, the attacks
19 that she's presented to the Tribunal upon health,
20 environment and future should be considered criminal
21 offenses against all of humanity and against the earth.

22 She says nature deserves our legal protection
23 as well as do our children, the people of the global
24 south and all who are opposed in silence. Without an
25 honorable international judiciary to stop them these
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1 entities will have a free rein to control policy
2 decision-making and further subvert legislatures,
3 judiciaries and executive branches of government from
4 the village level on up.

5 So they believe fracking and related
6 industrial activities should be made crimes in
7 international law as they are in reality.

8 So moving on to question 3. What is the
9 extent of responsibility and liability of states and
10 non-state actors for violations of human rights and for
11 environmental and climate harm caused by these oil and
12 gas extraction techniques?

13 There was an interesting report submitted by
14 Andy Gheorghiu from Food And Water Watch that relies on
15 an example of Exxon Mobil's own in-house scientists in
16 1980 warning about the impacts of global warming and the
17 company considering this in their plans and operations,
18 however, then going about starting a denial-campaign
19 that covered up the certainty that climate change and
20 fossil fuel extraction are actually closely linked.

21 So apparently 30-million dollars was given to
22 climate denial think tanks and to politicians to support
23 this dissemination. And for years the industry earned
24 billions by contributing significantly to global warming
25 while not taking any of the responsibility around this
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1 damage.

2 So I thought this case study was an excellent
3 demonstration of the significant responsibility of
4 non-state actors in not taking responsibility when they
5 are aware of the impacts, and the significant impacts,
6 that their industry is creating by not taking account of
7 those. But I think it also brings in the states in
8 allowing non-state actors to operate in such a way where
9 they probably were privy to the same information.

10 So we know that unconventional gas and oil
11 extraction activities create greenhouse gas emissions,
12 particularly methane, of an extremely dangerous
13 greenhouse gas that is a powerful greenhouse gas 86
14 times more powerful than carbon dioxide when its
15 atmospheric warming impacts are considered over a 20
16 year time period and 34 more times more powerful over a
17 100 year time period.

18 So what we don't know is how significant the
19 amount of methane emissions released as fugitive or
20 migratory emissions from the gas and oil industries are
21 due to consistent failure to require these figures to be
22 measured. It's, therefore, difficult to determine the
23 extent of responsibility and liability of states and
24 non-state actors for violating human rights for climate
25 harm given we don't have that data.

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1 However, the fact that the regulation of these
2 serious greenhouse gas emissions is so lax in ensuring
3 that emissions are actually measured and avoided or
4 reduced we consider itself a human right failure of the
5 government and the industry.

6 The industry even has a profit benefit from
7 saving gas from getting accidentally released through its
8 production chain and, nevertheless, we still see
9 countless examples where monitoring and reporting is
10 just not undertaken and so all of these leaks and
11 emissions aren't getting addressed.

12 The impacts of climate change risks generally
13 is particularly significant for those living in Alaska
14 where they're not only at risk for climate change
15 threatening to force their migration from their
16 homelands but also the actual undertaking of fracking
17 and unconventional gas and oil exploration which is
18 impacting their livelihoods daily through poor
19 regulation and significant reporting impacts to their
20 health and livelihoods. So the Tribunal has before it
21 exceptional submissions from various Alaskan based
22 entities.

23 So Robin Bronen a human rights attorney and
24 the director of the Alaskan Immigration Justice Project,
25 presented on Human Rights And Climate Forced Migration
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1 and argued that the continued increase in greenhouse gas
2 emissions is forcing those who have least contributed to
3 the climate crisis to make the extremely difficult
4 decision to leave their homes where they've lived for
5 millennia. So there was evidence put forward which
6 demonstrates serious governance and human rights
7 challenges around these climate forced community
8 relocations.

9 And there is an excellent Law Review article
10 before the Tribunal which I recommend that it read given
11 the implications that it has on this highly vulnerable
12 community as an example of how climate change impacts
13 can really play out and who should be made responsible
14 and liable for these actions where the industry itself
15 is having both direct and indirect impacts on their
16 lives through on-site and then global emissions.

17 So Robin recommended that the Tribunal
18 ultimately proposes that the creation of an expert
19 working group is created to specifically provide
20 guideline principles on which maybe she termed, I'm not
21 sure if it's a known term otherwise, "climigration",
22 outlining key human rights principles that can guide an
23 adaptive governance framework. So really interesting
24 recommendations around that.

25 I know Eunice Brower and Ceal Smith provided
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1 submissions from the Alaska Climate Network as well on
2 their experience of fracking in the native village of
3 Nuiqsut which I've mentioned before and they have
4 extensive testimonials provided in their letter around
5 the impacts that their village is facing, both to their
6 health and to the degradation of their environment also
7 and their ability to undertake subsistence living.

8 So question 4 is looking at what's the extent
9 of responsibility and liability of states and non-state
10 actors, both legal and moral, for violations of the
11 rights of nature related to environmental and climate
12 harm caused by these unconventional oil and gas
13 extraction techniques?

14 So firstly I just wanted to quickly reflect on
15 what the rights of nature are. Lisa Mead and Michelle
16 Maloney have provided fantastic submissions to the
17 Tribunal on the rights of nature in which they give a
18 great explanation of the background and of when and
19 where it's playing out in the law at the moment,
20 explaining that the Universal Declaration of the Rights
21 of Mother Earth, known as the Declaration in their
22 submission, was kind of the commencement, I guess, of a
23 formal recognition of the rights of nature and was
24 created in Bolivia in 2010 by a Peoples' Congress. So
25 it's actually not a formally recognized document but it
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1 is getting extensive recognition more increasingly
2 throughout the world.

3 So there's also a growing body of legal
4 recognition through many countries with Ecuador and
5 Bolivia, New Zealand and Columbia and India all, to some
6 extent, providing either a particular ecosystem or
7 environmental features such as rivers. For India it was
8 most recently the rivers Ganga and Yamuna and all of the
9 tributaries, streams and natural water flows around it,
10 being given legal personhood or a living entity that has
11 corresponding rights, duties and liabilities as a living
12 person to ensure that they're able to better protect
13 these entities.

14 Or it might also be Bolivia passing the Rights
15 of Mother Earth Act in 2010 which creates institutional
16 structure to protect the rights of mother earth and
17 enable citizens to represent and defend their interests.

18 So these legal events demonstrate rights of
19 nature are no longer merely just a philosophical trend
20 and they really have a substantial legal notion that is
21 being given increasingly legal effect globally.

22 Lisa and Michelle argue that the rights of
23 nature are being violated from unconventional gas and
24 oil extraction through various means. And the key ones
25 are violation of the rights of the rivers, aquifers and
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1 waterways through the significant water use by the
2 industrial processes and they mention tarsands
3 extraction as an example.

4 Also in Australia and in other countries, US
5 and Romania, the pollution of aquifers by toxic fracking
6 chemicals has been a concern, including methane.

7 We're seeing severe pollution of rivers by gas
8 and chemicals to the extent that in Australia the
9 Condamine River and other connected water systems have
10 actually caught fire due to gas bubbling up in the
11 river. And they go on.

12 And in terms of these rights to the rivers,
13 aquifers and waterways being violated they claim that
14 the right to continue their vital cycles and processes
15 free from human disruptions, right to integral health
16 and the right to be free from contamination, pollution
17 and toxic or radioactive wastes, are being breached in
18 these instances due to the unconventional oil and gas
19 activities. These are all articles in the Declaration
20 that they're referring to when they're drawing in these
21 rights.

22 They further argue that the industry violates
23 the rights of the climate system. And this is based on
24 the rights of nature articulation in the Declaration
25 that gases released by the unconventional oil and gas
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1 industry violate the following atmospheric rights of
2 nature to these rights. So the integral health and the
3 right to be free from contamination, pollution or toxic
4 radioactive waste.

5 The violation of the rights to land and
6 subsurface to overall well-being and integral health are
7 also considered through tree clearing, the risk of
8 increased seismic activity as result of waste water
9 reinjection underground at high pressure.

10 And, in this instance, they draw on the
11 Declaration to show that these earthquakes and seismic
12 activities directly interfere with the right to
13 well-being, the right to a place and to play its role in
14 mother earth for her harmonious functioning.

15 The right to continue their vital cycles and
16 processes free from human disruptions. The right to
17 integral health and the right to be free from
18 contamination, pollution and toxic or radioactive waste
19 once again.

20 So finally they argue that there's been a
21 violation of the rights of animals and plants to exist
22 and thrive due to the impacts, for instance, of numerous
23 migratory birds that were killed due to tailing ponds
24 toxicity in Canada or through significant impact on
25 habitat through clearing. And I know they mention
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1 through the southern Brigalow Belt in Queensland there's
2 been significant clearing of suitable habitat for
3 various species of lizards and snakes that are actually
4 only found in that area.

5 So as to the question of the extent of the
6 responsibility of the state and non-state actors for
7 these legal and moral violations Michelle and Lisa have
8 argued that governments and public institutions and the
9 people who work in them they have a particular
10 responsibility to act and must meet a higher standard by
11 virtue of the regulatory powers and responsibilities
12 vested in them.

13 The Declaration places an onus on states,
14 being the Declaration from Bolivia, places an onus on
15 states and public institutions to protect the rights of
16 mother nature, including to establish and apply
17 effective norms and laws for the defense, protection and
18 conservation of the rights of mother earth;

19 To guarantee that the damages caused by human
20 violations of the inherent rights recognized in the
21 Declaration are rectified and that those responsible are
22 held accountable for restoring the integrity and health
23 of mother earth;

24 That empowering human beings and institutions to
25 defend the rights of mother earth and all human beings
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1 as necessary and to establish the precautionary and
2 restrictive measures to prevent human activities from
3 causing species extinction, the destruction of
4 ecosystems or the disruption of ecological cycles.

5 So these are all key areas that they're
6 arguing that the states need to be held responsible for
7 in terms of the impacts that are being allowed to the
8 rights of nature.

9 The governments indicted through the evidence
10 before the Tribunal, so including US, England, Canada
11 and Australia are not, on the evidence, fulfilling their
12 responsibilities to protect the rights of nature in
13 their decision-making or governance processes nor are
14 the companies or non-state actors, however, fulfilling
15 their role of upholding human rights or the rights of
16 nature adequately above their own profits. And we're
17 seeing that throughout all of the submissions.

18 The Declaration records that every human being
19 is responsible for respecting and living in harmony with
20 mother earth. Consequently everyone, including all
21 companies and government officials, has a responsibility
22 to ensure that they do not contribute to climate change
23 and thereby the warming and acidification of the oceans
24 and also not to contribute to undue impacts to the
25 rights of nature.

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1 Lisa and Michelle request that the Permanent
2 Peoples' Tribunal examine the factual evidence put
3 before them on how unconventional oil and gas activities
4 are violating the rights of nature:

5 That they determine the accountability of relevant
6 parties for the violations of the rights of nature and
7 jurisdictions impacted by this industry;

8 That a determination of what restorative measures
9 should be undertaken should be provided;

10 And that determination of what preventative and
11 precautionary measures should be taken to prevent future
12 violations of the rights of nature;

13 And finally they ask that the Tribunal acknowledges
14 the inherent wisdom in recognizing, in law, the
15 intrinsic rights of nature and of ecosystems to exist,
16 to thrive, to regenerate and to evolve, thus adding to
17 the growing conviction that such a fundamental systemic
18 change may be the only thing that can save us in our
19 darkest hour.

20 So I'm just seeing the time. I hope that I've
21 laid out various key evidence relevant to each question.
22 I realize it could have been more engaging being able to
23 have a bit more time and maybe provide a bit more of an
24 elucidation of the findings that have come out of the
25 submissions put before you rather than just a summary.

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1 But I will take the opportunity to remind the
2 judges to refer back to the four key questions in
3 considering your responses to the testimonials put
4 before you. It's a formidable task that you have in
5 front of you and so are the issues that we're seeking to
6 solve or, at the very least, to address.

7 So I really congratulate all of the people who
8 have had the courage and determination to speak out
9 about the impacts that are occurring and that these
10 people that have been threatened from the unconventional
11 oil and gas industry as part of this tribunal hearing.
12 It's been very impressive to read and participate in the
13 viewing the submissions put before you.

14 I'll leave you with a quote from a submission
15 that was put before the Tribunal by Raymond Cusson.

16 "So as we progress in time we realize that the
17 threat persists for our way of life, the human rights,
18 the rights of nature, the changing climate and
19 democracy. We, the citizens and communities, have a
20 moral obligation to speak out, to demand a change and to
21 live the change we want to see.

22 "The governments and industry have a moral,
23 if not legal, obligation to listen and a responsibility
24 to ensure public safety."

25 So thank you so much to the judges for your
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1 consideration and deliberations in being part of making
2 government and industry take note and hopefully take
3 more responsibility for the impacts that are occurring
4 to our earth and humanity. And I hope these closing
5 submissions have assisted somewhat in your deliberations
6 for this Permanent Peoples' Tribunal on Human Rights,
7 Fracking and Climate Change.

8 If the judges need any further assistance in
9 the coming days or weeks or if now, if there's time, in
10 answering further questions I'm sure I and other
11 attorneys would gladly do our best to assist you.

12 DR. THOMAS KERNS: Thank you Revel.
13 Beautiful summary.

14 Let's see if there are any questions from the
15 judges.

16 DR. ANDRES BARREDA: It is obvious that
17 the accusation is aimed at the whole of the enterprises
18 of the corporations and all the packet of techniques and
19 it's also directed to public institutions that are
20 accomplices.

21 My question is if there is a detailed list of
22 the involved corporations directly involved and, also,
23 if such a list exists of the public institutions that
24 are also involved?

25 I understand that it's a very complex job
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1 because there are so many levels and the disasters are
2 so widespread but still I would like to ask if there is
3 such a list or such lists?

4 MS. REVEL POINTON: So I understand your
5 question is probably in terms of all impacts from
6 unconventional oil and gas around the world or is it
7 just limited to what the Tribunal has heard and had
8 submissions put towards them?

9 DR. ANDRES BARREDA: Well, the
10 corporations, the specific corporations by the names, so
11 to speak, and public institutions involved in this. So
12 the active subjects.

13 MS. REVEL POINTON: Sure. I'm not aware
14 of a single place where -- well for either or all
15 activities.

16 All of the companies -- what I understand is
17 maybe you're after just a list of all unconventional oil
18 and gas companies generally rather than ones that are
19 implicated necessarily and for impacts on human rights
20 or rights of nature, which I'm not sure if there's any
21 answer. That's another question. But I'm sure a list
22 could be found.

23 Well, I shouldn't say that. I wonder if maybe
24 even the IEA, the International Energy Agency might even
25 have, as part of their data base, a list of such a
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1 nature. We can look into that and get back to you.

2 I don't think the institutions or the
3 government bodies, and I imagine you're meaning that
4 regulate these industries and aren't performing well,
5 they're maybe allowing impacts on human rights and
6 rights of nature, I don't think a list exists at all of
7 those entities.

8 Because, as you said, they just they're so
9 extensive I don't imagine that they would have been
10 captured. However, I imagine there are reports and I
11 know even before the Tribunal the fantastic human rights
12 impacts assessments have gone into, for England and for
13 part of the states, some of the entities that were
14 involved in those and various other reports have tried
15 to detail them. But having one place with all of them I
16 can't think of where that might be, sorry, unless
17 somebody else here could.

18 DR. THOMAS KERNS: That would be a very
19 long list. And it would vary from -- in the US it would
20 vary from state to state, you know. So there's 50
21 different organizations or agencies and then the whole
22 federal government would have -- who knows how many
23 agencies are involved in regulating various aspects of,
24 you know, climate and extraction.

25 DR. GIANNI TOGNONI: If I may add. At
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1 least I think that would be useful according to what
2 Andres was asking and saying that a Secretariat do have
3 a list, because that has been left out many times, at
4 least that the names of those corporations that have
5 been involved in the cases which have been presented and
6 the institutions because that would provide some more
7 specific reference for the extension of that.

8 Based on that then we could see whether, in
9 fact, there is some cluster of corporations, either from
10 US or from Australia or from India because that would be
11 important for our general framework and not simply a sum
12 of detailed cases. And that would be a request that
13 could be forwarded also to the organizations which have
14 been following them more systematically those cases
15 across the world.

16 And certainly the Friends Of The Earth they
17 are some of these things and that would be very important
18 also to clarify the extent of the involvement and whether
19 there are some systematic implications for some areas.

20 So I think that would be one of the questions,
21 and that you could not have the time, and over the next
22 few days or so because we have heard during the session
23 that we are simply asking for some supplemental
24 information, if possible.

25 MS. REVEL POINTON: Understood. And I
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1 can see the value in it. I worry that some advocates
2 might be concerned about potential claims of defamation
3 and so they might be more hesitant to raise issues when
4 they are actually naming companies that are involved or
5 entities. However, I'll certainly put it to the other
6 advocates as far as possible if they can send in the
7 names of the various companies that they are talking
8 about when they're referencing the impacts that they are
9 experiencing.

10 DR. GIANNI TOGNONI: So let's say that,
11 as I think you said before, I think that would be
12 interesting and useful for the Secretariat to be in
13 touch with you so that we could explore a bit more some
14 of the questions some of points about the new
15 directions.

16 MS. REVEL POINTON: Great.

17 DR. THOMAS KERNS: And with agencies which
18 would be, you know, the state actors, advocates might
19 not be so worried about defamation concerns.

20 Is that accurate?

21 MS. REVEL POINTON: I think depending --
22 no, depending on the defamation laws in the country and
23 depending on what they're claiming around it, I guess.
24 But, yeah, I guess that's a question for each of them.

25 So we do have the questions for the attorneys
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1 that were sent through and I'm sorry that I didn't get
2 to answer more of them.

3 Were there any other ones that people might
4 want to try to answer on the spot now?

5 I can't guarantee I'll be able to but
6 otherwise we'll continue with Plan A of getting back
7 responses to you by next Friday.

8 DR. THOMAS KERNS: I think that's the
9 best point. Now we need to move on to the next piece.

10 Any more questions that the judges might
11 want to submit and any responses that advocates might
12 want to submit.

13 MS. REVEL POINTON: Great.

14 DR. ANDRES BARREDA: Thanks a lot for the
15 effort.

16 MS. REVEL POINTON: It's a pleasure.
17 Thank you so much. It was a honor to present to you
18 all. So I wish you well in your deliberations and look
19 forward to hearing your recommendations.

20 Do get in touch, as I said, if we can be of
21 further assistance.

22 DR. ANDRES BARREDA: This effort is going
23 to be useful for every one who fights against the oil
24 industry in the world.

25 MS. REVEL POINTON: I hope so too.
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[youtube.com/watch?=HfvzwsnOoIE&t=1s]

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1 CLOSING CEREMONY

2 MAY 18, 2018 11:00-12:00

3
4 MS. CARLY LETTERO: Hi, and welcome to the
5 closing ceremonies for the Permanent Peoples' Tribunal
6 session on Human Rights, Fracking and Climate Change.
7 My name is Carly Lettero with the Spring Creek Project
8 for Ideas, Nature and the Written Word at Oregon State
9 University. It's been an honor to co-organize and
10 co-host the Tribunal.

11 On behalf of the Spring Creek Project I want
12 to thank everyone who came forward to courageously tell
13 their stories for the Tribunal. Some of those stories
14 are archived in the on-line sessions that we recorded
15 this week but many more of those stories are archived in
16 the documents that the attorneys provided for the judges
17 in addition to the spoken testimony this week.

18 I would also like to thank the attorneys who
19 donated their time and wisdom and expertise this week
20 and in the months and years leading up to the Tribunal.

21 And special thanks to Tom Kerns who, with his
22 colleagues, first proposed this session of the Tribunal
23 and ushered it along for years and years until it
24 finally happened this week.

25 Thanks to Gianni Tonogni who is the Secretary
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1 General of the Permanent Peoples' Tribunal and to Simona
2 Fraudatario, who is the Coordinator of the Permanent
3 Peoples' Tribunal in Rome, Italy.

4 Zoom Video Communications donated the software
5 that we used to record the tribunal this week.

6 And special thanks to Shelly Stonerbrook who
7 is the program coordinator with Spring Creek Project.
8 She graciously worked with every single person who
9 presented this week to make sure that they were
10 comfortable with the on-line platform.

11 Thanks also to Emily Grubby who is an intern
12 with the Spring Creek Project who very thoughtfully and
13 quickly edited every single session of the Tribunal that
14 we recorded so that we could put it on-line to share
15 with you as it was happening.

16 And thanks to the graduate students of the
17 Environmental Arts and Humanities Program here at Oregon
18 State University who helped organize the Tribunal for
19 the year leading up to it.

20 So while this session of the Tribunal has come
21 to a close it is far from the end. I want to thank the
22 judges who watched the tribunal on-line and off-line
23 this week and who are going to spend the next few weeks
24 deliberating and reading through all of the written
25 documentation that was submitted.

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1 They are going to write a judicial opinion
2 some time over the next month and as soon as that
3 opinion is done we will make it public.

4 All of the videos from the tribunal are going
5 to be archived on the Spring Creek Project youtube
6 page. Also on the fracking tribunal web site, which is
7 TribunalOnFracking.org and ultimately they'll be
8 archived on the Spring Creek Project web site at Oregon
9 State University.

10 So now on to the closing remarks. First we
11 will be joined by Gianni Tonogni who, I mentioned, is
12 the Secretary General of the Permanent Peoples'
13 Tribunal. And then we'll hear a poem by a writer Mark
14 Trechock from Dickinson State University who will read
15 his piece Down The River that was published in the
16 anthology Fractures: Essays, Poems and Stories on
17 Fracking in America.

18 And then we'll hear from Kathleen Dean Moore
19 who will share some closing remarks. She is a
20 Distinguished Professor of Philosophy Emerita at Oregon
21 State University and author of Great Tide Rising among
22 other books.

23 And finally we'll close the session with a
24 song that was written and composed for the Tribunal by
25 John Michael Looking Wolf who is an enrolled member of
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1 the Kalapuya Confederate Tribes of Grand Ronde and a
2 world renowned Native American flute player.

3 Thanks so much for joining us.

4 DR. GIANNI TOGNONI: Okay. These are a
5 few closing remarks by Simona Fraudatario and myself as
6 Secretariat of the Permanent Peoples' Tribunal. They
7 are obviously not pretending to represent the advisory
8 opinion, which is the exclusive role of the component of
9 the jury.

10 The comments which follow are meant to
11 provide, first, focus on the overall experience and
12 evidence of all that has been accumulating over the last
13 four days of reports, data, but even more importantly on
14 the testimonies of the community of the various
15 continents who are represented. More vividly the
16 dramatic significance of the question which is at the
17 center of the title of this session, the impacts on
18 human rights of fracking and of one of its main
19 consequences climate change.

20 It would be incumbent on the judges that over
21 the next few weeks, depending on the availability of all
22 the documents, we provide an advisory opinion. For the
23 time being we are trying to give our impressions which
24 are based on the implicit comparison of the importance,
25 the reliability, significance of what has been presented
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1 here with all the sessions which have explored different
2 issues and different context.

3 So the first observation is that the impacts
4 in so many dramatic modalities have been documented with
5 the richness of facts and related oral, visual,
6 juridical, cultural evidences which definitely coincide
7 with a scenario of violations which beyond any
8 reasonable doubt require an urgent qualification in
9 terms of responsibility to be ascertained and attributed
10 as well as of measures which must be assumed to avoid
11 events worsening of the already dramatic situation and
12 to allow policies of reparation of changes of practices.

13 What has become further clear is the fact that
14 fracking is with important but limited exceptions and
15 still ongoing and an expanding reality which affects
16 both the rights of nature as well as the individuals and
17 communities in all the countries being considered by the
18 Permanent Peoples' Tribunal with specifically dramatic
19 consequences on indigenous people.

20 The practices of resistance of research, of
21 resilience, which has been presented underlying on the
22 other side that the violation of rights are most of the
23 times planned and implemented intentionally and are
24 further denied or hidden.

25 The existing absence of adopting clear
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1 legislations is not recognized as a vacuum to be
2 urgently corrected but as an excuse to go ahead in a
3 regime of impunity.

4 The scenarios of fracking appear in this sense
5 an exemplary model of the tragic broader geo-political
6 policies and strategies which consider and impose an
7 adverse heirarchy of values between human and people's
8 rights and economic and environmental powers.

9 The work of the PPT is oriented to provide
10 positive not simply descriptive answer to the four main
11 questions which have guided the preparation and
12 implementation of this session would certainly aim at
13 exploring and judging responsibility of courses and
14 actors of the violation but at the same time we
15 concentrate the attention on three aspects.

16 First, the possible ways of strengthening the
17 role of the communities who must remain and be further
18 recognized as the main subjects of inviolable rights and
19 of their self-determination.

20 Second, the focus will be on the needed
21 evolution of existing international, national, local
22 instruments towards an innovative role of guarantors of
23 the rights of affected and threatened human communities
24 and of nature.

25 The third, the promotion of broader and
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1 effective networks of community, political community
2 actors capable of transforming the present very rich but
3 fragmented and disparate experiences of resistance and
4 resilience into a response of people fighting for the
5 combined respect and promotion of the old, but
6 fundamental, Universal Declaration of Human Rights and
7 of the so-called new Universal Declaration of Rights of
8 Mother Earth.

9 And last, but not least comment, the event of
10 this Session of the Permanent Peoples' Tribunal has been
11 an experiment of collaboration and communication which
12 has been decided to overcome the economic constraints
13 which impede what should be a permanent, timely exercise
14 of assessing, monitoring, reversing the universe of
15 violation which occur in present global scenarios where
16 the decisions and policies which go against the
17 fundamental rights of nature and of human community are
18 taken, imposed and directed centrally with unlimited
19 resources.

20 The experiment has been made a success with
21 some inevitable but instructive limitations thanks to
22 the commitment of a group of promoters which deserve the
23 recognition and the gratitude not only nor principally
24 of the Permanent Peoples' Tribunal but of all those who
25 could transform this experiment into a flexible powerful
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1 permanent tool that could allow also the struggles of
2 the community of the world to become more globally and
3 timely known, shared and detected.

4 Thank you.

5 MR. MARK RASHAD: I'm Mark Rashad. I'm
6 reading the poem Down The Road which appeared in the
7 Anthology Fracture: Essays, Poems And Stories On
8 Fracking In America.

9 Down the road heading west on the interstate
10 through oil country toward Montana. Passing the ground
11 laid bare for Best Buy and newcomers condominiums whose
12 prices will rival Manhattan until the next bust and next
13 evacuation or whatever boom comes then, uranium or
14 gravel or freshwater to whatever unsuspecting place.

15 Passing the oil trucks headed to the Bakken.
16 The dual-wheeled pickups and company logos and license
17 plates from far away passing the eight acre scoria pad
18 cut out of a wheat field to accommodate the drilling rig
19 and its odor of fracking fluids. The pad not likely to
20 go back to wheat in the farmer's lifetime or his heirs.

21 Passing the great elevator they want to tear
22 down for a place to deliver fracking chemicals. Passing
23 the sign a shade the color of a tree trunk welcoming us
24 to the national park.

25 Passing descendents of Coronado's horses that
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1 were packed, never ridden, looking down from a bluff.

2 Passing a wing like metal fabrication churning
3 west on a wideload semi destined, we speculate, for an
4 Oregon wind farm, passing wheel, after wheel, after
5 wheel whose contact with the pavement produces the
6 insistent chant, got to move, got to move, got to move.

7 DR. KATHLEEN DEAN MOORE: And so we come
8 to the end of a week long Tribunal on Fracking, Climate
9 Change and Human Rights.

10 What we have learned has been terrifying and
11 empowering, infuriating and uplifting, tedious and
12 electrifying, disgraceful and full of grace.

13 What a week, right smack in the center of what
14 I believe is the most critically important decade in the
15 history of life on earth. Where civilization will
16 either imagine into existence, adjust and find a
17 fruitful way forward or we will watch planetary and
18 human systems fray, fragment and fall apart.

19 Imagine. Let us stop to think about the
20 paradoxical place where we are at the end of the
21 Tribunal.

22 So here we are in my garden. You may hear
23 birds. You'll probably hear motorcycles. The birds will
24 be evening grosbeaks. I don't know what the motorcycles
25 are.

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1 We all live in earth's garden where evolution
2 has achieved its greatest fullness of flowering. I'm
3 quoting theologian Thomas Berry, "It's the most lyric
4 period in earth history. The time of thrush song and
5 30,000 species of orchards, microscopic sea angles with
6 tiny wings and whales who teach each other to sing.

7 "It's a time of birdsong and other
8 astonishments that have evolved over four-billion
9 years.

10 "And the greatest astonishment of all, the
11 human species, which has the ability to turn awe-
12 stricken to the night's sky and imagine its own
13 beginnings and its own end.

14 "And yet governments, in collusion with the
15 oil and gas industry, are rapidly taking steps to give
16 away this world, this lovely world, to the planet's 93
17 crude oil billionaires enriching them beyond the
18 cruellest pharaohs.

19 "It's our generation that's witnessing the end
20 of the era we evolved in." That's Thomas Berry again.

21 "My generation has done what no previous
22 generation could do because they lacked the
23 technological power and what no future generation will
24 be able to do because the planet will never again be so
25 beautiful or abundant."

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1 In my lifetime, because of fossil fuel driven
2 climate change, fossil fuel enabled habitat destruction,
3 fossil fuel driven agricultural expansion and fossil
4 fuel based agriculture and other assorted poisons, 39%
5 of terrestrial wildlife is gone. 39% of the marine
6 wildlife is gone. 76% of freshwater wildlife is gone,
7 76%.

8 The greatest extinctions are in the poor
9 countries with losses of 58% where the wealthy countries
10 are out-sourcing their environmental destruction.

11 Let's think also of the extinction of home
12 lands, Bangladeshee deltas, Alaskan coastal villages,
13 Micronesian villages sinking under the rising seas.

14 Here we are in a garden. You may hear
15 laughing children although we've tried to corral them.

16 There is my young grandson Theo who wants to
17 be an engineer for Lego company when he grows up. His
18 little brother Lem who wants to be a deep sea
19 biologist. And Zoe who imagines herself working in a
20 pet store when she grows up along with kittens and the
21 snakes. All the imagined futures, all the dreams .

22 And yet a new extreme extraction technique,
23 hydraulic fracturing, is flooding the atmosphere with
24 greenhouse gases 80 times more potent than carbon
25 dioxide accelerating climate change.

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1 And I hear this always in my mind, a statement
2 by 500 scientists led by a team from Stanford. Unless
3 all nations take immediate action on climate change by
4 the time today's children are middle-aged the life-
5 support systems of the planet will be irretrievably
6 damaged. Irretrievable, from the French, retrouver. So:
7 "Never to be found again."

8 Of course I am afraid for the children and my
9 little biologist probing a soured scoured sea.

10 In countries around the world global warming
11 has begun. In Africa disastrous flooding so mothers
12 have to sleep standing up to keep their babies heads
13 above water.

14 In East Africa drought so severe that crops
15 die on the vine and 12-million people are in terrible
16 need of food.

17 Children, the little ones, especially
18 susceptible to spreading infectious diseases from fouled
19 water and insect vectors. Thirsty children dreaming of
20 gardens.

21 The planet balances here, now, between two
22 possible futures. Earth, this beautiful blue marble in
23 absolute balance trembles there with winds singing
24 across its gardens. It could roll either way. The
25 planet and the children head over heels.

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1 In this context, in this place, in this time
2 we gather to consider fracking, the new engine of the US
3 energy revolution. A technology that has increased oil
4 and gas production faster than at any time in United
5 States history. 510,000 fracking wells producing more
6 than half of US crude oil and 2/3rd of the natural gas,
7 13,000 new wells per year. A technology racing ahead far
8 outpacing the legal regulations or the moral outrage
9 that might control it.

10 This flood of cheap energy could not have come
11 at a worse time in planetary history.

12 What happens next is largely a function of the
13 choices we make aiding civilization toward the
14 aspirational goals of international human and earth
15 rights or surrendering to the power of the
16 self-enriching corporations or to the allure of fossil
17 fuel powered life, the easy life, the end game.

18 We are in terrible moral peril that we might
19 let this world slip away. Imagine.

20 I think of Eric a Jong who wrote In My
21 Dreams. "The angel shrugged and said if we fail this
22 time it will be a failure of the imagination. And then
23 she placed the world gently in the palm of my hand."

24 So let us turn to the good work of imagining.

25 Let us imagine two futures. One in which human and earth
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1 rights are fully respected and one in which the rights
2 are trampled by huge amounts of money invested in crimes
3 that are dug into the very structure of the land. A
4 tangled well-head of fearful politicians, reckless
5 corporations and bewildered children.

6 Let's look at these two possible futures.
7 First, let's tell the story of a future without human
8 rights enforcement.

9 In this scenario internationally recognized
10 human and earth rights are simply ignored. They are,
11 the argument goes, trumped by the corporation's right to
12 make a profit.

13 The immediate result is that unimpeded by law
14 or conscience wells spread across the land and profits
15 sore. This wealth creates a lively market in
16 legislators, judges and regulators, all happy to sell
17 their consciences and their votes for oil money.

18 In this first story the level of corruption is
19 staggering enough that citizens have to prod themselves
20 to remember that paying piles of cash for votes is
21 called bribery and it's a betrayal of the public trust.
22 And if it weren't for the Citizens United court case it
23 would also be a felony.

24 In this story federal energy policy is quickly
25 transferred to the hands of the fossil fuel
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1 corporations. It is now government of, by and for the
2 corporations, a corporatocracy, a thuggish petro state.

3 Now the greatest transfer of public lands and
4 public wealth into the hands of gas and oil companies
5 proceeds apace as drills move into cherished indigenous
6 land and into the once protected lands of public parks,
7 forests, grasslands, farms and neighborhoods.

8 The effect on human health is immediately
9 measurable. There are cancer zones that map exactly
10 onto the fracking fields which, at first, map exactly
11 onto poor and minority communities.

12 Asthma, neurological disorders, skin rashes
13 increase, birth weights decrease. The costs are borne
14 by the victims, never by the corporations or the state.

15 Water and air pollution follows fracking
16 wherever it goes.

17 Abandoned wells leak methane. Chemicals leak
18 into ground water. Chemicals leak into surface water.
19 Pipelines leak, corrode, spill and explode.

20 Gradually the cancer zones radiate from the
21 wells following the pipelines just as cancer cells
22 follow the blood.

23 To consolidate their power the corporations
24 fight against the most powerful opponent they might ever
25 face which is knowledge.

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1 Four traditional sources of knowledge, the
2 pride of civilization, come under relentless attack;
3 science, universities, free press and the courts.

4 Their weapons are silencing, scrubbed web
5 sites, demoted scientists, cancelled research,
6 non-disclosure agreements, purchasing university
7 professorships and research centers, hired guns who
8 plant false stories, bribes of every sort. Deception
9 and threats to homes and livelihoods.

10 In this first story activists who seek and
11 share information are charged under new laws that allow
12 a person who aides, advises, counsels or conspires with
13 someone who damages a pipeline to be charged with a
14 felony and sentenced to ten years in prison.

15 Sometimes, absent any human rights, murder is
16 a preferred way to silence a critic. Citizens who know
17 only one fact, their stress and their pain, are
18 ridiculed, isolated and threatened.

19 In this story, as the methane leaks without
20 restraint, global warming accelerates as do its effects
21 on peoples homelands, driven from the lands by drought,
22 driven from their homes by flood, driven from their
23 cities by unbearable heat stress, people are on the move
24 with no possible place to go and no redress. There are
25 no rights for refugees.

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1 That's the first story and I've got to stop. I
2 don't know how to write this.

3 Do I use past tense because these things have
4 already happened?

5 Do I use the present tense because this story
6 is unfolding today?

7 Do I use future tense because without
8 effective protection of human rights they will continue
9 to occur?

10 What is the verb tense for, Dear God, this
11 cannot be allowed to happen?

12 So let's start over. Now we are going to do a
13 different thought experiment.

14 Now let's imagine a story of a future with
15 full protection of human and earth rights. In this
16 story the government's commitment to rights serves as a
17 powerful restraint on the fossil fuel industry's freedom
18 to defile.

19 At first the fossil fuel industry does its
20 level best to use hydraulic fracturing in as careful a
21 way as possible developing technologies, siting wells
22 and disposing of waste in ways that are expensive but
23 fully respect the rights of health to people and biota,
24 to self-determination and to the free enjoyment of
25 property.

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1 And in this second story let us assume also
2 that the protection of the right to know is a high
3 priority for government.

4 Now I'm quoting. "A responsibility of every
5 American citizen to each other is to preserve and
6 protect our freedom by recognizing what truth is and is
7 not. What effect is and is not. And begin by holding
8 ourselves accountable to truthfulness and demand that
9 our pursuit of America's future be fact based."

10 Who said that?

11 I never thought I would be quoting Rex
12 Tillerson, the former CEO of Exxon Mobil, former
13 secretary of state.

14 When his advice is followed as it is in this
15 alternative story much becomes clearer about the
16 fracking technology.

17 A salient fact is that it seems to be
18 impossible to pour poisons on to the ground, impossible
19 to move methane thousands of miles, impossible to
20 release toxins in to the air to be filtered by the lungs
21 of children and songbirds with the assurance that human
22 and earth rights will not be violated.

23 And at this point in this story the
24 precautionary principle kicks in.

25 If your primary obligation is to honor the
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1 rights of life, health and so on, and if you simply do
2 not know enough about the chemistry of toxins, the
3 geology of wells, the fittings of the pipes to be even a
4 little bit sure they are safe then the rational and, in
5 this imaginary setting, the legal thing is to not
6 proceed.

7 Now things are getting really expensive for
8 the fracking industry. Delay costs a fortune and now
9 gas and oil cost a whole lot of money, far more than
10 solar panels and winds turbines or agricultural and
11 methane capture and tidal power. It's a powerful
12 incentive for industry to find more reliable sources of
13 income. And off we go into the future with the monkey
14 off our back and the whole realm of possibility ahead of
15 us.

16 The point is that there are two paths here.
17 We have learned that we can see quite a way down those
18 two different roads. It's not as though the path is
19 obscured by fog or distance. We know the consequences
20 of turning one way or another.

21 What the Tribunal will do is to show us which
22 path the collective moral wisdom of the planet would
23 have us choose.

24 The other point I want to make with these two
25 stories is about the transformative power of a human
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1 rights narrative. Once you start looking at the world
2 through the lenses of human and earth rights you will
3 see a quite different prospect.

4 Here again the tribunal is an exceptional
5 opportunity to imagine a world very different from our
6 own, an aspirational world. A world that calls us to
7 our better, more discerning and more empowered selves.

8 Which leads me to say one more thing about
9 rights. Throughout the tribunal we have a firm human
10 rights and we have a firm earth rights but there is a
11 set of rights we haven't talked about. A set of rights
12 that hovers over us like a nervous angel. These are the
13 rights of future generations.

14 What are our responsibilities for those who
15 will come after us, the children of all species
16 desperately imperiled by the corporate plunder of the
17 planet? What do we owe the future?

18 Surely this. Future beings have a right to a
19 world as rich in possibilities as the world that was
20 left to us. At a bare minimum the material conditions
21 for ongoing life. A world with fresh water to drink,
22 fresh air to breathe, clean food to eat, the minimum.
23 And then bird song to delight in. Safe homes to return
24 to at night. Dreams that might come true. Not just for
25 people but for the towering trees and the cowering owls.
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1 Why do we have this duty to the new ones?
2 Because they are the very definition of innocent and
3 every single blow and shout and shiver of fear that
4 rains down on them is utterly undeserved and unfair and
5 unwarranted. Those words are Brian Doyle's.

6 And I would add because we promised the new
7 ones, every parent holds a newborn life in her arms and
8 she whispers I will care for you. I will give you the
9 world.

10 Whatever is left of the planet when the
11 pillage ends that's the world that future beings will
12 live in.

13 Whatever genetic lines, whatever possibilities
14 are left, that is what evolution has to work with.

15 Future beings have a right to more than what's
16 left scattered and torn on the table after the great
17 cosmic going out of business sale.

18 The planet, so gentle to life, picked over and
19 storm torn. How can the future beings deserve any less
20 than what we ask for ourselves?

21 Philosophers say you can't talk intelligently
22 about the rights of future generations because you don't
23 know what they will want.

24 That is simply not true. Maybe we don't know
25 whether they will want electric cars or jet packs,
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1 apples or protein pops or whatever, but there's one fact
2 about the desires of future beings that we cannot deny
3 and that is the fact about the urgent press towards
4 ongoing life.

5 I struggle to make this case, so forgive me,
6 but consider I love my grandchildren more than I love my
7 own life. They are the manifestations of life ongoing.
8 That love is intense, ferocious and all consuming.

9 And when I think about other people all around
10 the world I assume, I know, that they love the future
11 that is manifest in their children with an equal
12 intensity.

13 And then I think of all the plants and animals
14 that shiver with the urgency of reproduction and life
15 ongoing. Life ongoing in the rotting log. Life in the
16 deepest sea, ongoing life in bedrock and hot springs.
17 The urge towards life has to be the strongest force on
18 the planet. On a warm humid day the air fairly buzzes
19 with it.

20 So I know this about present life. Life wants
21 to live. And I know this about future lives. They,
22 too, will want the possibility for full life, for full
23 manifestation of potential for growth and change for
24 continuing.

25 And this is the authenticity of natural rights
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1 that they echo, they amplify the trembling urgency of
2 life ongoing.

3 Surely these future generations only imagined
4 deserve a planet as rich in the possibility of ongoing
5 life as our own. This is what we must protect fiercely
6 and faithfully for all time.

7 So I say thanks to the witnesses, all the
8 courageous truth-tellers, the organizers and the judges.
9 And may you find wisdom and courage to match the
10 challenges of the time on the reeling planet that we
11 hold in our hands.

12 May gentle rain fall forever on green hills.
13 May ice return to glaze the bays. May people speak
14 without fear and dream of the future. May salmon
15 endlessly return when sandpipers call and may the
16 children hum themselves to sleep in the safe and
17 sustaining night.

18
19 [youtube.com/watch?v=4tOgl_otN9k]

1
2 State of Oregon)
3) ss.
4 County of Lane)

5 I, Mark A. Clemens, the undersigned Shorthand Court
6 Reporter and Notary Public for the State of Oregon, do
7 hereby attest that I prepared a transcript of
8 proceedings from an youtube.com digital audio/video
9 recording of The Permanent Peoples' Tribunal Plenary
10 Session on Human Rights, Fracking and Climate Change
11 that was held on the 14-18 days of May, 2018, at
12 Corvallis, Oregon, as set for in the foregoing
13 transcript consisting of 959 consecutive pages;

14 I further attest that all motions made, and other
15 proceedings occurring at the tribunal sessions of said
16 matter were then and there taken down in shorthand from
17 an digital audio/video youtube.com recording by me and
18 thereafter reduced to typewriting by me or under my
19 direct supervision.

20 I further attest that I am not of counsel or
21 attorney to any of the parties, nor am I interested in
22 the event of the cause, nor am I related by blood or
23 marriage to any party to this matter.

24 IN WITNESS WHEREOF, I have hereunto set my hand in
25 the City of Eugene, County of Lane, State of Oregon,
this 9th day of August, 2018.

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Mark A. Clemens
Notary Public State of Oregon
My commission expires April 5, 2021

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