Transcript of **Scoping Meeting**

Date: June 28, 2016

Case: Federal Coal Program, Programmatic Environmental Impact Statement

Planet Depos, LLC
Phone: 888-433-3767
Fax: 888-503-3767
Email: transcripts@planetdepos.com
Internet: www.planetdepos.com

Worldwide Court Reporting | Interpretation | Trial Services

1 TRANSCRIPT OF PROCEEDINGS
2
- - -
3
BUREAU OF LAND MANAGEMENT
4
IN RE: FEDERAL COAL LEASING PROGRAM
5 PROGRAMMATIC ENVIRONMENTAL IMPACT
STATEMENT
6
SCOPING MEETING
7
8 TUESDAY, JUNE 28, 2016
1:10 P.M.
9
DAVID LAWRENCE CONVENTION CENTER
10 PITTSBURGH, PENNSYLVANIA
11
- - -
12
13
BEFORE:
14
BARBARA EGGERS: Associate State Director,
15 Eastern States BLM
AL ELSER: Deputy Division Chief,
16 Solid Minerals, BLM
NEIL KORNZE: Director of BLM
17
KATIE PATTERSON: Facilitator
18
- - -
19
20
21 REPORTED BY: DEBORAH L. ENDLER, COURT REPORTER
22
- - -
23
24
25

P-R-O-C-E-E-D-I-N-G-S

MS. PATTERSON: Good afternoon. We will go ahead and get started if everyone wants to take a seat. I'll encourage folks to come up to the front of the room so they can hear and see everybody well.

On behalf of the Bureau of Land Management, I want to welcome you all to the sixth and final public scoping meeting for the Federal Coal Program, Programmatic Environmental Impact Statement.

I want to thank you all for being here today. Certainly recognize that your time is valuable, and we greatly appreciate your participation in this process.

Before we get started today, I'm going to just go over a few logistical announcements. First of all, if you need any help during the day or have questions, feel free to find someone wearing the badge around the room. They will be happy to help you out.

Bathrooms are located out these doors and to either side, and emergency exists are also out those doors, you will see the exit

signs.

You are welcome to come and go during the meeting today as you please. If you do leave the secured area, you will just have to do the bag check again.

We ask that you silence your cell phones, please, out of respect for everyone else in the meeting. If you do need to take a phone call or have a side conversation, please go outside those doors and have it in the lobby, we appreciate it.

As a reminder, if you want to provide verbal comments today, you do need a speaking card. And if you didn't already get one of those, you can get one at the back of the room here at our speaker card table.

This meeting is being live streamed over the internet as well, so if you know of anybody who would like to watch from home, couldn't make it today, you can give them the internet website address, which is on our agenda.

I'll just go over what's on our agenda real quickly so that you have an idea of what we'll be going over today.

We are going to begin with some welcoming remarks, followed by a brief power point presentation, providing you some information about the Federal Coal Program, and then we will get into the commenting period.

We are scheduled right now to take a break at 4 p.m. until 4:30, and then we will go until 7 today. We will be here until 7 no matter what. So feel free to stick around. That's enough for the logistics so far.

It's now my pressure to introduce Barbara Eggers who is the Acting State Director for Eastern States BLM.

MS. BARBARA EGGERS: Thank you. Good afternoon everyone and thank you for being here. We would like to welcome you to the Public Scoping Meeting on the Federal Coal Program. Public scoping is an important part of this process, and your comments today will help us as we make our decisions on the Programmatic Environmental Impact Statement.

While we want to hear any thoughts or comments you may have, there are some areas that we would particularly like to hear some

1 comments on.
2 For example, how, when and where to
3 lease federal coal? How can we account for
4 the environmental and public health impacts
5 of the coal program? How to ensure the sale
6 of public resources can result in fair
7 returns to the American taxpayers, including
8 whether current royalties should be adjusted?
9 And finally, should U.S. imports factor
10 into leasing and other program decisions?
11 So, again, I'd like to thank you for
12 being here today and I look forward to
13 hearing your comments.
14 And with that, I would like to
15 introduce Neil Kornze, Director of BLM.
16 MR. NEIL KORNZE: Hi, folks. It's a
17 pleasure to be here in Pittsburgh with you.
18 This is a Great American city. And I'm going
19 to let you know that we sincerely appreciate
20 you taking time out of your busy lives to be
21 here. Taking part in a public comment
22 session is not something that we all do every
23 day, and I know that in my own life I never
24 do this. It takes a lot of effort to get to
25 these types of events.

1 So today, we are here to talk about the
2 nation's coal program. But let me start with
3 the Bureau of Land Management. This
4 organization, which is a public entity,
5 public agency, we manage 10 percent of the
6 nation's lands and roughly 30 percent of the
7 nation's minerals and soils.
8 We have a very large set of
9 responsibilities. We manage property on your
10 behalf all the way from the Artic Ocean to
11 the Mexican border, from the San Juan islands
12 of Washington State to the Keys in Florida.
13 And one of the very important programs
14 that we have responsibility for is the
15 nation's Federal Coal Program. So it is a
16 large supplier of energy to the country and
17 there are a lot of very important questions
18 that members of public, members of Congress
19 and others have raised.
20 And so in an effort to make sure that
21 we have a full sense of the national voice,
22 we will hold these sessions to make sure we
23 can hear from you and your thoughts.
24 Barbara has identified a number of the
25 key areas that we would like to hear from you

1 from. But we are taking a top to bottom look
2 at the Federal Coal Program, and so are
3 excited to hear what you have to share with
4 us today.
5 We will be listening intently and
6 sincerely and really, truly greatly
7 appreciate you spending time with us today.
8 I'm going to invite Al Elser up to the
9 mike. Al is our Deputy Division Chief for
10 Solid Minerals, which means that Al and his
11 team have national responsibilities for
12 making sure that the coal program, hard rock
13 minerals, which is gold and silver, and those
14 type of mining operations are done and done
15 well. So Al Elser.
16 MR. AL ELSER: Thank you, Director
17 Kornze. We are hear to listen to you today.
18 So I'm not going to be very verbose while I'm
19 up here. I think it's more important that we
20 give you guys the time to give your comments
21 on the Federal Coal Program and the things
22 that you'd like to have clarified in your own
23 minds during this programmatic review.
24 I've got about a 10 minute presentation
25 that will give you an introduction to what it

is that we do in the Bureau of Land Management when it comes to managing this public resource, as well as keying up some of the questions that have already been identified through the listening sessions that we had last summer across the nation where we asked you for your input on what we needed to look at to modernizing the Federal Coal Program.

So real briefly, the Bureau is one of several agencies that has a role in managing this public resource. When it comes to our responsibilities, we've been tasked with leasing and production verification.

So when an operator wants to mine federal coal, they can come to the Bureau of Land Management and apply for a lease for that tract of land that contains that public coal.

Once we have issued a lease, assuming it is goes to lease issuance, and all the permitting has been issued by some of the other agencies, which we'll talk about here in a second, then we're also charged with monitoring the production from those leased

1 lands and verifying that all that public coal
2 that's being mined is being mined according
3 to the lease terms.
4 So again, we are just one of several
5 agencies. The Office of Surface Mining and
6 reclamation and Enforcement, or OSMRE, they
7 are the office that's charged with developing
8 and permitting that mine's permit to actually
9 go in and disturb that ground and mine that
10 federal, that public coal.
11 So once we have issued a lease, OSM,
12 OSMRE gets involved, they look at what the
13 applicant has planned as far as developing
14 that resource. They issue a permit along
15 with the state's in which that severance is
16 taking place, and then it comes back over to
17 us to monitor that production.
18 There is also the Office of Natural
19 Resources Revenue. They are tasked with
20 collecting and disbursing all of the
21 royalties that come in from that federal coal
22 production.
23 And then, of course, is the Mine,
24 Safety and Health Administration, which is
25 charged with developing and enforcing federal

1 safety rules for the mines.
2 So just real briefly, some quick
3 program statistics for the BLM. At the end
4 of 2015, we administered 306 coal leases
5 across the United States. Most of these
6 leases are out in the western states which
7 we'll talk about in a second here, but we do
8 have a number of leases out here in the
9 eastern states area as well.
10 Over the last decade, from 2006 to the
11 end of last year, those BLM-managed public
12 lands produced approximately 4.3 billion tons
13 of coal, worth over 63 billion dollars on the
14 open market.
15 And that production generated 6.8
16 billion in royalties and 3.8 billion in
17 rents, bonuses and other payments.
18 And it's important to note that that
19 money gets split with the states. So a lot
20 of that revenue that's coming in through
21 those three streams comes back directly to
22 those communities in which the miners are
23 working.
24 And during that time, the BLM held a
25 total of 32 coal lease sales.

1 In 2015, approximately one-third of the
2 nation's electricity was generated by coal.
3 This is down a little bit from previous years
4 where I think the peak was around 40, 44
5 percent, but coal is still producing over a
6 third of the nation's electricity. And of
7 that third approximately 44 percent comes
8 from coal produced from public resources.
9 And 88 percent of that came out of the
10 Powder River Basin of Wyoming and Montana.
11 So the majority of the federal coal, public
12 coal that is mined, is mined out west in this
13 area here in red on this map. This encircles
14 an area that includes Montana, North and
15 South Dakota, Wyoming, parts of Idaho, Utah,
16 Colorado, New Mexico, and Arizona.
17 But the vast majority of the
18 BLM-managed production comes out of the
19 Powder River Basin in Wyoming and Montana,
20 which is the basin immediately south of that
21 yellow area to the north of the picture.
22 But again, we do have a lot of federal
23 coal leases that we manage out here in the
24 eastern states. You can see that there is a
25 number of coal resources throughout the

1 United States, but just because of the way
2 the ownership for United States land
3 developed over the years, most of what we
4 manage is out in those western states.
5 So before we get into the Programmatic
6 Environmental Impact Statements, or PEIS, one
7 of the questions we would like help on, I
8 want to take just a brief moment to talk
9 about the coal leasing pause that we've been
10 hearing a lot about.
11 Back in January of this year, Secretary
12 Jewell, the Department of the Interior,
13 announced or signed Secretarial Order 3338
14 which directed us at the BLM to prepare this
15 programmatic review as well as put a pause on
16 new leasing while we developed this document.
17 But it's really important to understand
18 that that pause does not affect current
19 production or current leases. So anything
20 that's already out there, that's been leased
21 to a company, which amounts to about 20 years
22 of federal production, that will be
23 completely unaffected by the pause.
24 Pending leases that we have already
25 gone through our national environmental

1 policy analysis on and signed a Record of
2 Decision, or Decision Record, to offer that
3 coal for lease, we can move forward with
4 those as well.
5 Those pending applications that we
6 haven't signed a decision on, we can continue
7 to process, but we'll just be deferring a
8 lease sale until we are done with this
9 Programmatic Environmental Impact Statement.
10 So really the applications that are
11 affected by this coal lease pause are just
12 anything new coming in the door while we're
13 under this programmatic review.
14 So it makes sense, so that we are
15 looking at ways to improve the Federal Coal
16 Program, that we shouldn't be considering new
17 leases if we've identified areas that need to
18 be analyzed during this Programmatic
19 Environmental Impact Statement.
20 So the last thing on that is that it's
21 important to note that if something were to
22 happen where an operator needs coal that they
23 hadn't anticipated and can show that it's
24 really an emergency, we will consider those
25 lease applications as well.

1 So there is a lot of checks and
2 balances built into this pause that should
3 allow everything to move forward so that
4 we're not having a number of companies that
5 are running up against not having enough
6 federal coal resources to continue mining.
7 It's really just those new mines or
8 those new applications that are affected by
9 the pause.
10 So getting into the Programmatic
11 Environmental Impact Statement, I mentioned
12 that last year, last summer, we held a series
13 of listening sessions across the United
14 States where we asked for your input on what
15 we can do to modernize the coal program.
16 There were a number of areas that were
17 identified from your comments that we have
18 asked for specifically your comments and
19 thoughts on during this programmatic
20 evaluation.
21 So I want to tee those up a little bit
22 here and give you a little bit background on
23 some of the questions that we have for you.
24 Now, it's important to note that the
25 full set of issues that we're going to

1 discuss or that we're going to analyze in the
2 PEIS will come out of this process, this open
3 scoping process that we have with you. So we
4 don't expect this to be the full sleet, we
5 just know that these are some of the
6 questions that we've already identified as
7 areas we would like to hear comment on.
8 So areas like how, when and where to
9 lease. Examples should we be considering
10 holding scheduled lease sales the way we do
11 for oil and gas, or should we be holding
12 those sales during times when the market is
13 higher so that we are maximizing that fair
14 market value of the bonus bid.
15 Where should we be considering leasing
16 or not to lease based on that landscape level
17 view approach that we have.
18 Does our current unsuitability criteria
19 which are a set of screens that we use to
20 identify areas that we do not want to see
21 coal leasing consideration, are those screens
22 adequate for addressing those questions of
23 where or where not to lease?
24 Fair return. This is another question
25 that we would definitely like to get your

1 input on. There are three streams of revenue
2 from the Federal Coal Program, bonus bids,
3 rents and royalties. Are they adequately
4 securing a fair return for the American
5 public? How should those components be
6 calculated in the overall picture of the fair
7 return? And should externalities be
8 considered as part of that calculation? And
9 if so, what and how should we do that?
10 Climate impacts. How can we best
11 measure and assess the climate impacts of
12 continued Federal coal production and
13 transportation and combustion? What are
14 potential substitution effects that may occur
15 to any changes that we make to our program?
16 Will we see increased production from
17 non-Federal lands?
18 How may BLM best ensure no unnecessary
19 and undue degradation of public lands due to
20 climate change impacts? And how do we
21 mitigate or account for those impacts? And
22 does the program, or how does the program
23 relate to the nation's overall climate
24 objectives as well as its energy and security
25 needs?

1 Of course, there are other impacts from
2 Federal coal production and transportation
3 and combustion. And what are those impacts
4 or effects on the other resources? Examples
5 of air quality or water quality, wildlife,
6 other land uses.
7 How are the impacts from mining,
8 combusting of Federal coal adequately
9 mitigated? And should standard mitigation be
10 considered at this programmatic level that
11 we're looking at here in addition to the
12 project-by-project level that we currently
13 look at those mitigation standards.
14 Socioeconomic considerations.
15 Obviously there is a number of socioeconomic
16 factors that go into a program of this size
17 and of this scale. And does our current
18 program adequately account for some of those
19 externalities that are related to the
20 production including environmental and social
21 impacts? How does our program and the
22 pricing of Federal coal affect state,
23 regional and national economies, including
24 the job markets and energy markets in
25 general?

1 And finally, what is the impact of the
2 program alternatives that we might develop
3 out of this analysis on the nation's
4 projected fuel mix and cost of electricity?
5 Exports is another topic that has
6 certainly been at the forefront of a lot of
7 the coal discussions lately and we would like
8 to hear input on this as well.
9 How should we consider actual or
10 projected exports in our leasing decisions?
11 And what potential mechanisms could we use to
12 appropriately evaluate that potential?
13 We haven't seen a lot of export over
14 the last several decades, but it's growing,
15 so how do we look at that, knowing that it's
16 more potential right now than based on some
17 of the actual figures.
18 Energy needs. You can't talk about
19 coal without talking about energy. How does
20 our program support fulfilling the energy
21 needs of the United States? How does the
22 program and pricing of Federal coal impact on
23 electricity generation, particularly in light
24 of some of the other regulatory influences
25 that are out there right now?

1 And finally, what other sources of
2 energy supply, including increased efficiency
3 of existing technology, are projected to be
4 available?
5 So these are all some of the questions
6 that we'd really like to get your feedback
7 on. And with that, I'm going to turn it back
8 over to our facilitator, Katie, and we will
9 get into our comment phase. So thank you
10 very much.
11 MS. PATTERSON: Thank you, Al. Before
12 we get started on the commenting portion of
13 the meeting, just going to go over a few
14 notes about the process and objectives for
15 today's meeting.
16 First of all, my name is Katie
17 Patterson, and I'm with Environmental
18 Management and Planning Soluations, also
19 known as EMPSI. And my job today is to help
20 make sure that your input is heard and
21 incorporated into the programmatic EIS.
22 This public scoping period lasts until
23 July 28th, and comments received after that
24 scoping period will still be considered in
25 the EIS and will also be incorporated into

1 the scoping report as practicable.
2 My job is also to ensure that we hold
3 this meeting today in a civil and inclusive
4 manner. All comments are valuable and I
5 think we all know how hard it can be to get
6 up and stand up in front of a group of people
7 and share your input, so therefore I ask that
8 we can agree to some ground rules.
9 First of all, let's be respectful of
10 each other and diverse opinions. We ask that
11 you keep your clapping and jeering down. Not
12 only can it be disrupting to the meeting, but
13 it also delays us from getting to hear
14 additional comments from people who came here
15 to speak today.
16 Remember that everyone does have a
17 right to their opinion and it's okay to
18 disagree, that is, after all, what makes
19 American great.
20 And again, if you have any special
21 needs, for example, if you can't come up to
22 the microphone, but would like to speak,
23 please feel free to find someone with a name
24 badge and we'll be to happy to help. We have
25 a roving microphone that can come to you in

1 the audience if you need.
2 As Al mentioned, this is a scoping
3 meeting in support of the Federal Coal
4 Program, PEIS, governed under the National
5 Environmental Policy Act. Scoping is a
6 valuated term and it refers to the early and
7 open process for identifying issues, actions,
8 alternatives and impacts that should be
9 considered in EIS.
10 This is a programmatic EIS. And a
11 programmatic EIS is a formal opportunity for
12 extensive public input and comment. It
13 evaluates the effects of a broad program such
14 as the possible reforming of the Federal Coal
15 Program.
16 If you have more questions about this
17 process, there is a poster in the side of the
18 room that lays out some more of the steps of
19 the process. And of course, BLM staff in
20 attendance can answer questions about the
21 process as well.
22 While the format of today's meeting is
23 similar to the listening sessions that were
24 held last year, it is different in a few
25 ways. The purpose of this meeting is to help

1 define the scope of the PEIS and inform the
2 analysis of that PEIS. Helpful comments are
3 ones that combine data or information about
4 issues that should be analyzed in the PEIS,
5 or specific concerns that should be assessed.
6 I want to make clear that no decisions
7 will be made at today's meeting. We are at
8 the beginning of a process that could take up
9 to three years, and there will be numerous
10 opportunities for public involvement
11 throughout that process.
12 All comments count equally regardless
13 of the number of times that they are heard or
14 received, so it's less like a voting process
15 and really we are just asking for each
16 person's comment.
17 All input received during this scoping
18 period will be reviewed, analyzed and
19 included in a scoping report that will be
20 published later this fall.
21 I want to also introduce our court
22 reporter who is here today, Deb. She is
23 going to be producing a transcript of today's
24 meeting, so it will be recorded in that
25 manner.

1 And as a reminder, we are also live
2 streaming over the web.
3 I'll make a quick note about the
4 speaking process. This is similar to the
5 guidelines that you may have heard when you
6 received your speaking card and then we will
7 be able to get started.
8 We do want to accommodate as many
9 people as possible today. We have given out
10 about 30 speaking cards so far and we'll be
11 continuing to give them out throughout the
12 day to anybody that would like to speak.
13 In order to accomplish this, we have
14 the following process. We did distribute
15 speaker cards on a first come, first serve
16 basis. If you want to speak, but do not have
17 a card, please go back to the table, the
18 speaker card table at the back of the room to
19 get one.
20 Each speaker card has a number in the
21 upper right-hand corner, and it's your ticket
22 to speak. So make sure you hold onto it once
23 you receive that card. We will be calling
24 people up in order or their numbers in groups
25 of five at a time.

1 When your number is called, you can
2 proceed up to the microphones. We have two
3 microphones at the front of the room.
4 Microphone 1 is here on my left with Amy and
5 we have chairs reserved for each group of 5
6 as they get called up. Microphone number 2
7 is on my right with Molly. Amy and Molly
8 will be helping you without when you get down
9 to the microphone. We also do have a
10 cordless microphone, so again, if you cannot
11 make it up to the microphone, just raise your
12 hand when your number is called, and we will
13 be happy to bring it to you.
14 We do ask that you, you have to be
15 present in order to speak. So if you are
16 going to leave and come back, please make
17 sure that you give plenty of time before you
18 anticipate being called up. We do also want
19 to hear directly from you, so as neat as
20 technology can be, please don't bring up your
21 cell phone for a person commenting through
22 Skype or Face Time or anything. We would
23 like to hear from you in person.
24 When you begin your comment, please
25 state your name and the organization that you

1 are representing, and speak clearly and
2 slowly into the microphone for our court
3 reporter.
4 We have the microphones facing forward
5 and this is especially important not only so
6 that our panel can hear you more clearly, but
7 also so that the court reporter can
8 accurately capture your comments.
9 Each person will have a maximum of
10 three minutes to speak, which will be
11 indicated by a digital count down timer on
12 each of these two screens. The timer looks
13 like this. When it gets to zero, it's going
14 to play a little chime. I know it can get a
15 bit annoying, sorry about that, that's just
16 how the timer works. But it also helps as a
17 reminder to please go ahead and wrap up your
18 comment at that time.
19 If people respect the three minute
20 limit, that will also help us make sure that
21 we can hear as many commentors today as
22 possible. So the timer is here to just help
23 you keep track of your time.
24 If you do hit your three minute limit,
25 we are not going to jump up and cut you off

in the middle of a sentence. So don't worry about that, go ahead and finish your thought.

If you do keep going on after that, we will ask you to take your seat out of respect for the other attendees.

We are going to accommodate as many speakers as time allows today. However, receipt of the speaker card does not guarantee your opportunity to speak.

Based on the number of folks we have signed up so far, I'm very confident that we will be able to hear from everyone who is here today.

Speaking times cannot be taken by multiple recipients, so please don't take multiple cards and give them to one person and have six minutes. Each person is just three minutes per person.

If you have written comments that you are speaking from, we encourage you to leave those with us as well. We have a comment box at our commenting station in the back corner of the room. You can submit any written comments, not just ones that you use to speak.

1 And there is information there about
2 how you can submit your comments after
3 today's meeting.
4 In the interest of time today, there is
5 no need to reiterate comments that have
6 already been made. If you would like to come
7 up and simply state your support for someone
8 else's comment, you are welcome to come up
9 and just say "ditto" or whatever you would
10 like to express that support.
11 Lastly, we do have a long meeting
12 schedule today and our panelists have been
13 very gracious to come, but they may need to
14 go out and take a quick break from time to
15 time. So if they step down off the stage,
16 just know that they will be back shortly and
17 let's be understanding of that, please.
18 I'm going to turn it back over to
19 Barbara to introduce a member of our
20 Congressional delegation.
21 MS. BARBARA EGGERS: Thank you, Katie.
22 So I'd like to introduce Jeremy Honhold who
23 is here with U.S. Congressman's Keith
24 Rothfu's office. We appreciate you taking
25 the time here today.

JEREMY HONHOLD: Good afternoon. My name is Jeremy Honhold. I am speaking on behalf of Congressman Keith Rothfus. Since the Congressman could not join us today, he asked that I convey his concern that changes to the Federal coal leasing program could further damage the already struggling coal industry.

As we all know, anti-coal regulations have contributed to the loss of thousands of jobs in the coal industry. Roughly 40 percent of U.S. coal comes from federal lands the prospect that additional red tape and prices artificially inflated by the federal government could impact this significant segment of domestic coal production should worry all who support good jobs, affordable energy and vibrant U.S. industry.

As you consider possible changes to the Federal Coal Leasing Program, Congressman Rothfus urges you to be mindful of the overwhelming benefits provided to the American people. The coal industry supports family-sustaining jobs nationwide and fuels a significant portion of our country's energy

1 supply. Any efforts to reduce the amount of
2 coal produced on federal lands would have a
3 significant and negative impact on American
4 jobs and our energy security.
5 As you know, under Secretarial Order
6 3338, the Federal government has imposed a
7 moratorium on further coal lease sales
8 pending completion of the Programmatic
9 Environmental Impact Statement. In doing so,
10 BLM is putting 65,000 jobs at risk and
11 threatening further hardship in coal
12 communities.
13 As representative from a district with
14 a long history of mining, and one that has
15 suffered as a result of Washington's
16 job-killing policies, Congressman Rothfus
17 cannot sit silently as regulators threaten to
18 impose further hardships on the American
19 people.
20 Though Pennsylvania's 12th District
21 does not contain large Federal land tracts,
22 it is home to many miners, equipment
23 suppliers and other firms that depend on a
24 healthy coal industry for their livelihoods.
25 Accordingly, we are concerned that any

1 additional regulations from Federal agencies
2 that seem designed to keep coal in the
3 ground. These regulations have caused
4 lasting damage to the industry nationwide and
5 eliminated family-sustaining jobs in
6 communities from Appalachia to the west
7 coast.
8 On behalf of the Congressman, I'd like
9 to thank you for the opportunity to deliver
10 my remarks today.
11 MS. PATTERSON: Thank you, Jeremy. We
12 are going to go ahead and get started with
13 the public commenting portion of the meeting
14 now. So group number 1 through 5 come down
15 to microphone number 1. Group 6 through 10
16 please come to microphone number 2. We will
17 start with speaker number one on microphone
18 1.
19 JOSHUA MANTELL: My name is Joshua
20 Mantell. I'm the Carbon Management Campaign
21 Manager for the Wilderness Society. Thank
22 you to Director Kornze, the Department of
23 Interior, the Bureau of Land Management, for
24 the opportunity to speak here today about the
25 Federal Coal Program and the need for reform.

1 The Federal Coal Program is broken.
2 That's not just me saying that. That's what
3 reports from the Government Accountability
4 Office, the Department of the Interior,
5 Inspector General and numerous other advisors
6 have said over the last 30 years.
7 You have listened and we thank you for
8 hearing those calls. The question now is
9 what do we do about this. There are a
10 multitude of issues that stretch back long
11 before this administration that need to be
12 resolved.
13 Number one, we are currently leasing
14 coal at the behest of companies and the coal
15 industry. We need federal land managers and
16 experts to be in charge of where, when and
17 how we lease coal.
18 Two, federal taxpayers are not
19 receiving their fair share for the use of
20 their land and resources. Right now coal
21 companies are paying effective royalty rate
22 of 4.9 percent according to one study, and 90
23 percent of coal leases have a single bidder
24 since 1990. We need to raise the royalty
25 rate for surface mined coal, and raise the

minimum bid so that we are receiving what is due.

Three, the impacts of coal on the land, water, local communities and our climate are not being accounted for at any point during the leasing process. These impacts should be accounted for and mitigated before a lease is approved.

And four, there is a terrible record of reclaiming old mines. We should not be leasing to companies that have a poor track record of cleaning up land. This is why a comprehensive look of the entire coal program is so important. We cannot fix these problems without a clear review. We know the problems exist and that work needs to be done to find solutions.

But the fact is that the current coal program is costing taxpayers, hurting our share of lands and damaging our climate. These lands and the resources underneath belong to all of us. We all deserve a say in how these resources are managed.

It's also incumbent on us to remember that these shared resources don't just affect

1 our lands. They affect our health, our
2 budget and our shared planet. What worked
3 for the Federal Coal Program in 1984 after
4 the last review, which was before I was born,
5 by the way, not to mention 1920 when the Act
6 was passed, does not necessarily work in
7 2016.
8 We have some new technologies, like
9 renewable energy, that is getting cheaper and
10 more prevalent every day.
11 We understand so much more about
12 climate change and we know we have to do
13 something about it now. And Americans are
14 valuing our shared lands for so much more,
15 with the Department of Interior reporting
16 contributed $45 million in economic output
17 for recreation and conservation just last
18 year. These are the values that should drive
19 our public lands decision.
20 Thank you again for your important work
21 on this issue and I thank you for your time.
22 LARRY SELTWEIGER: I'm Larry Seltweiger
23 and I'm president and CEO of Penn Future, a
24 state wide organization committed to a clean
25 energy economy and sustainable communities.

1 Since 1971 I've been involved in
2 various levels around the issue of coal. I
3 worked for the Commonwealth of Pennsylvania
4 and oversaw a $200 million program in the
5 '70s to reclaim strip mines in Pennsylvania.
6 And it's been my experience that many
7 communities in this state and across the
8 country have found themselves without the
9 jobs, pensions or thriving economies that
10 they were promised by big coal companies that
11 went bust.
12 Communities here and throughout the
13 nation have struggled to survive with scarred
14 and subsided lands, poisoned waters and wide
15 spread and severe ecological damage from coal
16 mined on our public lands, often in a single
17 bidder arrangement, causes great harm to the
18 communities while ships go to China to
19 produce cheap goods to undercut U.S. workers
20 and harm our economy.
21 I believe that our coal dependence over
22 the past cannot be our future. Simply
23 stated, it's incongruent with protecting the
24 planet.
25 Reforms of the leasing and production

1 of coal on our national public lands and
2 tribal lands are long overdue. They have not
3 been updated for 30 years and they reflect an
4 urgent priority for any carbon emissions.
5 Government and independent
6 investigators say American taxpayers are
7 being short-changed because of the Federal
8 Coal Program's flaws. These include
9 inconsistencies in estimating coals, fair
10 market value and failure to consider value of
11 exporting the coal.
12 A 2012 independent report estimates
13 that U.S. Taxpayers have lost nearly 30
14 billion in revenue over the last 30 years
15 because BLM has failed to get fair market
16 value in the coal mined just in the Powder
17 River Basin.
18 As coal companies declare bankruptcy,
19 including even giants like Peabody, American
20 taxpayers are on the hook literally for
21 billions of dollars to clean up and reclaim
22 vast expanses of public lands. Pennsylvania
23 is home to the largest longwall mining
24 operation and the largest coking facilities
25 in the nation, yet we have over 3,000 miles

1 of streams and rivers that have been polluted
2 by mine drainage, and we live with one-third
3 of the abandoned mine lands in the United
4 States.
5 We have seen the old story played over
6 and over again. Coal companies give single
7 bid sweetheart deals, but go bankrupt
8 anyways. And clearly today science is
9 telling us that the problem is much worse
10 than these localized impacts, as coal
11 generated electricity is a leading cause of
12 greenhouse gas emissions and climate change.
13 I would like to point out that our
14 President, this week, is meeting with the
15 head of Canada and also Mexico to cut our
16 emissions by 50 percent and that's not
17 possible if we continue to lease coal in this
18 country. Thank you.
19 MS. PATTERSON: Thank you.
20 AUTUMN HANNA: Good afternoon. My name
21 is Autumn Hanna and I'm Senior Program
22 Director at Taxpayers For Common Sense, a
23 national non-partisan budget watchdog
24 organization that for the last two decades
25 has worked to achieve sound fiscal policy

1 across the federal government.
2 I'm especially pleased to provide
3 comments to the Bureau of Land Management on
4 the Federal Coal Program here in my home
5 town. The BLM leases coal owned by all
6 federal taxpayers and the management of the
7 Federal Coal Program is an important issue
8 here in Pittsburgh and across the country.
9 For the last 15 years I have worked
10 with Taxpayers For Common Sense to actively
11 ensure that taxpayers receive a fair return
12 on all resources developed on federal lands
13 and waters, from hard rock minerals, oil, gas
14 and coal to wind and solar.
15 Coal is a central part of our nation's
16 energy mix and over the last decade, the BLM
17 managed leases that produced approximately
18 4.3 billion tons of coal, resulting in $9.5
19 billion in revenue collections by the United
20 States.
21 These funds are an important source of
22 revenue for the country. And while the
23 Department of Interior is legally required to
24 provide a fair return to taxpayers for the
25 development of the coal we all own, the

1 leasing program has been plagued with
2 problems. Further, it fails to meet the
3 goals set forth during the last review under
4 the Reagan Administration.
5 In 2013 my organization released a
6 study on fair market value of federal coal.
7 We found that the current coal program was in
8 need of significant reform and responsible
9 for billions in taxpayer losses.
10 For example, by supplanting the
11 competitive system envisioned by Congress
12 more than 40 years ago, the current Lease by
13 Application system has failed taxpayers. The
14 system improperly distorts the valuation of
15 lease tracts, brings in significantly reduced
16 bids, and shrouds crucial information in
17 secrecy.
18 There's little, if any, competition
19 under the leasing program. Incredibly, the
20 Government Accountability Office found that
21 90 percent of lease sales in the Powder River
22 Basin from 1990 to 2013 has only one bidder.
23 The game is essentially rigged: under the
24 current system, individual companies often
25 draw the tracts for leasing themselves.

1 In the absence of competition, the BLM
2 must accurately calculate the fair market
3 value of federal coal. Here, too, the BLM
4 has failed.
5 Before determining the fair market
6 value, the Secretary of Interior must provide
7 an opportunity for public comments. But it
8 is impossible to provide feedback when the
9 BLM refuses to share its valuation data or
10 methodology. Final lease sale numbers are
11 often undervalued and can be used as
12 comparables for new tracts, locking in a
13 rolling system undervalued leases and
14 taxpayer losses.
15 Finally, changes in the marketplace must
16 be considered when calculating fair market
17 value since coal exports to foreign markets
18 have more than doubled in the last ten years.
19 As we detailed in our comments to DOI last
20 year, coal valuation at the initial point of
21 sale may not truly capture the value of the
22 taxpayers' resource.
23 The BLM has a responsibility to
24 taxpayers to ensure they are fully
25 compensated for the sale of all public

1 resources. In the face of an ever-rising $19
2 trillion federal debt, taxpayers can afford
3 nothing less.
4 Thank you for the opportunity to
5 present comments here today.
6 JIM LYON: Good afternoon. I'm Jim
7 Lyon, Vice President, National Widelife
8 Federation, a national organization with more
9 than 6 million members and supporters and
10 federation family of 50 state affiliate
11 organizations.
12 Two weeks ago our state affiliates
13 unanimously approved a resolution calling for
14 a comprehensive reform of the Federal Coal
15 Program. We will be submitting extensive
16 technical comments before the deadline.
17 So I'm just going to hit on a couple of
18 high points today. The Federal Coal Program
19 is broken from soup to nuts, and we encourage
20 you as you approach this to look at it
21 comprehensively and cohesively. Please look
22 at the program from cradle to grave; lease
23 site, bid applications, royalty, mine plan
24 adequacy, reclamation bonding, reclamation
25 integrity, post mining productivity, bond

1 release and of course carbon reduction.
2 On a couple of these points, the
3 leasing application process is neither
4 competitive nor strategic, and as we know the
5 12 and a half percent royalty is woefully
6 below fair market. The study found that coal
7 leases have attracted only one bidder at
8 rocks bottom prices.
9 Recently the Council of Economic
10 Advisors reported that companies used
11 questionable loophole. As Larry just pointed
12 out, we just lost $30 billion in royalty
13 rates. So a future program must ensure that
14 these sites are competitive bids, royalties
15 must be at fair market and close loopholes.
16 And the whole point of this is the
17 mine. Mining performance, the leases show
18 failure fail to reclaim. Our report recently
19 found that of the 450 square miles of mined
20 land in the Powder River Basin, only 46
21 square miles have been fully reclaimed to
22 final bond to these standards. It's doubtful
23 these lands are going to be fully reclaimed
24 because of damaged water. How far
25 reclamation has lagged behind performance and

1 company's financial health is in trouble.
2 This is not ultimate use, this is permanent
3 damage.
4 As you know, the majority of these,
5 federal coal lies under prairies, fragile
6 habitat that's home to imperiled sage grouse,
7 mule deer, elk, pronghorn and 300 other
8 species. Can take decades to reclaim these
9 mines to pre-mining conditions.
10 Another recent study we did of wildlife
11 herds in and outside of fossil fuel
12 extraction zones of the Powder River showed
13 that only one out of 8 mule deer herds and
14 only 3 out of 11 pronghorn herds are healthy.
15 So the coal leasing must not result in
16 permanent damage to public lands and water.
17 It must include repercussions for wildlife.
18 I'd go on about bonding, but we all
19 know that's a shredded program that needs
20 seriously to be overhauled so that there is a
21 safety net. So thank you.
22 MITCHELL C. HESCOX: Good afternoon.
23 Thank you for allowing me to speak. I am
24 Mitchell Hescox, I am president and CEO of
25 Evangelical Environmental Network. I'm a

1 native of Pennsylvania, currently reside
2 here.
3 EEN, or Evangelical Environmental
4 Network, represents over 2 and a half million
5 pro-life Christians around the country who
6 take an action and support some clean energy,
7 climate change and clean energy future. We
8 also represent over 70,000 people here in
9 this Commonwealth of Pennsylvania.
10 For us, dealing with energy and
11 pollution is what we call a matter of life,
12 the impacts it has on our children and our
13 entire population.
14 I'd like to state for the record that I
15 agree with the first four speakers, and they
16 could have had my comments written down, so I
17 will just tell stories then.
18 I'm probably one of the few people here
19 that actually live in a coal community. I
20 actually worked in the coal industry for 14
21 years and grew up in a little town called
22 Lamburg (sp), Pennsylvania. Less than a 100
23 yards from my back yard were unreclaimed coal
24 strip mines. They were state owned lands.
25 Still to this day they have never been

1 reclaimed.
2 Just a couple miles on top of a place
3 in Cambria County, which was called Jackson
4 Ridge, my dad's favorite hunting ground. It
5 was mined back in the '60s as well and to
6 this day has never been reclaimed. It spews
7 out toxic mine waste into the forest,
8 destroying trees, wildlife and pollution that
9 affects our children right now.
10 So in support of the comments and what
11 I would like to make are two-fold. One is
12 was mentioned, we can no longer afford or
13 allow self-bonding by any coal company. The
14 amount of bankruptcies are there, are
15 witnessed around the country. It is that
16 lack of bonding and the externalities that
17 affect, has to be a way to accumulate those
18 external costs.
19 For years both utility industry and the
20 coal companies themselves have privatized the
21 profits of our coal industry and externalized
22 the cost on our children's lungs, hearts and
23 brains. Not to mention the effects of
24 climate disruption and other things.
25 So I would urge you and as the people

of faith from all around this nation and the Commonwealth, let us move towards a clean, energy economy, retrain our workers, but most importantly for your benefit, let us make sure that we no longer allow mines not to be reclaimed and our waters poisoned. Thank you very much.

MS. PATTERSON: Thank you. Group 11 through 15, please come down to microphone number 1. We will move to microphone number 2 for speaker number 6.

ROBIN MANN: Hello, my name is Robin Mann and I'm a member of the Sierra Club Board of Directors and serve as Vice President. Our organization will be submitting formal comments.

So I'm speaking here on my own behalf. But I'll say that the organization is committed to driving rapid progress in confronting carbon pollution and speeding the country to a clean energy economy, 100 percent clean energy economy on behalf of our 2.4 million members and supporters.

I live in Delaware County, Pennsylvania, and I work closely with

1 Environmental Justice Community in southwest
2 Philadelphia. It is increasingly vulnerable
3 to climate induced storm surge and sea level
4 rise.
5 I'm also a grandmother of three, three
6 small children, two of whom live in coastal
7 Maine community coping already with sea level
8 rise, but also seeing the future liability of
9 the lobster and shellfish industry, its main
10 economic mainstay under threat from carbon
11 pollution induced ocean warming and
12 acidification.
13 President Obama has shown strong
14 leadership in confronting climate, climate
15 change with the Climate Action Plan and his
16 administration's emission reduction
17 initiatives, especially the Clean Power Plan
18 and revision of the CAFE standards.
19 States and cities are making
20 significant strides with emission reduction
21 policies and programs. Hundreds of
22 coal-powered power plants are slated for
23 retirement or renewable energy is coming
24 online.
25 But I share the deep concern expressed

earlier that we are not moving rapidly enough to avert catastrophic climate impacts that will most definitely burden and potentially displace the most vulnerable communities, especially low income and people of color communities, and will rob my grandchildren of their generation of the future they deserve.

The Federal Coal Leasing Program is overdue for an overhaul and is seriously flawed in numerous ways that have been mentioned. It needs taxpayer protections to be reformed, eliminate self-bonding, and it also needs climate change to be addressed formally.

In addition, the other measures that have been mentioned I will just note that given the urgency of rapid progress in transitioning the economy off fossil fuels to clean, renewable energy, BLM must evaluate the alternative of ending the program all together to a planned transition that leaves the remaining coal in the ground and remaining lands in tact with their environmental and social benefits and provides a transition for the communities and

1 workers dependent on it. Thank you very
2 much.
3 MS. PATTERSON: Thank you.
4 PATRICE TOMCIK: Hello. My name is
5 Patrice Tomcik, and I live in Gibsonia, PA,
6 about 30 minutes north of Pittsburgh. I'm
7 here as a mother of two young boys, member of
8 grass roots organization Mars Care Group, a
9 member of Protect Our Children Coalition, and
10 a member of Mom's Clean Air Force.
11 What all these organizations have in
12 common is that we fight for our children's
13 health. I'm here today because I know that
14 every stage of the coal life cycle impacts
15 human health and the pollution from the
16 mining and burning of coal in power plants
17 has an even greater impact on children
18 because they are vulnerable population.
19 Developing babies and children are
20 vulnerable because they have body systems
21 that are not mature and are still developing.
22 The lungs and brains continue to develop
23 until the early 20s and exposure to harmful
24 pollution can cause damage to these organ
25 systems.

1 As a parent, I'm concerned about the
2 harmful pollution created from the burning of
3 coal and power plants in my community. I
4 live downwind from one of the largest coal
5 plants.
6 I'm particularly concerned about what
7 my children are breathing in. The pollutants
8 that are emitted are particulate matter,
9 nitrogen oxide, sulfur dioxide and dangerous
10 heavy metals such as mercury, lead and there
11 are many more.
12 This pollution can effect our
13 children's health by causing ground level
14 ozone response, which affects lung tissue,
15 cause respiratory diseases, adversely affect
16 the normal lung development of children and
17 exacerbate asthma attacks. Asthma is a
18 leading cause of missed school days among
19 children ages 5 to 17.
20 Exposure to mercury is a particular
21 concern for pregnant women and nursing
22 mothers and young children because mercury is
23 a toxic heavy metal that can cause brain
24 damage, impairs learning and growth.
25 Even people who do not develop illness

1 directly from whole foods find their health
2 impacted due to coal's contribution to carbon
3 dioxide and causing climate change.
4 The health risk from climate change are
5 especially serious for children, elderly
6 those who are immune compromised. The direct
7 effects of climate change include increased
8 illness and deaths from extreme weather and
9 heat stress. Children are especially
10 vulnerable to heat exposure because they
11 don't have fully developed temperature
12 regulation mechanisms within their bodies.
13 The indirect effects of climate change
14 are malnutrition, food insecurity, anxiety,
15 depression and increase of insect-borne
16 diseases like the zika virus.
17 The BLM must consider the climate
18 consequences and health impacts on our
19 children and future generations of leasing
20 public lands for fossil fuel extraction. We
21 need to start developing the capacity today
22 to generate energy from clean, safe and
23 renewable sources for the health of our
24 children today and future generations. Thank
25 you.

1 MS. PATTERSON: Thank you.
2 ED PERRY: My name is Ed Perry. I'm an
3 aquatic biologist working for the National
4 Wildlife Federation, on their clean energy
5 and climate change campaigns. The monetary
6 benefits of mining coal are well known, but
7 what I hope your EIS will focus on is the
8 considerable cost to human health, our
9 economy, our nation's wildlife by our
10 government's continued support for coal
11 mining on public lands.
12 Climate scientists have firmly
13 established that fossil fuels are causing the
14 planet to heat up, lead to massive wildfires,
15 more intense hurricanes, loss of wildlife and
16 public health problems. These costs
17 generated by these environmental disasters
18 are being borne by the people who are being
19 harmed, not by the companies who are creating
20 this harm.
21 Already, wildlife are seeing the
22 effects of climate change all across our
23 great country. And here in Pennsylvania
24 scientists forecast that our state tree, the
25 hemlock, our state fish, the brook trout, and

1 our state bird, the rough grouse, will be
2 gone in the next 90 years unless we take
3 action to reduce carbon pollution.
4 This costs and this loss of our
5 biological heritage needs to be considered
6 and someone should be bearing that cost.
7 The adverse impacts on human health are
8 also substantial. Just one example, every
9 body of water in our country is contaminated
10 with mercury. And here in Pennsylvania, the
11 State of Pennsylvania lists an additional 86
12 streams and lakes, thousands of stream miles
13 and thousands of acres of lakes that are so
14 contaminated they recommend women of
15 childbearing age only consume one meal of
16 fish per month.
17 Finally, I hope you consider what the
18 impacts on our public lands is costing us.
19 As you well know, coal use is declining
20 rapidly. And here in Pennsylvania coal
21 companies going out of business are infamous
22 for not cleaning up after themselves. And as
23 a result, we have thousands of miles of
24 streams that are devoid of aquatic life that
25 we will have to bear the cost of restoring.

1 So question is if western coal
2 companies go bankrupt, is your bond
3 sufficient to restore our public lands? Or
4 once again are we going to be stuck with a
5 bill for that cleanup?
6 And finally, when we consider the
7 direction our country is going and the
8 emphasis the President is putting on moving
9 to clean, renewable energy, you have to
10 wonder why we are continuing to allow coal
11 mining on our public lands. You have to
12 wonder why we are continuing to do that.
13 And as I understand it, this EIS is
14 only going to focus on future leases, but any
15 business today, when it's recognized that
16 they are causing damage to public health or
17 pollution problems, they have to clean up
18 their act. So I strongly recommend that this
19 EIS, whatever you come up with, also applies
20 to existing coal operations. Thank you.
21 MS. PATTERSON: Thank you.
22 KHARI MOSLEY: Good afternoon. My name
23 is Khari Mosley. I'm the Pennsylvania
24 Regional Program Manager for Blue Green
25 Alliance. In 2006 the United Steelworkers

and the Sierra Club formed the Blue Green Alliance with the belief that creating good jobs and protecting the environment were not mutually exclusive. We can and must do both.

The Blue Green Alliance believes that the concentrated overall of this program is not only an opportunity to fix a broken system, but also an opportunity to take a hard look at how coal-dependent communities, regional economies and individual workers can transition to new economic models.

The review of the federal coal leasing systems must evaluate BLM authority and opportunities, as well as actions of other agencies and Congress could take, to help ensure a just transition for workers and communities to a clean energy economy. Such actions should include robust investment in community economic development, protection of worker livelihoods, and development of new tax revenue sources for local economies.

A combination of factors is forging a new reality where lower gas prices, rising coal costs, and the competitive cost of renewable energy sources are driving a shift

1 to clean energy. The new energy technologies
2 coming on-line will create hundreds of
3 thousands of new jobs and will continue to do
4 so in communities across the country. But,
5 as our nation makes this transition, some
6 workers and communities may be impacted.
7 Coal mines, coal-fired power plants,
8 coal transportation infrastructure, coal
9 handling facilities and their associated
10 supply and maintenance industries are often
11 the lifeblood of small towns, providing
12 significant employment and contributing to
13 their communities' tax base. Moving toward
14 clean energy could result in fewer jobs at a
15 local level and a reduction in the tax stream
16 going to local governments in these
17 communities.
18 Therefore, we must consider what
19 authority and opportunities the federal
20 government possesses, having succeeded in
21 capturing a fair return for extracted coal,
22 to ensure that some portion of that increased
23 return is put to use ensuring a just
24 transition for workers, communities and
25 regional economies occurs.

1 BLM has sought comment as to whether
2 the extraction of fossil resources from
3 federal Lands is consistent with U.S. climate
4 goals.
5 In order to better understand and
6 manage carbon emissions from public lands,
7 the U.S. Geological Survey intends to
8 establish and maintain a public database to
9 account for annual carbon emissions from
10 fossil fuels developed on federal lands. The
11 Blue Green Alliance supports this effort to
12 ensure a transparent process that accounts
13 for costs, which would otherwise be
14 externalized.
15 In summary, we thank the Bureau of Land
16 Management and the U.S. Department of
17 Interior for seeking to improve the federal
18 coal leasing system and look forward to
19 continuing to work with your agencies on the
20 eventual implementation of a modernized and
21 improved system both to serve the interests
22 of American communities, workers, taxpayers
23 and our national environment. Thank you.
24 MS. PATTERSON: Thank you.
25 PATRICK GRENTER: Hello, my name is

1 Patrick Grenter. I'm the Executive Director
2 of Center for Coalfield Justice. I will be
3 the first person to say "ditto." So many
4 people have come up and spoke on issues that
5 I think are important.
6 Particularly, I want to echo statements
7 made by people for frontline communities.
8 The Center for Coalfield Justice works
9 primarily in southwestern Pennsylvania,
10 Washington. We are an environmental justice
11 organization that work on issues primarily
12 related to underground coal mining and
13 hydraulic fracturing.
14 Washington and Greene Counties are
15 communities where almost no one owns the
16 rights to their coal. Greene County just in
17 the past couple years was the third largest
18 coal-producing county in the country, home to
19 the largest underground coal mine in the
20 country. These are frontline communities
21 directly impacted by coal every single day
22 for people who live there.
23 So not having the rights to their coal
24 means so many people are forced to live with
25 the harms of the coal industry, destroyed

1 streams, displaced communities, reduced tax
2 base, destroyed property values.
3 These are facts of lives for people who
4 have to live in and around coal.
5 Now, we, as American taxpayers, have an
6 opportunity here with the BLM to reform this
7 coal program and to change the view. If we
8 do decide to continue leasing, I think there
9 is a serous examination, particularly given
10 that there is a 20 year backlog of leases to
11 eliminate future coal lease entirely,
12 particularly if we are truthful in our
13 concern about climate change.
14 If we do decide to continue coal
15 leasing, there must be increased royalties.
16 Coal companies should have to pay the full
17 cost of their activities. There is no such
18 thing as affordable, cheap coal.
19 The question is who pays for it? What
20 we have seen all too often is communities
21 living in and around coal are forced to pay
22 for that cleanup or forced to pay for the
23 activities of coal through health costs and
24 other activities like that.
25 What we have seen is those liabilities

1 and external costs of coal are internalized
2 on companies, they cannot compete with
3 renewables, and this process is just slowing
4 the effect the transition in the economy,
5 which is essential for our country's future.
6 Thank you.
7 MS. PATTERSON: Thank you. Group 16
8 through 20 come up to microphone number 2
9 now. We will move to microphone number 1 for
10 speaker number 11.
11 LAURA BURNS: Thank you for the
12 opportunity to speak today. My name is Laura
13 Burns. I'm a field organization with Moms
14 Clean Air Force. I'm also a toxicologist, a
15 Republican and a conservative Christian. On
16 top of all that, I'm a parent.
17 And as a parent, I understand these
18 decisions you face are often quite heavy, but
19 I also ask that while you make these
20 decisions you consider the health of the
21 children who will be affected by them for the
22 reminder of their lives.
23 President Obama has publicly
24 acknowledged the need for America to reduce
25 our emissions. In addition, to overusing

fossil fuels that pollute our atmosphere by adding climate driving chemicals, we have chosen to turn a blind eye to the environmental damage that is created. For too long, piecemeal evaluations and lease-by-lease comparisons to global greenhouse gas concentrations misrepresent the nature of a very real climate crisis and thereby downplay the extent to which coal leasing contributes to the problem.

We can no longer accept this naive view of what coal pollution does to our environment, our health and our economies. When our environment is damaged, our climate is damaged.

Already, 2016 had been the hottest year on record. Pollution from coal is a great contributor. In January 2015 a peer-reviewed study in Nature concluded that in order to avoid the worst effects of climate change, one third of all oil reserves, half of all gas reserves and more than 80 percent of coal reserves worldwide must remain in the ground through 2050.

We ask that the BLM address the evident

1 inconsistency between the conclusions of the
2 best available climate science and the
3 agency's continued expansion of the Federal
4 Coal Program. Thank you.
5 MS. PATTERSON: Thank you.
6 BILL MYERS: Can you hear me? Ladies
7 and gentlemen, Kate, I apologize --
8 MS. PATTERSON: Katie.
9 BILL MYERS: I don't have any pages,
10 anything that you haven't heard in years, but
11 I do have personal experiences, family -- Oh,
12 I'm Bill Myers, Dr. Bill Myers, from Gahanna,
13 Ohio. I assume you have never heard of
14 Gahanna before. It's an interesting name.
15 Again, thanks for your review of this
16 issue. I think it's long past and needs a
17 really hard look and I appreciate your
18 promise.
19 My little brother, his name is Patrick.
20 Very smart man. He is a gas turbine
21 engineer. An expert in electricity
22 generations from natural gas. He believes
23 that every ounce of fossil fuel on and in
24 Earth should be extracted and burned. He
25 really believes that.

He believes that the current global warming, which he acknowledges, is a natural cycle of Earth through the ages, and is influenced very little, or not at all, by what man does.

Patrick has a wonderful wife, two fine sons, four beautiful grandchildren. He thinks they will all be fine for years to come, comforted by electricity produced from coal and natural gas, with perhaps a little hydro power thrown in.

Patrick has recently retired from long and rewarding career in the gas industry. His last employment was as a plant manager for American Electric Power, a plant that he designed and managed in its construction and operation.

Patrick doesn't like environmental regulation. Patrick lives in West Virginia. And in spite of the clear evidence to the contrary, thinks that land reclamation is a real and effective practice. He doesn't think we need all the mountain tops.

I recently marked the 50th anniversary of entering the practice of medicine. Most

of those years were spent in a small town in Ohio, family doctor, and as a clinical associate professor on the faculty of the Ohio State University College of Medicine.

During those years I cared for thousands of patients, young and old, who suffered intensively from diseases that through the years we have learned were caused or greatly worsened by air quality. What we breathe has a direct effect on how long we live and how well we live.

I, too, grew up in West Virginia. The smell of burning coal meant warmth and comfort in the home of my early years. There was a lot we didn't know then.

Since then we have learned more. I hope you will take into account what we have learned scientifically and experiencing in the decision-making. Thank you.

MS. PATTERSON: Thank you.

MICHELLS DOYON: My name is Michelle Doyon. I lived and outdoor recreated for 22 years on the western slope in Colorado and Utah, and I've lived for 18 years now in Western Pennsylvania.

1 The federal coal leasing program needs
2 key reforms. We need climate protection
3 reform. The Federal Coal Program accounts
4 for roughly 40 percent of U.S. coal
5 production linking it to 13 percent of U.S.
6 greenhouse gas emissions.
7 BLM must assess the external cost that
8 mining and burning federal coal imposes on
9 society, disclose to the public and decision
10 makers how BLM's decisions to lease federally
11 owned coal affects the amount of wind and
12 solar generation available in the
13 marketplace.
14 BLM must evaluate an alternative that
15 would phase out federal coal leasing and
16 create a plan transition of the federal
17 government out of the coal leasing business.
18 Taxpayer protection reforms are needed.
19 Federal coal royalty rates are far below the
20 18.5 percent from offshore oil and gas and
21 have not changed in 30 years. BLM should
22 raise royalty rates and close loopholes that
23 allow companies to avoid paying agreed upon
24 royalty rates.
25 Artificially low coal leases directly

1 affect energy production competition and this
2 low cost is undercutting renewable resource
3 development.
4 We need reclamation and bonding
5 reforms. In my communities that I live in,
6 Scottdale and Mt. Pleasant, Pennsylvania,
7 there are many locations that are adversely
8 affected by old, abandoned, unreclaimed coal
9 mines, processing sites and dumps. We call
10 on BLM to prepare a thorough Environmental
11 Impact Statement under the National
12 Environmental Policy Act that critically
13 evaluates the programs's climate and economic
14 impacts for the very first time.
15 The review must be comprehensive in
16 scope. It must be transparent with public
17 participation, and the review must
18 acknowledge the scientific consensus that the
19 vast majority of fossil fuels must remain in
20 the ground in order to avoid the worst
21 effects of climate disruption.
22 Finally, BLM has a choice in whether or
23 not to approve proposed coal leases and
24 should base their decisions on the public
25 interests, the administration's climate

1 objectives and how severe the project's
2 environmental and climate consequences are.
3 Thank you.
4 MS. PATTERSON: Thank you.
5 KARINA TOY: Hi, my name is Karina Toy,
6 and while I work as an intern for the
7 Wilderness Society, I am here today to share
8 my own personal opinions.
9 As a Seattle native, I want to first
10 off thank the BLM for hosting these hearings
11 in a diverse locations across the country. I
12 also want to applaud the Department of
13 Interior's efforts to review the Federal Coal
14 Program which as we all know is extremely
15 outdated.
16 As an avid supporter of public land for
17 legacy, it seems wrong to me that we are
18 depending on regulations created before I was
19 born, before email overtook sending mail via
20 the post office, before new technology were
21 invented and the phrase climate change became
22 part of public and everyday vernacular.
23 I think it's helpful to highlight my
24 young age, but also to emphasize the fact
25 that a lot has changed since these

1 regulations were put in place, and it is high
2 time that they change as well.
3 I am an undergraduate student at the
4 Middlebury College where I focus my studies
5 on renewable energy across the globe. I am
6 also a U.S. Citizen who pays taxes. This is
7 not something that I resent, don't get me
8 wrong, but there are some things that I feel
9 is an important part to being a citizens and
10 the government, taxation through
11 representation.
12 However, in this contract we fail to
13 get a fair return on our tax. What the
14 government should be doing with the money
15 available to buy the citizens' security,
16 social services and to look out for the land
17 that we all share.
18 This is why I was so furious to learn
19 that the current coal leasing system doesn't
20 only encourage the development of coal from a
21 renewable technology, renewable technology
22 that will, preserve the land for generations
23 to come, but also that this development
24 generates a major loss to tax base.
25 In one city alone, taxpayers are being

1 deprived of $730 million per year due to this
2 failure of the federal government. However,
3 we taxpayers are not the only ones affected.
4 These policies also represent a loss of
5 government revenue that could clean up this
6 environmental and economic for my generation
7 and the generations after mine who cannot be
8 here to speak have been left with.
9 It is time to support the future and
10 start thinking about those who come after us
11 instead of ourselves. These are all steps in
12 the right direction. And I thank you all so
13 much for your work.
14 MS. PATTERSON: Thank you.
15 GREG KOCHANSKI: Hi. I thank you for
16 the opportunity to speak today. My name is
17 Greg Kochanski. My occupation is a
18 physicist, academic and recently a software
19 engineer. Today I'm here to represent myself
20 and my children.
21 When we start thinking about changing
22 leasing terms and royalties for coal mining,
23 it helps to distinguish between short term
24 and long term stakeholders. We know who the
25 short term stakeholders are because we can

1 see them and they have voices, and sometimes
2 lawyers.
3 But who are the long term stakeholders?
4 They are people who mostly haven't yet been
5 born. Scientific research has established
6 that humanity must live within an overall
7 carbon budget. Keep the Earth's environment
8 within a somewhat safe range. We can allow
9 ourselves to release no more than about 500
10 billion tons of carbon dioxide from fossil
11 fuels.
12 While that is a lot, we are burning
13 coal, oil and gas at a ferocious rate, enough
14 to release more than 36 billion ton of carbon
15 dioxide every year. Simple division. 500,
16 36 gone every year. Well, it's about 14
17 years, which is a shockingly short time.
18 If we keep going at the present rate,
19 we will burn through our safety margin in
20 2029. Fortunately, if we start ramping down
21 the fossil fuel industry now, we will have a
22 bit longer.
23 If we start now and cut fossil fuel
24 lease in half by 2029, and we can continue to
25 ramp the industry down to zero carbon by

about 2040.

And in 2040 is just about when the long term starts. My children will be in their 40s. If I have grandchildren by then, they will just be beginning their lives.

Some of you may think that's a crazy fast schedule, but it's not my schedule. It's set by the influxable laws of physics and the rate at which we are burning fossil fuels.

We are burning coal and making carbon dioxide substantially faster than natural processes can remove them from the biosphere.

Consequently, CO2 accumulates, traps heat, leads to climate change and all the other problems that everyone knows about.

The accumulation needs to stop. To do that we need to make maximum use of current resources. And we also need to design releasing rules so that there is no uncertainty about the overall fossil fuel use.

The market must understand clearly and as early as possible that fossil fuel use will be heading downwards. As we give that

signal, we need to give the market as much freedom as possible to find the low cost solution. Thank you.

MS. PATTERSON: Thank you. Group 21 through 25 can now come down to microphone number 1. And we will move to speaker number 16 on microphone 2.

RANDELL WIESENMAYER: Good afternoon. I'm Dr. Randell Wiesenmayer, professor at West Virginia University, and I'm here representing the organization 350.org and Citizens Climate Lobby.

I thank the members of the board, members of the panel, for the opportunity to express my serious concerns related to coal extraction on public lands. As indicated in the power point at the beginning of the session, a significant amount of coal is being extracted from our public lands. This means that a significant amount of carbon dioxide, mercury, lead and other toxic materials are being spewed into the atmosphere at a cost of about $300 billion estimated.

That's far more than the $68 billion

that was shown up there as income generated from the extraction of coal.

Today the carbon dioxide levels are 460 parts per million. That's up from 180 parts per million. The ice is melting.

Greenland's ice caps, glaciers are melting. Antartica's glaciers are melting. Alpine's glaciers are melting. And according to James Hanson, the current rate of melting, sea level rise expected to go up or rise by 12 feet by the end of this century. That's 12 feet by the end of this century.

It's estimated that 2 billion people are going to be displaced by the sea level rises. That's far more extensive in terms of the losses there than the short term gains by the extraction of fossil fuels.

The oceans are dying. The carbon dioxide levels have caused the oceans to warm and acidify. This acidification is ruining our reefs, which are an ecological indicator of the tropical rain forest in terms of its reduction of ecosystems, and at the same time that plankton is being destroyed in the oceans as well. Plankten, by the way, is a

source of 70 percent of our oxygen that we breathe.

In addition to this, this warming is causing the melting of permafrost and we see methane being released. Methane levels have been recorded at that exceeding 3,000 parts per billion. That's the highest rate of methane that has been recorded.

Methane is 80 times more potent than greenhouse gas than carbon dioxide is, according to Michael Mann in his book "Dire Predictions."

For the sake of future generations, we must transition from fossil fuels to renewable sources of energy. For the sake of our eternity of Earth's ecosystems that support human life on this planet, we must transition from fossil fuels to renewable energy sources. Keeping the coal and all fossil fuels in the ground on public lands will play an important role in the restriction of the carbon dioxide being emitted into the atmosphere. Thank you for your time.

MS. PATTERSON: Thank you.

1 DAVE BLAIR: Hello, I'm Dave Blair.
2 And I am going to go partially to completely
3 off script because of something that you
4 asked earlier today. And that is about
5 externalities. My mother is an externality.
6 She died in 2004 of lung cancer. She never
7 smoked a cigarette in her life and the
8 doctors said it was most likely air
9 pollution.
10 Air pollution is about one-third caused
11 in this country by coal. And that is
12 something that calculators cannot understand.
13 That's something that a computer cannot
14 understand. And we, and you, have to come to
15 some way of thinking beyond that and thinking
16 as humans and as compassionate people about
17 externalities because numbers do not show
18 externalities.
19 Now I'll go on script. Okay, actually
20 after I retired, I looked around and noticed
21 so many people seemed helpless about what
22 they could do about climate change, so I
23 decided to show that net zero houses are
24 possible; two, that it can be done without
25 being ridiculously expensive; and three, show

1 people how to do it.
2 We built it for $135 a square foot. We
3 didn't get all our solar power on line until
4 about mid July, which puts it not a full year
5 at solar power; and even so, our total cost
6 was $22.46 for the entire year. That's heat,
7 electric and hot water.
8 Now, what's that have to do with Bureau
9 of Land Management and coal? Actually has
10 everything to do with Bureau of Land
11 Management and coal. Because it shows that
12 we don't need it. There are better ways.
13 We need to put our federal tax dollars
14 and subsidies into things that work and
15 things that don't harm people, that don't
16 have externalities. And it can be done.
17 Penn Future will be giving a house tour
18 in about mid October. I live in Monaca,
19 Pennsylvania. All of you, and that means all
20 of you, too, are welcome, come to my house, I
21 will show you, I'll show you, A, it can work;
22 B, it's not that crazy expensive; and C, I'll
23 show you how to do it if you want to know.
24 Thank you.
25 MS. PATTERSON: Thank you.

TALIA O'BRIEN: Hello, my name is Talia O'Brien. I'm with the Sierra Club. I just want to thank you for this opportunity to let me speak. I've never had a personal experience with the effects of coal. However, I don't need to have one to know the negatives. The effects of coal will eventually lead to an unsustainable planet, and I'm sure that some of you have children, and I myself would like to have children some day.

And the things added to this planet such as the burning of coal make living a clean and healthy lifestyle nearly impossible.

And as a young environmentalist, the negatives that coal specifically will bring will affect my generation and future generations the most.

The extraction and burning of coal will bring money to the country, okay, but how much are future generations worth and how much is enough? Thank you.

MS. PATTERSON: Thank you.

JANE KIRCHNER: I'm Jane Kirchner. I

1 live in Northern Virginia, and I work for the
2 National Wildlife Federation, online advocacy
3 manager. I'd like to thank the Department of
4 Interior for conducting the review of the
5 federal coal leasing program, because this
6 program has such an immense and lasting
7 impact on America's public lands, and these
8 are the lands that belong to all of us.
9 And I really appreciate also the public
10 input sessions and comment period so citizens
11 truly have an opportunity to share their
12 concerns directly with you.
13 Today, I'd like to express concerns
14 regarding the protection of wildlife and
15 water quality from the impacts of mining coal
16 on public lands. Unfortunately, the
17 resultant pollution and degradation from coal
18 mining can continue for thousands of years
19 after the coal has been extracted. Here are
20 a few examples of the impacts to consider as
21 you make reforms to the program:
22 The degradation of aquatic habitats is
23 a major impact of coal mining, may be
24 apparent many miles from a mining site.
25 Sediment contamination of surface water is

1 common with mining. Sediment yields may
2 increase to a thousand times their former
3 level as a result of strip mining. The
4 heaviest sediment pollution of a drainage
5 normally comes within 5 to 25 years after
6 mining. And in some areas unreclaimed soil
7 piles, I'm sorry, spoil piles continue to
8 erode even 50 to 65 years after the area has
9 been mined.
10 Presence of acid-forming materials
11 exposed as a result of mining can affect
12 aquatic wildlife by eliminating habitat and
13 by causing direct destruction of some
14 species. Lesser concentrations can suppress
15 productivity, growth rate and reproduction of
16 many aquatic species. Acids, dilute
17 concentrations of heavy metals and high
18 alkalinity can cause severe damage to
19 wildlife in some areas. In fact, the
20 duration of acidic-waste pollution can be
21 long. Estimates of the time required to
22 leach exposed acidic materials in the Eastern
23 United States range from 800 to 3,000 years.
24 It is way beyond a business life cycle
25 calculation.

1 Mule deer, pronghorn antelope, sage
2 grouse, elk, and hundreds of bird species
3 including eagles make their home in the
4 Powder River Basin of Wyoming and Montana.
5 And as you mentioned before, that is a major
6 coal region. The National Wildlife
7 Federation and Natural Resources Defense
8 Council commissioned a study of the health of
9 wildlife in this major coal producing region.
10 More than 30 percent of the mule deer and
11 pronghorn herds evaluated were found to be
12 unhealthy. Notably, the mule deer herds
13 evaluated, the only one that was found to be
14 healthy was the one living in an area without
15 any energy development within its boundaries.
16 I urge you to look beyond immediate or
17 short-term, cosmetic reclamation. Reforming
18 the Federal Coal Program must include new
19 protections, prohibitions and management
20 actions to fully protect wildlife populations
21 and the very vulnerable habitats they all
22 depend on. Thank you very much.
23 MS. PATTERSON: Thank you.
24 BRIAN RONREMOELLER: Good afternoon.
25 My name is Brian Ronremoeller. I'm here on

1 behalf of the Sierra Club, Ohio chapter,
2 175,000 members, supporters, in the Buckeye
3 State.
4 First of all, we'd just like to urge
5 BLM to consider the alternative, to end the
6 federal coal leasing program because we can
7 never fully account for all the public health
8 and environmental impacts coal leasing. In
9 Ohio we estimate that about one out of every
10 100,000 people die from coal-powered
11 pollution in our state. No number above zero
12 is an acceptable number of deaths from coal
13 pollution.
14 No number above zero is an acceptable
15 number of asthma attacks of our children in
16 our state.
17 Second of all, like to urge BLM to also
18 conduct Programmatic EIS for the development
19 of all fossil fuels on our public lands.
20 For example, there was an environmental
21 assessment, national forest to lease up to
22 30,000 acres, oil and gas, where the
23 environmental assessment issued a finding of
24 no significant impact because the climate
25 impacts were beyond the scope of that study.

1 So we urge that Secretary Jewell also
2 issue an order for Programmatic EIS for oil,
3 gas, mine. Thank you.
4 MS. PATTERSON: Thank you. Group 26
5 through 30 can come to microphone number 2
6 now. We will move to speaker 21 at
7 microphone 1.
8 ROBIN MARTIN: Good afternoon. Thank
9 you for this speaking opportunity. My name
10 is Robin Martin, and I am a Sierra Club
11 member, Pittsburgh native, and graduated
12 environmental biology student at Chatham
13 University.
14 I'm requesting the BLM to conduct a
15 thorough review on new coal leases that
16 acknowledges the scientist consensus that a
17 vast majority of unmined coal must remain in
18 the ground to circumvent most devastating
19 effects of climate disruption.
20 Continuing to issue new coal leases
21 would be a direct contradiction to the United
22 States' commitment to climate resolutions
23 made during the Paris Climate Agreement to
24 curb greenhouse gas emissions in order to
25 achieve global temperature rise levels below

2 degrees Celsius, or 1.5 if we are really motivated.

The United States is known for our resourcefulness, and we have a chance to be a world leader in energy innovation by phasing out coal and investing in alternative energies that preserve the health of the land and the American people.

As a daughter from a union family that includes coal miners who have lost their economic viability after the coal land has dried up, and a wife who is afraid to start a family due to environmental dangers of living within five miles of Clarion Coke Works, I implore the BLM to consider utilizing the land for cleaner, more sustainable energy options that provide environmental and economic opportunities for future generations.

We did not inherit the Earth from our ancestors, we borrow it from our children. Thank you so much for your time and your dedication to our nation's land and energy needs.

MS. PATTERSON: Thank you. I think we

1 are also missing speaker number 23. So if
2 you are here, please come on up.
3 MARK SZYBIST: My name is Mark Szybist,
4 I'm a senior program advocate in the energy
5 and transportation program for the National
6 Defense Council based in Washington, D.C.
7 On a personal note, I grew up in
8 Williamsport, Pennsylvania. I have two great
9 grandfathers who mined coal, and before
10 moving to DC, I lived in Wilkes-Barre,
11 Pennsylvania within several minutes of
12 several coal mines.
13 We would like to thank Secretary Jewell
14 for her leadership in causing the review of
15 this Federal Coal Leasing Program. I'm here
16 today because NDC has a long history working
17 on coal mining dating back to the passage of
18 SMCRA.
19 In 2011 we commissioned the first audit
20 of the Federal Coal Leasing Program in 30
21 years. The ensuing report was Tomsend's
22 greatest reward, which found that over those
23 three decades the coal program short changed
24 taxpayers by almost $30 billion.
25 Many have commented on the flaws of the

1 current program. Last week Senator Maria
2 Cantwell of Washington noted that coal on
3 federal land in Montana had sold for an
4 average of 12 cents a ton, "33 tons of coal
5 for the price of a big mac."
6 Last week the President's Council of
7 Economic Advisors released a report on the
8 program. President Obama's top environmental
9 advisor Ryan East summarized it this way.
10 "This is a hard look at the economics and
11 what we see is a program that even before
12 getting through the environmental
13 considerations is not serving the interests
14 of taxpayers."
15 But you are all aware of this and
16 that's why you are here today. So what
17 changes would we like to see? NDC believes
18 that America's federal lands and waters are a
19 national commons to be managed for the common
20 good of all Americans.
21 In the 21st century that is not what we
22 would call leasing. It scars our landscapes
23 and hinders the crucial shift to clean
24 energy.
25 We support a phase-out of fossil fuel

1 leases on federal lands starting with a
2 phase-out of new leases and no renewal of
3 non-producing leases.
4 Short of that, we would like to see the
5 public put first. BLM should be in firm
6 control of when, where and how coal, federal
7 coal, is leased, not coal companies. The
8 agency should lease only when, one, it can
9 ensure areas for lease are low conflicts on
10 wildlife, air, water and protected lands.
11 Also, the coal-mined methane is
12 captured.
13 Two, coal companies have demonstrated
14 less than 10 years in business; three, coal
15 companies need measurable and enforceable
16 standards for reclaiming mined lands. The
17 scope of the review should be extended to
18 include OSM.
19 And four, taxpayers will get a fair
20 return to coal soil. That means cutting out
21 captive transactions, substantially raising
22 minimum bids and eliminating royalty rate
23 reductions.
24 Last, but not least, BLM needs to align
25 coal policies with our national climate

goals. This can be achieved in part by raising royalty rates, finding increased royalties should be used to help communities transition to more sustainable economies. Thank you very much.

MS. PATTERSON: Thank you.

FRANK SZOLLOSI: Good afternoon. My name is Frank Szollosi. I live in Toledo, Ohio. I'm here on behalf of the National Wildlife Federation working to unite all Americans to ensure wildlife thrive in natural habitation.

National Wildlife Federation got its start as the general wildlife under former Secretary of the Interior Harold and Secretary Jewell and director had the opportunity to be just as consequential for the future of this country as Secretary Hinge was with the process as the coal mining.

Rapidly changing world is part of our mission statement. It's why we need to reform coal leasing now. There is increased pressure on wildlife and habitat, especially from fossil fuel extraction.

According to your own data, BLM data,

in 2010, 2011, the eastern state's office leased 460,000 acres of public land for fossil fuel extraction which was up 71 percent from previous five years.

I'd like to join my fellow Buckeye, special shout-out, for protections in the national forest in southern Ohio. We are here for coal reform. Taxpayers should not bail out the coal companies.

Raise the royalty rate. Raise the minimum bid. It's a drag on our economy, not to mention the climate impacts for coal leasing impacts on public lands.

We urgently need reform. Like the previous gentleman, my grandfather was born in Adena, Ohio, coal town near St. Clairsville, Ohio, 1922. My great grandfather and my grandfather worked there.

Last week I was so proud of my organization. Our affiliates on behalf of 6 million National Wildlife Federation members endorsed a resolution encouraging the federal government to finance a just transition for coal miners and the people in those coal communities, extremely important.

We need to improve reclamation performance. Last summer, my son and I drove through North Dakota and Montana to hike and fish. We drove through the Powder River Basin. I'd like his sons and daughters to have the same opportunity that we were able to provide for him.

And I'm not alone. Although I live in Ohio, vast amounts of National Wildlife Federation commissioned an independent public research was also overwhelming. 83 percent of Ohioans consider it very important to protect national public lands.

I encourage you to take their voices into consideration. They are our lands and belong to all of us and we owe it to ourselves to get this right.

Thank you for your leadership on coal leasing reform.

MS. PATTERSON: Thank you.

JUSTIN WASSER: My name is Justin Wasser, and I work for the Sierra club, speaking on my own account. Sharing personal story today. I live here in Pittsburgh.

So at the top, two main issues I'd like

1 to address. First, well, the first is the
2 reform, reclamation bonding. And reforming
3 bonding.
4 And the second is assessing
5 externalities. On the bonding. Personally,
6 I grew up about 72 miles east of here in a
7 mining area. I played on what we call bony
8 piles, slag heap. And I think I was 11
9 before I realized it's not natural for
10 certain streams to be orange.
11 The process on any land of reclamation
12 is an absolute failure. It's a failure to
13 the communities on the terms of quality of
14 life and to their health. Where I grow up or
15 grew up, one of my family lives there, there
16 are higher rates of cancer, of heart disease,
17 of issues that scientific consensus shows,
18 they may not say it's a direct correlation,
19 but definitely the lack of cleaning up after
20 mining, after burning and transporting coal
21 contributes to it.
22 The Youghiogheny and the Conemaugh
23 Rivers, it's a story of two rivers that are
24 near by here. The Yough had some mining
25 issues and through state, federal and

1 non-profit investments over the last 10 years
2 has become what some people have called the
3 Madison River, a famous river out west for
4 trout fishing. The Madison River of the
5 east.
6 That has brought all kinds of funding
7 and tourism to the area.
8 Now, the Conemaugh River, not too far
9 off from there, where I'm from, is not
10 bringing in tourism, is not attracting
11 people. People aren't fishing on that river
12 because of the problems with reclamation.
13 On assessing externalities, with just
14 30 seconds, I'd like to say that I'm 28 years
15 old and staring into a future of dealing with
16 global warming, climate change and the
17 catastrophes that could come. And I think it
18 is time that the BLM review the scientific
19 consensus on the effects of mining and
20 burning what's extracted out of federal
21 lands, and those externalities far into the
22 future of the time, energy and finances we
23 are going to have to put in to clean up the
24 mess from today. Thank you.
25 MS. PATTERSON: Thank you. Speaker

number 23, last call, are you here? Number 23? Okay.

We will call group 31 through 35 down to microphone number 1. We are also missing speaker number 28 I believe. So if you are here, please come to microphone number 2. Speaker number 26.

BEN LEERS: My name is Ben Leers, I'm with Sierra Club Ohio. I'm going to be short and sweet. Personal story as well. I'm from Las Vegas, Nevada and my parents live in Utah. So living in the west I spent a lot of time in the national parks. It's where I have found my spirituality and a lot of valuable time as a kid.

So seeing the national parks, it's one of the most well-protected pieces of land that I've ever seen.

So I moved out east for school about three years ago, and I was introduced to an entirely new type of view and nature. But it's not as well protected as demonstrated by the federal coal leasing program. Giving the land out and letting them destroy it.

In the national parks it's vandalism

and it's a federal misdemeanor and penalized by up to six months in prison and a fine up to $500. Meanwhile, the federal leasing program of coal, we are giving this land to corporations and allowing them to destroy this property which belongs to everybody here.

So like you guys mentioned, 20 years in, we still have leases that are going to be in effect and this destruction is going to occur for 20 years going on into the future.

So I want to reiterate the words of a couple of people that have spoken that it is necessary that federal land leases for coal needs to be stopped, but not only that but begin to impose recommendations to phase out the federal leasing of land for coal all together.

You guys have been presented with the statistics and you know the drastic effects that it has. So I think this is a lot larger of a problem than money and the economy. Our entire future and environment is at stake. Thank you.

MS. PATTERSON: Thank you.

1 DORCAS EVANS MILLER: Hello. Thank
2 you. My name is Dorcas Evans Miller, and I'm
3 retired. That means that I have time to
4 volunteer. And I have to thank my friends at
5 Pittsburgh Sierra Club and Environment and
6 350.org for educating me to what I've been
7 learning over time.
8 But now I'm more committed than ever.
9 So I grew up in Springdale, which is on the
10 Allegheny River, about 20 minutes from here,
11 between two power stations between the ages
12 of 5 and 15.
13 The results are health issues for my
14 family that we learned about later, heart
15 disease being one, after five generations of
16 us being in this area.
17 Rachel Carson, author of the "Silent
18 Scream" of the 1960s informed me and the
19 world about poison and effects on humans.
20 She happens to be from Springdale, so I guess
21 that's where we get a little of our activism.
22 I'm proud of her and her message.
23 Currently I'm working with the Clean Power
24 Plan. We are working on volunteering with
25 that and the adopted legislation, adopted

1 legislator.
2 So we are coming after the bodies that
3 can effect change. And I might as well be
4 right up front, blocking extraction from
5 public lands would be my number one priority.
6 I remember the actual soot on our cars
7 and clothes in the 1950s. We lived with the
8 effects of coal, not knowing the health
9 effects later in our life.
10 Energy is now a new path. Renewables
11 are the future, I believe, and I'm learning
12 that in these organizations. I have heard
13 young people like my friend Talia who just
14 spoke here today and the young woman from
15 Seattle, they have asked us, our age people,
16 to become responsible, and we must not miss
17 this opportunity to address coal and its
18 effects on the health and the land.
19 So again, I would repeat, no leases.
20 No leases on public lands. It is our public
21 land.
22 Should we extract any fossil fuel? The
23 answer would be no. From what I'm learning.
24 Please tax carbon so that we can
25 remediate our public lands and leave them the

way we found them. I fear for the future and my loved ones on the east and the west coast of the nation and of the world who have lost their lands, who will slowly lose their land because of rising water.

We cannot deny that fossil fuels contribute to climate change. There is too much evidence. There is no clean coal. Public lands should not contribute to climate change. In fact, we should contribute to renewable solution. I know we can do it. It is up to us. It is our time. Thank you.

MS. PATTERSON: Thank you.

RACHEL RAKOVAN: Hi, I'm Rachel Rakovan. I'm a professor of ecology at the Community College of Beaver County. I'm also board chairman for the Environmental Advisory Board for the township. And I am founder of the ECO Action Nonprofit Organization.

I'm here to talk to you about coal mining, direct effects. In my past I lived in Appalachia and coal mining was the cause of cancer, which actually inspired me to become an environmental scientist. Several of my family members have died from cancer.

1 In particular, my two year old niece and
2 stepfather.
3 Anyhow. So coal mining is the cause of
4 pollution in southern Ohio. And what it does
5 is it causes cancer among people, families,
6 friends, that makes people become addicted to
7 cancer medications.
8 And then what happens after that, it
9 gets in the hands of teenagers, that cancer
10 medications. They become addicted to
11 Oxycontins, and Oxycontins are very
12 expensive, this is a cancer medication, then
13 they divert to heroin and illicit street
14 drugs, which is cheaper, and what they then
15 do is take excess amounts of heroin and they
16 end up in teenage drug overdose.
17 So I have about 60 friends from the
18 time that I was pre-teen that have died from
19 heroin usage that was caused from this chain
20 reaction from coal mining.
21 So, again, in recap, coal mining causes
22 cancer, which then causes people to become
23 addicted to cancer medications, which then
24 contributes to the illicit drug trade and
25 then causes teenage drug overdose.

1 Excuse me. So the direct effects of
2 coal can be accounted for. But the indirect
3 effects and the chain reaction of coal and
4 the cost to communities as well as our lives
5 are concerned -- excuse me.
6 I also wanted to talk about something
7 else. I am a consultant for open -- I'm
8 sorry, it's very personal. But I would like
9 to see us convert to renewable energy
10 sources. Thank you.
11 MS. PATTERSON: Thank you.
12 JAMES KOTCON: Good afternoon. My name
13 is James Kotcon. I'm from Morgantown, West
14 Virginia. I currently serve as the
15 conservation chair for the West Virginia
16 chapter of the Sierra Club.
17 I have some written comments that I'll
18 be filing. But sort of summarize some of the
19 things we have heard here today.
20 In real life I teach at West Virginia
21 University and through a course on
22 environmental impact assessment where we
23 study the process so I have a pretty good
24 grasp of what you're proposing on this
25 Programmatic EIS.

1 You will be considering the effects of
2 several alternatives, one of those might be
3 to resume the leasing program, in terms
4 business as usual, and maybe end somewhere in
5 between.
6 I am here today to urge that you look
7 very seriously at the no leasing alternative.
8 I realize that from an agency whose mission
9 is to issue leases that's going to be a very
10 heavy lift, and I'd like to give you some
11 reasons why.
12 We have heard a lot about the problems
13 with the leasing program, the need to reform
14 reclamation bonding, the need to end the self
15 bonding, the need to consider and incorporate
16 the social cost of carbon in the leasing
17 costs, a lot of the adverse impacts on mining
18 communities and so on. And I think you need
19 to consider each of those.
20 EPA asks that you consider both the
21 direct impacts of your alternatives as well
22 as the indirect and cumulative impacts. Much
23 of what we have heard today is testimony from
24 the eastern United States really looks as
25 evidence of the indirect and cumulative

1 impacts of leasing from western states coal.
2 It will be easy to disregard some of
3 this testimony today as not relevant to the
4 western states leasing programs, and I'm
5 urging you to resist that temptation to
6 disregard that and instead look at the
7 impacts on eastern states of the leasing
8 programs in western United States.
9 For example, about 40 percent of the
10 coal burned in coal-fired power plants in
11 West Virginia is actually western coal. So
12 the air pollution impacts of that western
13 coal, the mercury in the streams, the impacts
14 to fisheries, is an indirect impact of your
15 leasing program, and it's happening in my
16 home State of West Virginia. Please consider
17 that in your analysis.
18 There are indirect impacts of burning
19 western coals on eastern coal communities,
20 impacts to workers. Right now a number of
21 the major mining companies in West Virginia
22 are bankrupt and don't have the money for
23 reclamation. It is important that you get an
24 estimate of the true cost of coal and that
25 you fully consider those in your analysis.

Thank you.

MS. PATTERSON: Thank you. At this time I believe we have only given out two more speaker cards for 31, 32. So if there is anyone else who would like to speak right now, please grab a speaker card in the back and come on up as well. We will hear from speaker number 31.

AIMEE ERICKSON: Thank you. Does this mean I can speak longer since I'm the next to the last person? I was just checking.

My name is Aimee Erickson. I'm the Executive Director of Citizens Coal Council, a national nonprofit organization whose mission is to inform, empower and work for and with communities affected by mining, processing and use of coal.

While many activists and organizations will make strong, well-documented cases for problematic, fiscal aspects of coal leasing, I believe that there is critical opportunity at this very moment for the United States government to make its position clear: We are taking real, measurable steps to stem the momentum of climate change.

1 Even though the coal industry has seen
2 a significant decline over the last decade,
3 we can't ignore the reality of the United
4 States is the fourth largest source of coal
5 exports in the world.
6 Of those exports, the majority of our
7 coal is headed to Asia. Joby Warrick in a
8 Washington Post article put it most aptly:
9 "Each shipment highlights what critics
10 describe as a hypocrisy, underlining U.S.
11 climate policy: While boasting of pollution
12 cuts at home, the United States is
13 facilitating the sale of large quantities of
14 government-owned coal abroad."
15 To make it abundantly clear, continuing
16 the mining and export of government owned
17 coal is making a statement to the world where
18 our priorities lie and most importantly it
19 goes against President Obama's Climate Action
20 Plan.
21 By the Bureau of Land Management not
22 taking into account the effects of coal
23 exports on global warming, you are
24 undermining global efforts to address climate
25 change.

In yesterday's USA Today article on the West Virginia floods, it stated that climate change may have added to this disaster.

According to the National Climate Assessment, the part of the U.S. that includes West Virginia has seen a 71 percent increase in extreme precipitation since 1958.

We are exporting our pollution and that pollution is not only still contributing to global climate change, but its local effects are impacting poor and vulnerable populations.

Now is the time to take a serious stance on climate change and protect the most vulnerable. This is a real, substantial thing we can do to not only show that our humanity takes precedence over our concern for money, but to increase the possibility that our world will be a livable place for future generations.

MS. PATTERSON: Thank you.

KRISSY KASSERMAN: Hi. I'm Krissy Kasserman. I live and work in former coal communities that are struggling to recover from massive decades of environmental

1 devastation for both legacy sites and from
2 those permitted under the current regulatory
3 system.
4 For decades coal companies have mined
5 tons of coal, 40 percent of all coal burned
6 in the U.S. power plants from our public
7 lands. Most of the coal mined comes from
8 grass lands, ranches, natural habitat, leases
9 to mine underneath this land, encourages
10 consumption of dirty fuels by artificially
11 lowering the price at a time when we should
12 be moving away from fossil fuels.
13 What I want to talk about today,
14 though, is the way that continued federal
15 coal leasing diverts our attention from the
16 real work, transitioning coal communities
17 like mine to a clean energy future.
18 The transition to a clean energy
19 economy will create new jobs and new
20 opportunities for those of us living in coal
21 country. Some of these new jobs will be in
22 reclamation, reclaiming and restoring old
23 dangerous and polluted mine sites which foul
24 our streams and create a danger to community.
25 We want time and opportunity to assist

1 communities in moving forward. And we can be
2 using funds released by the U.S. government
3 to manage the Federal Coal Leasing Program to
4 enhance this transition or to restore these
5 legacy sites.
6 The Federal Coal Leasing program should
7 be ended in order to save taxpayers money,
8 protect public land and to begin the
9 meaningful transition for coal communities
10 here in Appalachian and beyond.
11 I ask you to end taxpayer-funded coal
12 leases on public lands and instead make this
13 important and historic transition toward a
14 clean energy economy. Thank you.
15 MS. PATTERSON: Thank you. If there is
16 no one else who would like to get a speaker
17 card right now, that is the last of our
18 commentors so far. I want to thank you all
19 who are here for your respectful comments and
20 your insightful thoughts, and I'll invite the
21 panel if you would like to give remarks
22 before we go into a break.
23 MR. NEIL KORNZE: Let me say briefly
24 that we very much appreciate the sincere,
25 personal comments folks have shared with us

today. We are committed to being here throughout the session. So we are going to take a short break. Look forward to visiting with some of you and appreciate your time and attention to these very important issues.

MS. PATTERSON: All right. Thank you everybody for being here. Encourage you to all stay involved in the Programmatic EIS process, and reminder that all of these comments as well as the rest of the input from the scoping period will be incorporated into a scoping report that will be available later this fall.

You can stay informed by visiting the project website and making sure that you signed in with your contact information out at the sign-in sheets. Thank you everybody. We are going to take a break now.

(Recessed at 3:11 p.m.)

(Resumed at 4:00 p.m.)

MS. PATTERSON: Thank you for being here. We have a packed house. We are really glad that you are providing input. We are live streaming this over the internet as well. So we are going to go live back to

that as well.

I think that you have an overview of the speaking procedures. Three minutes each. And we, of course, ask you to be respectful of each other. So, sir, if you are ready to begin your comment.

FRED KRAYBILL: My name is Fred Kraybill. Greet you all. I live in Pittsburgh. I work at the VA Medical Center. I am very concerned about climate change and I dedicate much of my spare time to working on this issue. I want to thank President Obama, Secretary Sally Jewell, and the Department of the Interior for this historic step to put a pause on coal leasing on federal lands. It was very unfair that federal lands were leased to coal companies at rock bottom prices and allowed them to compete unfairly with other cleaner energy sources.

It was also unfair to the taxpayers that shoulder a tax burden when highly profitable coal companies were not paying their fair share to lease federal lands for coal.

1 But ultimately, the most important
2 consideration to this issue is how much coal
3 can still be burned in our remaining carbon
4 budget. How much must we reduce our carbon
5 emissions to prevent a 2 degree Celsius
6 warming and to try to stay within a 1.5
7 degree Celsius warming?
8 Most of the people I know will say that
9 we must keep fossil fuels in the ground. The
10 BLM has many competing interests to think
11 about, but at the very least it seems to me
12 that if the BLM continues to lease federal
13 lands for coal, then it must be at a price
14 that accounts for the social cost of carbon
15 and it must be at a price that allows clean,
16 renewable energy to rapidly overtake fossil
17 fuels in the energy marketplace. Because the
18 solution to pollution is renewable, it's
19 doable.
20 Recently I've been watching the
21 devastating weather events in both ends of
22 the U.S. Historic rainfall and flash floods
23 in West Virginia and devastating, out of
24 control, wildfires in the southwest. We are
25 witnessing exactly what climate scientists

have predicted for years. Record breaking heat waves, drought, forest fires, flash floods and storms. Record breaking sea level rise, glacier melt and ocean acidification.

So I ask the BLM and the Department of the Interior to make addressing climate change your most important priority when considering how to revamp the federal coal leasing program. Thank you for your time.

MS. PATTERSON: Thank you.

NEXT SPEAKER: Good afternoon. My name is Claudia Kirkpatrick and I live at 3763 Orchard Street in Pittsburgh, and I am a member of the local chapter of the Sierra Club. And I am speaking to support the changes that Fred was talking about.

The Federal Coal Leasing Program, through which the Bureau of Land Management grants coal companies leases to mine coal on federal public lands, creates serious problems.

This program destroys the public lands, which should be for the use of all the citizens of the United States, and it is a major factor in continuing to pollute our air

1 and water. Burning coal is a direct cause of
2 asthma, respiratory illnesses and cancer.
3 It is a serious risk especially to
4 children and families in the areas around the
5 power plants which are still burning coal.
6 And it is more likely that low income and
7 minority children and families will be the
8 people most seriously harmed. We, the people
9 of the United States, through our government
10 officials are causing this harm.
11 It is very important, therefore, that
12 we, the people of the United States, support
13 ending the Federal Coal Leasing Program.
14 This is our responsibility for our children,
15 grandchildren and great grandchildren. Thank
16 you.
17 MS. PATTERSON: Thank you. Is there
18 anyone else that has come in that wishes to
19 speak? Looks like no more speaker cards have
20 been given out so far. We are going to take
21 another 30 minute break.
22 During that time, though, our panelists
23 will still be around and available and able
24 to talk individually if you like. Anything
25 else that y'all would like to say before we

1 break again? All right. We will be back in
2 another 30 minutes.
3 (Recess taken at 4:10 p.m.)
4 (Resumed at 5:20 p.m.)
5 MS. PATTERSON: Welcome back to the
6 Federal Coal Program Programmatic
7 Environmental Impact Statement, Scoping
8 Meeting. We have another comment.
9 Just a quick note, Neil Kornze had to
10 leave, but we are now joined at the stage by
11 Linda Lance, who is the Deputy Director of
12 the Bureau of Land Management. So we thank
13 her for joining us as well. Thank you for
14 being here.
15 And please remember to state your name
16 and the organization you represent and be
17 sure to speak slowly and clearly for the
18 court reporter so she can hear your comments.
19 GRIM REAPER (JACK TURNER): Good
20 afternoon representatives of the eastern
21 district of the Bureau of Land Management and
22 Deputy Director. I am the Grim Reaper. I am
23 submitting testimony today on my own behalf.
24 I favor the continued leasing of federal
25 public lands that they may be exploited for

1 coal and other fossil fuels. The fossil fuel
2 business is very good for my own business.
3 According to the research by Dara (sp)
4 Daily Monitor, I collect an additional
5 400,000 souls annually thanks to global
6 warming, a direct result of fossil fuel use.
7 Assuming we don't see radical change in
8 the world's energy infrastructure and a
9 global commitment to adaptation to climate
10 change, which I oppose, I shall be able to
11 reach a full half million souls annually by
12 2030.
13 Furthermore, the contribution that
14 global warming makes to my business is only a
15 tip of the iceberg, so to speak, of the boom
16 that the fossil fuel industry provides to my
17 own business.
18 According to research by the World
19 Health Organization, air pollution provides
20 me, my company, with nearly 7 million souls
21 annually.
22 Fossil fuels, like coal and petroleum,
23 are important sources of both indoor and
24 outdoor air pollution. While it is difficult
25 to say how many souls I collect through water

1 pollution, for which I have coal to thank,
2 the contribution of the mining industry in
3 this field is still worth mentioning.
4 One polluter that I would like to
5 specifically thank is Freedom Industries, a
6 coal mining company which managed to poison
7 the drinking water for 300,000 people in 2014
8 by dumping methylcyclohexane methanol into
9 the Elk River, a tributary of the Ohio River.
10 I'd like to thank Representative Keith
11 Rothfus of the Pennsylvania 12th
12 Congressional District for calling out the
13 job killing regulations of our current
14 administration earlier today.
15 I am a good capitalist job creator, but
16 I've had to delay hiring more minions of
17 death and even let some go because fossil
18 fuels are being threatened by wind and solar
19 energy.
20 It's not just my own business that is
21 hurting. Consider, to produce the same
22 amount of energy from solar power as from
23 coal costs less, but creates more jobs. That
24 might sound good on the surface, but without
25 the crushing poverty dependent on fossil fuel

1 extraction, people might be less likely to
2 turn to substance abuse. This could erode
3 the heroin business that has been making
4 critical enhancements recently, and put drug
5 traffickers out of work.
6 And might I point out the harm that
7 medical enterprises will suffer if people are
8 healthier from cleaner air and water.
9 I do not think the administration has
10 thought through the consequences of this
11 proposed public land policy and it should be
12 stripped. Thank you for your time.
13 MS. PATTERSON: Thank you. Is anyone
14 else who would like to grab a card and speak.
15 If not, we will take another break for
16 another 30 minutes, see if we have anyone
17 else come. Thank you again for your comment.
18 We are going to reconvene at 6:30.
19 (Recess taken at 5:25 p.m.)
20 (Resumed at 6:35 p.m.)
21 MS. PATTERSON: Welcome back to the
22 Federal Coal Program, Programmatic EIS,
23 Public Scoping meeting. We have another
24 commentor who is going to provide comments.
25 Please just remember to state your name

and organization you represent at the beginning of your comment and speak slowly and clearly. The court reporter will capture your comments as well.

MARY RANII: Okay. Thank you. Thank you guys for being here today. My name is Mary Ranii. I'm from O'Hara Township, which is right outside of Pittsburgh. And I'm here to express my support for this pause on new coal leases on public lands. This land should be for recreational and educational use and purposes.

Mining projects pose undue threats on the health of nearby communities, not to mention the health of the waterways, soil, air and wildlife.

And as we also feel the impacts of climate change more and more, we need to make decisions that protect our future. So I'm encouraging the Bureau of Land Management to make this pause on new leases on public lands permanent and to consider revoking leases on existing coal projects on public lands that do not meet strict health, environmental and safety standards. Thank you.

1 MS. PATTERSON: Thank you.
2 LINDA LANCE: Sorry to make it so
3 formal, but we have to get you on live
4 transcript, plus we are live streaming this.
5 We appreciate your comment.
6 MS. PATTERSON: Thank you for being
7 here. We are going to break again until
8 anyone else shows up for this last portion of
9 the meeting. We will be around.
10 (Recessed at 6:40 p.m.)
11 (Resumed at 7:00 p.m.)
12 MS. PATTERSON: We are back with the
13 Bureau of Land Management, Federal Coal
14 Program, Programmatic Environmental Impact
15 Statement, Scoping Meeting. For anyone who
16 has been watching the live stream today, I
17 just want to thank you for watching and hope
18 that you will continue to participate in the
19 process as this EIS moves forward.
20 I'm going to turn it over to Linda
21 Lance, who has some closing remarks.
22 MS. LINDA LANCE: I just want to say
23 thanks on behalf of all of us at BLM to all
24 of you who have been watching this online and
25 the folks who have been here throughout the

1 day. Means a tremendous amount to us that
2 you take the time to help us think through
3 these issues.
4 And I just remind you, this is our last
5 public meeting, but we are still accepting
6 written comments and the address for that is
7 on our website. So please do continue to
8 participate.
9 So it's 7:00. We appreciate everyone's
10 time and attention and participation today,
11 and we also thank the wonderful BLM team and
12 security team that's been with us all day
13 today. So much appreciate your wonderful
14 work on all these meetings.
15 So with that, we will close and thanks
16 again to everyone.
17 (Thereupon, at 7:00 p.m., the scoping
18 meeting was concluded.)
19 - - -
20
21
22
23
24
25

C-E-R-T-I-F-I-C-A-T-E

I, Deborah L. Endler, the undersigned, do hereby certify that the foregoing one hundred sixteen (116) pages are a true and correct transcript of my stenotypy notes taken at the Bureau of Land Management, Scoping Meeting, held at the David Lawrence Convention Center, on Tuesday, June 28, 2016.

Deborah L. Endler, Court Reporter

- - -

A

abandoned
36:3 65:8
able
23:7 26:12 88:6 109:23 111:10
about
4:4 6:1 7:24 8:23 10:7 12:9,10,21 18:18,19 19:14 21:16,20 22:3 23:3,10 25:15 26:2 27:1 30:24 31:9 33:11,13 42:18 48:6 49:1,6 58:13 68:10,21 69:9,16 70:1,2,16,21 71:23 74:4,10,16,21 74:22 75:4,18 80:9 89:6 91:19 93:10,14 93:19 95:20 96:17 97:6 98:12 99:9 103:13 106:10 107:11 108:16
above
80:11,14
abroad
101:14
absence
39:1
absolute
89:12
abundantly
101:15
abuse
113:2
academic
68:18
accept
60:11
acceptable
80:12,14
accepting
116:5
accommodate
23:8 26:6
accomplish
23:13
according
9:2 31:22 72:8 73:11 86:25 102:4 111:3,18
Accordingly
29:25
account
5:3 16:21 17:18 56:9 63:17 80:7 88:23 101:22
Accountability
31:3 38:20
accounted
32:5,7 97:2
accounts
56:12 64:3 107:14
accumulate
44:17
accumulates
70:14
accumulation
70:17
accurately
25:8 39:2
achieve
36:25 81:25
achieved
86:1
acidic
78:22
acidic-waste
78:20
acidification
46:12 72:20 108:4
acidify
72:20
Acids
78:16
acid-forming
78:10
acknowledge
65:18
acknowledged
59:24
acknowledges
62:2 81:16
acres
52:13 80:22 87:2
across
8:6 10:5 14:13 34:7 37:1,8 51:22 55:4 66:11 67:5
act
21:5 33:5 53:18 65:12
Acting
4:13
action
43:6 46:15 52:3 95:19 101:19
actions
21:7 54:14,18 79:20
actively
37:10
activism
93:21
activists
100:18
activities
58:17,23,24
actual
18:9,17 94:6
actually
9:8 43:19,20 74:19 75:9 95:23 99:11
adaptation
111:9
added
76:12 102:3
addicted
96:6,10,23
adding
60:2
addition
17:11 47:15 59:25 73:3
additional
20:14 28:13 30:1 52:11 111:4
address
3:21 60:25 89:1 94:17 101:24 116:6
addressed
47:13
addressing
15:22 108:6
Adena
87:16
adequacy
40:24
adequate
15:22
adequately
16:3 17:8,18
adjusted
5:8
administered
10:4
administration
9:24 31:11 38:4 112:14 113:9
administration's
46:16 65:25
adopted
93:25,25
adverse
52:7 98:17
adversely
49:15 65:7
advisor
84:9
advisors
31:5 41:10 84:7
Advisory
95:17
advocacy
77:2
advocate
83:4
affect
12:18 17:22 32:25 33:1 44:17 49:15 65:1 76:18 78:11
affected
13:11 14:8 59:21 65:8 68:3 100:16
affects
44:9 49:14 64:11
affiliate
40:10
affiliates
40:12 87:20
afford
40:2 44:12
affordable

28:17 58:18
afraid
82:12
after
19:23 20:18 26:3 27:2 33:3 52:22 68:7,10 74:20 77:19 78:5,8 82:11 89:19,20 93:15 94:2 96:8
afternoon
2:2 4:16 28:1 36:20 40:6 42:22 53:22 71:8 79:24 81:8 86:7 97:12 108:11 110:20
again
3:5 5:11 9:4 11:22 20:20 24:10 33:20 36:6 53:4 61:15 94:19 96:21 110:1 113:17 115:7 116:16
against
14:5 101:19
age
52:15 66:24 94:15
agencies
8:11,23 9:5 30:1 54:15 56:19
agency
6:5 85:8 98:8
agency's
61:3
agenda
3:22,23
ages
49:19 62:3 93:11
ago
38:12 40:12 91:20
agree
20:8 43:15
agreed
64:23
Agreement
81:23
ahead
2:3 25:17 26:2 30:12
Aimee
100:9,12
air
17:5 48:10 59:14 63:9 74:8,10 85:10 99:12 108:25 111:19,24 113:8 114:16
Al
1:15 7:8,9,10,15,16 19:11 21:2
align
85:24
alkalinity
78:18
all
2:8,12,18 5:22 6:10 8:21 9:1,20 19:5,16 20:4,5,9,18 22:12,17 28:9,17 32:22,22 37:5 37:12,25 39:25 42:18 45:1 47:20 48:11 51:22 58:20 59:16 60:21,21 62:4,8,23 66:14 67:17 68:11,12 70:15 73:19 75:3,19 75:19 77:8 79:21 80:4,7,17,19 84:15,20 86:10 88:16 90:6 92:17 103:5 104:18 105:6,8,9 106:8 108:23 110:1 115:23 115:23 116:12,14
Allegheny
93:10
Alliance
53:25 54:2,5 56:11
allow
14:3 44:13 45:5 53:10 64:23 69:8
allowed
106:18
allowing
42:23 92:5
allows
26:7 107:15
almost
57:15 83:24
alone
67:25 88:8
along
9:14
Alpine's
72:8
already
3:14 8:4 12:20,24 15:6 27:6 28:7 46:7 51:21 60:16
also
2:25 8:24 9:18 19:18 19:25 20:2,13 22:21 23:1 24:9,18 25:7,16 25:20 32:24 36:15 43:8 46:5,8 47:13 52:8 53:19 54:8 59:14,19 66:12,24 67:6,23 68:4 70:19 77:9 80:17 81:1 83:1 85:11 88:11 91:4 95:16 97:6 106:21 114:17 116:11
alternative
47:20 64:14 80:5 82:6 98:7
alternatives
18:2 21:8 98:2,21
Although
88:8
America
59:24
American
5:7,18 16:4 20:19 28:23 29:3,18 35:6,19 56:22 58:5 62:15 82:8
Americans
33:13 84:20 86:11
America's
77:7 84:18
among
49:18 96:5
amount
29:1 44:14 64:11 71:18 71:20 112:22 116:1
amounts
12:21 88:9 96:15
Amy
24:4,7
analysis
13:1 18:3 22:2 99:17 99:25
analyze
15:1
analyzed
13:18 22:4,18
ancestors
82:21
anniversary
62:24
announced
12:13
announcements
2:18
annoying
25:15
annual
56:9
annually
111:5,11,21
another
15:24 18:5 42:10 109:21 110:2,8 113:15,16,23
answer
21:20 94:23
Antartica's
72:7
antelope
79:1
anticipate
24:18
anticipated
13:23
anti-coal
28:9
anxiety
50:14
any
2:18 4:23 16:15 20:20 26:23 29:1,25 32:5 35:4 38:18 44:13 53:14 61:9 79:15 89:11 94:22
anybody

3:19 23:12
Anyhow
96:3
anyone
100:5 109:18 113:13 113:16 115:8,15
anything
12:19 13:12 24:22 61:10 109:24
anyways
36:8
apologize
61:7
Appalachia
30:6 95:22
Appalachian
104:10
apparent
77:24
applaud
66:12
applicant
9:13
application
38:13 41:3
applications
13:5,10,25 14:8 40:23
applies
53:19
apply
8:17
appreciate
2:14 3:11 5:19 7:7 27:24 61:17 77:9 104:24 105:4 115:5 116:9,13
approach
15:17 40:20
appropriately
18:12
approve
65:23
approved
32:8 40:13
approximately
10:12 11:1,7 37:17
aptly
101:8
aquatic
51:3 52:24 77:22 78:12 78:16
area
3:4 10:9 11:13,14,21 78:8 79:14 89:7 90:7 93:16
areas
4:24 6:25 13:17 14:16 15:7,8,20 78:6,19 85:9 109:4
Arizona
11:16
around
2:20 4:10 11:4 34:2 43:5 44:15 45:1 58:4 58:21 74:20 109:4,23 115:9
arrangement
34:17
Artic
6:10
article
101:8 102:1
artificially
28:14 64:25 103:10
Asia
101:7
asked
8:7 14:14,18 28:5 74:4 94:15
asking
22:15
asks
98:20
aspects
100:20
assess
16:11 64:7
assessed
22:5
assessing
89:4 90:13
assessment
80:21,23 97:22 102:5
assist
103:25
associate
1:14 63:3
associated
55:9
assume
61:13
assuming
8:20 111:7
asthma
49:17,17 80:15 109:2
atmosphere
60:1 71:23 73:23
attacks
49:17 80:15
attendance
21:20
attendees
26:5
attention
103:15 105:5 116:10
attracted
41:7
attracting
90:10
audience
21:1
audit
83:19
author
93:17
authority
54:13 55:19
Autumn
36:20,21
available
19:4 61:2 64:12 67:15 105:12 109:23
average
84:4
avert
47:2
avid
66:16
avoid
60:20 64:23 65:20
aware
84:15
away
103:12

B

B
75:22
babies
48:19
back
3:15 9:16 10:21 12:11 19:7 23:17,18 24:16 26:22 27:16,18 31:10 43:23 44:5 83:17 100:6 105:25 110:1,5 113:21 115:12
background
14:22
backlog
58:10
badge
2:20 20:24
bag
3:5
bail
87:9
balances
14:2
bankrupt
36:7 53:2 99:22
bankruptcies
44:14
bankruptcy
35:18
Barbara
1:14 4:13,15 6:24 27:19,21
base
55:13 58:2 65:24 67:24
based
15:16 18:16 26:10 83:6
basin
11:10,19,20 35:17 38:22 41:20 79:4 88:5
basis
23:16
Bathrooms

2:23
bear
52:25
bearing
52:6
beautiful
62:7
Beaver
95:16
became
66:21
because
12:1 35:7,15 41:24 48:13,18,20 49:22 50:10 68:25 74:3,17 75:11 77:5 80:6,24 83:16 90:12 95:5 107:17 112:17
become
90:2 94:16 95:24 96:6 96:10,22
been
8:4,13,22 12:9,20 18:6 27:6,12 34:1,6 35:3 36:1 38:1 41:21 43:25 44:6 47:10,16 60:16 68:8 69:4 73:6 73:8 77:19 78:9 92:19 93:6 107:20 109:20 113:3 115:16 115:24,25 116:12
before
1:13 2:16 12:5 19:11 24:17 31:11 32:7 33:4 39:5 40:16 61:14 66:18,19,20 79:5 83:9 84:11 89:9 104:22 109:25
begin
4:1 24:24 92:16 104:8 106:6
beginning
22:8 70:5 71:17 114:2
behalf
2:7 6:10 28:3 30:8 45:17,22 80:1 86:9 87:20 110:23 115:23
behest
31:14
behind
41:25
being
2:12 3:17 4:16 5:12 9:2 9:2 24:18 32:5 35:7 51:18,18 67:9,25 71:19,22 72:24 73:5 73:22 74:25 93:15,16 105:1,7,21 110:14 112:18 114:6 115:6
belief
54:2
believe
34:21 91:5 94:11 100:3 100:21
believes
54:5 61:22,25 62:1 84:17
belong
32:22 77:8 88:16
belongs
92:6
below
41:6 64:19 81:25
Ben
91:8,8
benefit
45:4
benefits
28:22 47:24 51:6
best
16:10,18 61:2
better
56:5 75:12
between
61:1 68:23 93:11,11 98:5
beyond
74:15 78:24 79:16 80:25 104:10
bid
15:14 32:1 36:7 40:23 87:11
bidder
31:23 34:17 38:22 41:7
bids
16:2 38:16 41:14 85:22
big
34:10 84:5
bill
53:5 61:6,9,12,12
billion
10:12,13,16,16 35:14 37:18,19 41:12 69:10 69:14 71:23,25 72:13 73:7 83:24
billions
35:21 38:9
biological
52:5
biologist
51:3
biology
81:12
biosphere
70:13
bird
52:1 79:2
bit
11:3 14:21,22 25:15 69:22
Blair
74:1,1
blind
60:3
BLM
1:15,16,16 4:14 5:15 10:3,24 12:14 16:18 21:19 29:10 35:15 37:5,16 39:1,3,9,23 47:19 50:17 54:13 56:1 58:6 60:25 64:7 64:14,21 65:10,22 66:10 80:5,17 81:14 82:15 85:5,24 86:25 90:18 107:10,12 108:5 115:23 116:11
BLM's
64:10
BLM-managed
10:11 11:18
blocking
94:4
Blue
53:24 54:1,5 56:11
board
45:14 71:13 95:17,18
boasting
101:11
bodies
50:12 94:2
body
48:20 52:9
bond
40:25 41:22 53:2
bonding
40:24 42:18 44:16 65:4 89:2,3,5 98:14,15
bonus
15:14 16:2
bonuses
10:17
bony
89:7
book
73:11
boom
111:15
border
6:11
born
33:4 66:19 69:5 87:15
borne
51:18
borrow
82:21
both
44:19 54:4 56:21 98:20 103:1 107:21 111:23
bottom
7:1 41:8 106:18
boundaries
79:15
box
26:21
boys
48:7
brain
49:23

brains
44:23 48:22
break
4:8 27:14 104:22 105:3 105:18 109:21 110:1 113:15 115:7
breaking
108:1,3
breathe
63:10 73:2
breathing
49:7
Brian
79:24,25
brief
4:2 12:8
briefly
8:10 10:2 104:23
bring
24:13,20 76:17,21
bringing
90:10
brings
38:15
broad
21:13
broken
31:1 40:19 54:7
brook
51:25
brother
61:19
brought
90:6
Buckeye
80:2 87:5
budget
33:2 36:23 69:7 107:4
built
14:2 75:2
burden
47:3 106:22
Bureau
1:3 2:7 6:3 8:1,10,16 30:23 37:3 56:15 75:8,10 101:21 108:18 110:12,21 114:20 115:13 117:6
burn
69:19
burned
61:24 99:10 103:5 107:3
burning
48:16 49:2 63:13 64:8 69:12 70:9,11 76:13 76:20 89:20 90:20 99:18 109:1,5
Burns
59:11,13
business
52:21 53:15 64:17 78:24 85:14 98:4 111:2,2,14,17 112:20 113:3
bust
34:11
busy
5:20
buy
67:15

C

C
42:22 75:22
CAFE
46:18
calculate
39:2
calculated
16:6
calculating
39:16
calculation
16:8 78:25
calculators
74:12
call
3:9 43:11 65:9 84:22 89:7 91:1,3
called
24:1,6,12,18 43:21 44:3 90:2
calling
23:23 40:13 112:12
calls
31:8
Cambria
44:3
came
11:9 20:14
Campaign
30:20
campaigns
51:5
Canada
36:15
cancer
74:6 89:16 95:23,25 96:5,7,9,12,22,23 109:2
Cantwell
84:2
capacity
50:21
capitalist
112:15
caps
72:6
captive
85:21
capture
25:8 39:21 114:3
captured
85:12
capturing
55:21
carbon
30:20 35:4 41:1 45:20 46:10 50:2 52:3 56:6 56:9 69:7,10,14,25 70:11 71:20 72:3,18 73:10,22 94:24 98:16 107:3,4,14
card
3:14,16 23:6,17,18,20 23:23 26:8 100:6 104:17 113:14
cards
23:10,15 26:16 100:4 109:19
Care
48:8
cared
63:5
career
62:13
cars
94:6
Carson
93:17
cases
100:19
catastrophes
90:17
catastrophic
47:2
cause
36:11 48:24 49:15,18 49:23 78:18 95:22 96:3 109:1
caused
30:3 63:8 72:19 74:10 96:19
causes
34:17 96:5,21,22,25
causing
49:13 50:3 51:13 53:16 73:4 78:13 83:14 109:10
cell
3:6 24:21
Celsius
82:1 107:5,7
Center
1:9 57:2,8 106:9 117:7
central
37:15
cents
84:4
century
72:11,12 84:21
CEO
33:23 42:24
certain
89:10
certainly
2:13 18:6
certify

117:3
chain
96:19 97:3
chair
97:15
chairman
95:17
chairs
24:5
chance
82:4
change
16:20 33:12 36:12 43:7 46:15 47:13 50:3,4,7 50:13 51:5,22 58:7,13 60:20 66:21 67:2 70:15 74:22 90:16 94:3 95:7,10 100:25 101:25 102:3,10,14 106:10 108:7 111:7 111:10 114:18
changed
64:21 66:25 83:23
changes
16:15 28:5,19 39:15 84:17 108:16
changing
68:21 86:20
chapter
80:1 97:16 108:14
charge
31:16
charged
8:24 9:7,25
Chatham
81:12
cheap
34:19 58:18
cheaper
33:9 96:14
check
3:5
checking
100:11
checks
14:1
chemicals
60:2
Chief
1:15 7:9
childbearing
52:15
children
43:12 44:9 46:6 48:9 48:17,19 49:7,16,19 49:22 50:5,9,19,24 59:21 68:20 70:3 76:9,10 80:15 82:21 109:4,7,14
children's
44:22 48:12 49:13
chime
25:14
China
34:18
choice
65:22
chosen
60:3
Christian
59:15
Christians
43:5
cigarette
74:7
circumvent
81:18
cities
46:19
Citizen
67:6
citizens
67:9,15 71:12 77:10 100:13 108:24
city
5:18 67:25
civil
20:3
Clairsville
87:17
clapping
20:11
clarified
7:22
Clarion
82:14
Claudia
108:12
clean
33:24 35:21 43:6,7 45:2,21,22 46:17 47:19 48:10 50:22 51:4 53:9,17 54:17 55:1,14 59:14 68:5 76:14 84:23 90:23 93:23 95:8 103:17,18 104:14 107:15
cleaner
82:16 106:19 113:8
cleaning
32:12 52:22 89:19
cleanup
53:5 58:22
clear
22:6 32:15 62:20 100:23 101:15
clearly
25:1,6 36:8 70:23 110:17 114:3
climate
16:10,11,20,23 32:4,20 33:12 36:12 43:7 44:24 46:3,14,14,15 47:2,13 50:3,4,7,13 50:17 51:5,12,22 56:3 58:13 60:2,8,14,20 61:2 64:2 65:13,21,25 66:2,21 70:15 71:12 74:22 80:24 81:19,22 81:23 85:25 87:12 90:16 95:7,9 100:25 101:11,19,24 102:2,4 102:10,14 106:10 107:25 108:6 111:9 114:18
clinical
63:2
close
41:15 64:22 116:15
closely
45:25
closing
115:21
clothes
94:7
club
45:13 54:1 76:2 80:1 81:10 88:22 91:9 93:5 97:16 108:15
coal
1:4 2:10 4:4,18 5:3,5 6:2,15 7:2,12,21 8:9 8:16,19 9:1,10,21 10:4,13,25 11:2,5,8 11:11,12,23,25 12:9 13:3,11,15,22 14:6,15 15:21 16:2,12 17:2,8 17:22 18:7,19,22 21:3 21:14 28:6,7,11,12,16 28:20,23 29:2,7,11,24 30:2,25 31:1,14,14,17 31:20,23,25 32:3,13 32:18 33:3 34:2,10,15 34:21 35:1,8,11,16,18 36:6,10,17 37:4,5,7 37:14,15,18,25 38:6,7 39:3,17,20 40:14,18 41:6 42:5,15 43:19,20 43:23 44:13,20,21 47:8,22 48:14,16 49:3 49:4 51:6,10 52:19,20 53:1,10,20 54:12,24 55:7,8,8,21 56:18 57:12,16,19,21,23,25 58:4,7,11,14,16,18,21 58:23 59:1 60:9,12,17 60:22 61:4 62:10 63:13 64:1,3,4,8,11 64:15,17,19,25 65:8 65:23 66:13 67:19,20 68:22 69:13 70:11 71:15,18 72:2 73:19 74:11 75:9,11 76:5,7 76:13,17,20 77:5,15 77:17,19,23 79:6,9,18 80:6,8,12 81:15,17,20 82:6,10,11 83:9,12,15 83:17,20,23 84:2,4

85:6,7,7,13,14,20,25 86:19,22 87:8,9,12,16 87:24,24 88:18 89:20 91:23 92:4,14,17 94:8 94:17 95:8,20,22 96:3 96:20,21 97:2,3 99:1 99:10,11,13,19,24 100:13,17,20 101:1,4 101:7,14,17,22 102:23 103:4,5,5,7,15 103:16,20 104:3,6,9 104:11 106:15,17,23 106:25 107:2,13 108:8,17,19,19 109:1 109:5,13 110:6 111:1 111:22 112:1,6,23 113:22 114:10,23 115:13
Coalfield
57:2,8
Coalition
48:9
coals
35:9 99:19
coal's
50:2
coal-dependent
54:9
coal-fired
55:7 99:10
coal-mined
85:11
coal-powered
46:22 80:10
coal-producing
57:18
coast
30:7 95:2
coastal
46:6
cohesively
40:21
Coke
82:14
coking
35:24
collect
111:4,25
collecting
9:20
collections
37:19
College
63:4 67:4 95:16
color
47:5
Colorado
11:16 63:23
combination
54:22
combine
22:3
combusting
17:8
combustion
16:13 17:3
come
2:5 3:2 8:16 9:21 15:2 20:21,25 23:15 24:16 27:6,8,13 30:14,16 45:9 53:19 57:4 59:8 62:9 67:23 68:10 71:5 74:14 75:20 81:5 83:2 90:17 91:6 100:7 109:18 113:17
comes
8:2,12 9:16 10:21 11:7 11:18 28:12 78:5 103:7
comfort
63:14
comforted
62:9
coming
10:20 13:12 46:23 55:2 94:2
comment
5:21 15:7 19:9 21:12 22:16 24:24 25:18 26:21 27:8 56:1 77:10 106:6 110:8 113:17 114:2 115:5
commented
83:25
commenting
4:5 19:12 24:21 26:22 30:13
commentor
113:24
commentors
25:21 104:18
comments
3:13 4:20,24 5:1,13 7:20 14:17,18 19:23 20:4,14 22:2,12 25:8 26:19,24 27:2,5 37:3 39:7,19 40:5,16 43:16 44:10 45:16 97:17 104:19,25 105:10 110:18 113:24 114:4 116:6
commissioned
79:8 83:19 88:10
commitment
81:22 111:9
committed
33:24 45:19 93:8 105:1
common
36:22 37:10 48:12 78:1 84:19
commons
84:19
Commonwealth
34:3 43:9 45:2
communities
10:22 29:12 30:6 32:4 33:25 34:7,12,18 47:4 47:6,25 54:9,17 55:4 55:6,13,17,24 56:22 57:7,15,20 58:1,20 65:5 86:3 87:25 89:13 97:4 98:18 99:19 100:16 102:24 103:16 104:1,9 114:14
community
43:19 46:1,7 49:3 54:19 95:16 103:24
companies
14:4 31:14,21 32:11 34:10 35:18 36:6 38:24 41:10 44:20 51:19 52:21 53:2 58:16 59:2 64:23 85:7,13,15 87:9 99:21 103:4 106:17,23 108:19
company
12:21 44:13 111:20 112:6
company's
42:1
comparables
39:12
comparisons
60:6
compassionate
74:16
compensated
39:25
compete
59:2 106:19
competing
107:10
competition
38:18 39:1 65:1
competitive
38:11 41:4,14 54:24
completely
12:23 74:2
completion
29:8
components
16:5
comprehensive
32:13 40:14 65:15
comprehensively
40:21
compromised
50:6
computer
74:13
concentrated
54:6
concentrations
60:7 78:14,17
concern
28:5 46:25 49:21 58:13

102:17
concerned
29:25 49:1,6 97:5 106:10
concerns
22:5 71:15 77:12,13
concluded
60:19 116:18
conclusions
61:1
conditions
42:9
conduct
80:18 81:14
conducting
77:4
Conemaugh
89:22 90:8
confident
26:11
conflicts
85:9
confronting
45:20 46:14
Congress
6:18 38:11 54:15
Congressional
27:20 112:12
Congressman
28:3,4,20 29:16 30:8
Congressman's
27:23
consensus
65:18 81:16 89:17 90:19
consequences
50:18 66:2 113:10
consequential
86:17
Consequently
70:14
conservation
33:17 97:15
conservative
59:15
consider
13:24 18:9 28:19 35:10 50:17 52:17 53:6 55:18 59:20 77:20 80:5 82:15 88:12 98:15,19,20 99:16,25 112:21 114:22
considerable
51:8
consideration
15:21 88:15 107:2
considerations
17:14 84:13
considered
16:8 17:10 19:24 21:9 39:16 52:5
considering
13:16 15:9,15 98:1 108:8
consistent
56:3
construction
62:16
consultant
97:7
consume
52:15
consumption
103:10
contact
105:16
contain
29:21
contains
8:18
contaminated
52:9,14
contamination
77:25
continue
13:6 14:6 36:17 48:22 55:3 58:8,14 69:24 77:18 78:7 115:18 116:7
continued
16:12 51:10 61:3 103:14 110:24
continues
107:12
continuing
23:11 53:10,12 56:19 81:20 101:15 108:25
contract
67:12
contradiction
81:21
contrary
62:21
contribute
95:7,9,10
contributed
28:10 33:16
contributes
60:10 89:21 96:24
contributing
55:12 102:9
contribution
50:2 111:13 112:2
contributor
60:18
control
85:6 107:24
Convention
1:9 117:7
conversation
3:9
convert
97:9
convey
28:5
coping
46:7
cordless
24:10
corner
23:21 26:22
corporations
92:5
correct
117:4
correlation
89:18
cosmetic
79:17
cost
18:4 44:22 51:8 52:6 52:25 54:24 58:17 64:7 65:2 71:2,23 75:5 97:4 98:16 99:24 107:14
costing
32:19 52:18
costs
44:18 51:16 52:4 54:24 56:13 58:23 59:1 98:17 112:23
could
18:11 22:8 28:4,6,15 43:16 54:15 55:14 68:5 74:22 90:17 113:2
couldn't
3:20
Council
41:9 79:8 83:6 84:6 100:13
count
22:12 25:11
Counties
57:14
country
6:16 34:8 36:18 37:8 37:22 43:5 44:15 45:21 51:23 52:9 53:7 55:4 57:18,20 66:11 74:11 76:21 86:18 103:21
country's
28:25 59:5
county
44:3 45:24 57:16,18 95:16
couple
40:17 41:2 44:2 57:17 92:13
course
9:23 17:1 21:19 41:1 97:21 106:4
court
1:21 22:21 25:2,7 110:18 114:3 117:12
CO2
70:14

cradle
40:22
crazy
70:6 75:22
create
55:2 64:16 103:19,24
created
49:2 60:4 66:18
creates
108:20 112:23
creating
51:19 54:2
creator
112:15
crisis
60:8
criteria
15:18
critical
100:21 113:4
critically
65:12
critics
101:9
crucial
38:16 84:23
crushing
112:25
cumulative
98:22,25
curb
81:24
current
5:8 12:18,19 15:18 17:17 32:18 38:7,12 38:24 62:1 67:19 70:18 72:9 84:1 103:2 112:13
currently
17:12 31:13 43:1 93:23 97:14
cut
25:25 36:15 69:23
cuts
101:12
cutting
85:20
cycle
48:14 62:3 78:24
C-E-R-T-I-F-I-C-A-...
117:1

D

dad's
44:4
Daily
111:4
Dakota
11:15 88:3
damage
28:7 30:4 34:15 42:3 42:16 48:24 49:24 53:16 60:4 78:18
damaged
41:24 60:14,15
damaging
32:20
danger
103:24
dangerous
49:9 103:23
dangers
82:13
Dara
111:3
data
22:3 39:9 86:25,25
database
56:8
dating
83:17
daughter
82:9
daughters
88:5
Dave
74:1,1
David
1:9 117:7
day
2:19 5:23 23:12 33:10 43:25 44:6 57:21 76:11 116:1,12
days
49:18
DC
83:10
deadline
40:16
dealing
43:10 90:15
deals
36:7
death
112:17
deaths
50:8 80:12
Deb
22:22
Deborah
1:21 117:2,12
debt
40:2
decade
10:10 37:16 101:2
decades
18:14 36:24 42:8 83:23 102:25 103:4
decide
58:8,14
decided
74:23
decision
13:2,2,6 33:19 64:9
decisions
4:21 5:10 18:10 22:6 59:18,20 64:10 65:24 114:19
decision-making
63:19
declare
35:18
decline
101:2
declining
52:19
dedicate
106:11
dedication
82:23
deep
46:25
deer
42:7,13 79:1,10,12
Defense
79:7 83:6
deferring
13:7
define
22:1
definitely
15:25 47:3 89:19
degradation
16:19 77:17,22
degree
107:5,7
degrees
82:1
Delaware
45:24
delay
112:16
delays
20:13
delegation
27:20
deliver
30:9
demonstrated
85:13 91:22
deny
95:6
Department
12:12 30:22 31:4 33:15 37:23 56:16 66:12 77:3 106:14 108:5
depend
29:23 79:22
dependence
34:21
dependent
48:1 112:25
depending
66:18
depression
50:15
deprived
68:1
Deputy

1:15 7:9 110:11,22
describe
101:10
deserve
32:22 47:7
design
70:19
designed
30:2 62:16
destroy
91:24 92:5
destroyed
57:25 58:2 72:24
destroying
44:8
destroys
108:22
destruction
78:13 92:10
detailed
39:19
determining
39:5
devastating
81:18 107:21,23
devastation
103:1
develop
18:2 48:22 49:25
developed
12:3,16 37:12 50:11
56:10
developing
9:7,13,25 48:19,21
50:21
development
37:25 49:16 54:19,20
65:3 67:20,23 79:15
80:18
devoid
52:24
die
80:10
died
74:6 95:25 96:18
different
21:24
difficult
111:24
digital
25:11
dilute
78:16
dioxide
49:9 50:3 69:10,15
70:12 71:21 72:3,19
73:10,22
Dire
73:11
direct
50:6 63:10 78:13 81:21
89:18 95:21 97:1
98:21 109:1 111:6
directed
12:14
direction
53:7 68:12
directly
10:21 24:19 50:1 57:21
64:25 77:12
director
1:14,16 4:14 5:15 7:16
30:22 36:22 57:1
86:16 100:13 110:11
110:22
Directors
45:14
dirty
103:10
disagree
20:18
disaster
102:3
disasters
51:17
disbursing
9:20
disclose
64:9
discuss
15:1
discussions
18:7
disease
89:16 93:15
diseases
49:15 50:16 63:7
displace
47:4
displaced
58:1 72:14
disregard
99:2,6
disrupting
20:12
disruption
44:24 65:21 81:19
distinguish
68:23
distorts
38:14
distribute
23:14
district
29:13,20 110:21
112:12
disturb
9:9
ditto
27:9 57:3
diverse
20:10 66:11
divert
96:13
diverts
103:15
division
1:15 7:9 69:15
doable
107:19
doctor
63:2
doctors
74:8
document
12:16
DOI
39:19
doing
29:9 67:14
dollars
10:13 35:21 75:13
domestic
28:16
done
7:14,14 13:8 32:16
74:24 75:16
door
13:12
doors
2:23,25 3:10
Dorcas
93:1,2
doubled
39:18
doubtful
41:22
down
11:3 20:11 24:8 25:11
27:15 30:14 43:16
45:9 69:20,25 71:5
91:3
downplay
60:9
downwards
70:25
downwind
49:4
Doyon
63:21,22
Dr
61:12 71:9
drag
87:11
drainage
36:2 78:4
drastic
92:20
draw
38:25
dried
82:12
drinking
112:7
drive
33:18
driving
45:19 54:25 60:2

drought
108:2
drove
88:2,4
drug
96:16,24,25 113:4
drugs
96:14
due
16:19 32:2 50:2 68:1 82:13
dumping
112:8
dumps
65:9
duration
78:20
during
2:19 3:2 7:23 10:24 13:18 14:19 15:12 22:17 32:5 38:3 63:5 81:23 109:22
dying
72:18
D.C
83:6

E

eagles
79:3
earlier
47:1 74:4 112:14
early
21:6 48:23 63:14 70:24
Earth
61:24 62:3 82:20
Earth's
69:7 73:16
east
84:9 89:6 90:5 91:19 95:2
eastern
1:15 4:14 10:9 11:24 78:22 87:1 98:24 99:7,19 110:20
easy
99:2
echo
57:6
ECO
95:19
ecological
34:15 72:21
ecology
95:15
economic
33:16 41:9 46:10 54:11 54:19 65:13 68:6 82:11,18 84:7
economics
84:10
economies
17:23 34:9 54:10,21 55:25 60:13 86:4
economy
33:25 34:20 45:3,21,22 47:18 51:9 54:17 59:4 87:11 92:22 103:19 104:14
ecosystems
72:23 73:16
Ed
51:2,2
educating
93:6
educational
114:11
EEN
43:3
effect
49:12 59:4 63:10 92:10 94:3
effective
31:21 62:22
effects
16:14 17:4 21:13 44:23 50:7,13 51:22 60:20 65:21 76:5,7 81:19 90:19 92:20 93:19 94:8,9,18 95:21 97:1 97:3 98:1 101:22 102:10
efficiency
19:2
effort
5:24 6:20 56:11
efforts
29:1 66:13 101:24
Eggers
1:14 4:13,15 27:21
EIS
19:21,25 21:9,10,11 51:7 53:13,19 80:18 81:2 97:25 105:8 113:22 115:19
either
2:24
elderly
50:5
electric
62:15 75:7
electricity
11:2,6 18:4,23 36:11 61:21 62:9
eliminate
47:12 58:11
eliminated
30:5
eliminating
78:12 85:22
elk
42:7 79:2 112:9
else
3:8 97:7 100:5 104:16 109:18,25 113:14,17 115:8
Elser
1:15 7:8,15,16
else's
27:8
email
66:19
emergency
2:24 13:24
emission
46:16,20
emissions
35:4 36:12,16 56:6,9 59:25 64:6 81:24 107:5
emitted
49:8 73:23
emphasis
53:8
emphasize
66:24
employment
55:12 62:14
empower
100:15
EMPSI
19:19
encircles
11:13
encourage
2:4 26:20 40:19 67:20 88:14 105:7
encourages
103:9
encouraging
87:22 114:20
ended
104:7
ending
47:20 109:13
Endler
1:21 117:2,12
endorsed
87:22
ends
107:21
energies
82:7
energy
6:16 16:24 17:24 18:18 18:19,20 19:2 28:18 28:25 29:4 33:9,25 37:16 43:6,7,10 45:3 45:21,22 46:23 47:19 50:22 51:4 53:9 54:17,25 55:1,1,14 65:1 67:5 73:15,19 79:15 82:5,16,23 83:4 84:24 90:22 94:10 97:9 103:17,18 104:14 106:19 107:16 107:17 111:8 112:19 112:22
enforceable

85:15
Enforcement
9:6
enforcing
9:25
engineer
61:21 68:19
enhance
104:4
enhancements
113:4
enough
4:11 14:5 47:1 69:13 76:23
ensuing
83:21
ensure
5:5 16:18 20:2 37:11 39:24 41:13 54:16 55:22 56:12 85:9 86:11
ensuring
55:23
entering
62:25
enterprises
113:7
entire
32:13 43:13 75:6 92:23
entirely
58:11 91:21
entity
6:4
environment
54:3 56:23 60:13,14 69:7 92:23 93:5
environmental
1:5 2:11 4:22 5:4 12:6 12:25 13:9,19 14:11 17:20 19:17 21:5 29:9 42:25 43:3 46:1 47:24 51:17 57:10 60:4 62:18 65:10,12 66:2 68:6 80:8,20,23 81:12 82:13,17 84:8 84:12 95:17,24 97:22 102:25 110:7 114:24 115:14
environmentalist
76:16
envisioned
38:11
EPA
98:20
equally
22:12
equipment
29:22
Erickson
100:9,12
erode
78:8 113:2
especially
25:5 37:2 46:17 47:5 50:5,9 86:23 109:3
essential
59:5
essentially
38:23
establish
56:8
established
51:13 69:5
estimate
80:9 99:24
estimated
71:24 72:13
estimates
35:12 78:21
estimating
35:9
eternity
73:16
evaluate
18:12 47:19 54:13 64:14
evaluated
79:11,13
evaluates
21:13 65:13
evaluation
14:20
evaluations
60:5
Evangelical
42:25 43:3
Evans
93:1,2
even
35:19 48:17 49:25 75:5 78:8 84:11 101:1 112:17
events
5:25 107:21
eventual
56:20
eventually
76:8
ever
91:18 93:8
every
5:22 33:10 48:14 52:8 57:21 61:23 69:15,16 80:9
everybody
2:6 92:6 105:7,17
everyday
66:22
everyone
2:3 3:7 4:16 20:16 26:12 70:16 116:16
everyone's
116:9
everything
14:3 75:10
ever-rising
40:1
evidence
62:20 95:8 98:25
evident
60:25
exacerbate
49:17
exactly
107:25
examination
58:9
example
5:2 20:21 38:10 52:8 80:20 99:9
examples
15:9 17:4 77:20
exceeding
73:6
excess
96:15
excited
7:3
exclusive
54:4
excuse
97:1,5
Executive
57:1 100:13
exist
32:16
existing
19:3 53:20 114:23
exists
2:24
exit
2:25
expanses
35:22
expansion
61:3
expect
15:4
expected
72:10
expensive
74:25 75:22 96:12
experience
34:6 76:5
experiences
61:11
experiencing
63:18
expert
61:21
experts
31:16
exploited
110:25
export
18:13 101:16
exporting
35:11 102:8

exports
18:5,10 39:17 101:5,6 101:23
exposed
78:11,22
exposure
48:23 49:20 50:10
express
27:10 71:15 77:13 114:9
expressed
46:25
extended
85:17
extensive
21:12 40:15 72:15
extent
60:9
external
44:18 59:1 64:7
externalities
16:7 17:19 44:16 74:5 74:17,18 75:16 89:5 90:13,21
externality
74:5
externalized
44:21 56:14
extract
94:22
extracted
55:21 61:24 71:19 77:19 90:20
extraction
42:12 50:20 56:2 71:16 72:2,17 76:20 86:24 87:3 94:4 113:1
extreme
50:8 102:7
extremely
66:14 87:25
eye
60:3

F

face
24:22 40:1 59:18
facilitating
101:13
facilitator
1:17 19:8
facilities
35:24 55:9
facing
25:4
fact
32:18 66:24 78:19 95:10
factor
5:9 108:25
factors
17:16 54:22
facts
58:3
faculty
63:3
fail
41:18 67:12
failed
35:15 38:13 39:4
fails
38:2
failure
35:10 41:18 68:2 89:12 89:12
fair
5:6 15:13,24 16:4,6 31:19 35:9,15 37:11 37:24 38:6 39:2,5,16 41:6,15 55:21 67:13 85:19 106:24
faith
45:1
fall
22:20 105:13
families
96:5 109:4,7
family
40:10 61:11 63:2 82:9 82:13 89:15 93:14 95:25
family-sustaining
28:24 30:5
famous
90:3
far
4:11 9:13 23:10 26:11 41:24 64:19 71:25 72:15 90:8,21 104:18 109:20
fast
70:7
faster
70:12
favor
110:24
favorite
44:4
fear
95:1
federal
1:4 2:10 4:4,18 5:3 6:15 7:2,21 8:8,16 9:10,21,25 11:11,22 12:22 13:15 14:6 16:2,12 17:2,8,22 18:22 21:3,14 28:6,12 28:14,20 29:2,6,21 30:1,25 31:1,15,18 33:3 35:7 37:1,4,6,7 37:12 38:6 39:3 40:2 40:14,18 42:5 47:8 54:12 55:19 56:3,10 56:17 61:3 64:1,3,8 64:15,16,19 66:13 68:2 75:13 77:5 79:18 80:6 83:15,20 84:3,18 85:1,6 87:22 89:25 90:20 91:23 92:1,3,14,17 103:14 104:3,6 106:16,17,24 107:12 108:8,17,20 109:13 110:6,24 113:22 115:13
federally
64:10
federation
40:8,10 51:4 77:2 79:7 86:10,13 87:21 88:10
feedback
19:6 39:8
feel
2:19 4:10 20:23 67:8 114:17
feet
72:11,12
fellow
87:5
ferocious
69:13
few
2:17 19:13 21:24 43:18 77:20
fewer
55:14
field
59:13 112:3
fight
48:12
figures
18:17
filing
97:18
final
2:9 39:10 41:22
finally
5:9 18:1 19:1 39:15 52:17 53:6 65:22
finance
87:23
finances
90:22
financial
42:1
find
2:20 20:23 32:17 50:1 71:2
finding
80:23 86:2
fine
62:6,8 92:2
finish
26:2
fires
108:2
firm
85:5
firmly
51:12

firms
29:23
first
2:18 19:16 20:9 23:15 23:15 43:15 57:3 65:14 66:9 80:4 83:19 85:5 89:1,1
fiscal
36:25 100:20
fish
51:25 52:16 88:4
fisheries
99:14
fishing
90:4,11
five
23:25 82:14 87:4 93:15
fix
32:14 54:7
flash
107:22 108:2
flawed
47:10
flaws
35:8 83:25
floods
102:2 107:22 108:3
Florida
6:12
focus
51:7 53:14 67:4
folks
2:4 5:16 26:10 104:25 115:25
followed
4:2
following
23:14
food
50:14
foods
50:1
foot
75:2
Force
48:10 59:14
forced
57:24 58:21,22
forecast
51:24
forefront
18:6
foregoing
117:3
foreign
39:17
forest
44:7 72:22 80:21 87:7 108:2
forging
54:22
formal
21:11 45:16 115:3
formally
47:14
format
21:22
formed
54:1
former
78:2 86:14 102:23
forth
38:3
Fortunately
69:20
forward
5:12 13:3 14:3 25:4 56:18 104:1 105:3 115:19
fossil
42:11 47:18 50:20 51:13 56:2,10 60:1 61:23 65:19 69:10,21 69:23 70:9,21,24 72:17 73:14,18,20 80:19 84:25 86:24 87:3 94:22 95:6 103:12 107:9,16 111:1,1,6,16,22 112:17,25
foul
103:23
found
34:8 38:7,20 41:6,19 79:11,13 83:22 91:14 95:1
founder
95:18
four
32:9 43:15 62:7 85:19
fourth
101:4
fracturing
57:13
fragile
42:5
Frank
86:7,8
Fred
106:7,7 108:16
free
2:20 4:10 20:23
freedom
71:2 112:5
friend
94:13
friends
93:4 96:6,17
front
2:5 20:6 24:3 94:4
frontline
57:7,20
fuel
18:4 42:11 50:20 61:23 69:21,23 70:21,24 84:25 86:24 87:3 94:22 111:1,6,16 112:25
fuels
28:24 47:18 51:13 56:10 60:1 65:19 69:11 70:10 72:17 73:14,18,20 80:19 95:6 103:10,12 107:9 107:17 111:1,22 112:18
fulfilling
18:20
full
6:21 14:25 15:4 58:16 75:4 111:11
fully
39:24 41:21,23 50:11 79:20 80:7 99:25
funding
90:6
funds
37:21 104:2
furious
67:18
further
28:7 29:7,11,18 38:2
Furthermore
111:13
future
33:23 34:22 41:13 43:7 46:8 47:7 50:19,24 53:14 58:11 59:5 68:9 73:13 75:17 76:18,22 82:18 86:18 90:15,22 92:11,23 94:11 95:1 102:20 103:17 114:19

G

Gahanna
61:12,14
gains
72:16
game
38:23
gas
15:11 36:12 37:13 54:23 60:7,22 61:20 61:22 62:10,13 64:6 64:20 69:13 73:10 80:22 81:3,24
general
17:25 31:5 86:14
generate
50:22
generated
10:15 11:2 36:11 51:17 72:1
generates
67:24
generation
18:23 47:7 64:12 68:6 76:18

generations
50:19,24 61:22 67:22 68:7 73:13 76:19,22 82:19 93:15 102:20
gentleman
87:15
gentlemen
61:7
Geological
56:7
getting
14:10 20:13 33:9 84:12
giants
35:19
Gibsonia
48:5
give
3:20 7:20,20,25 14:22 23:11 24:17 26:16 36:6 70:25 71:1 98:10 104:21
given
23:9 47:17 58:9 100:3 109:20
giving
75:17 91:23 92:4
glacier
108:4
glaciers
72:6,7,8
glad
105:23
global
60:6 62:1 81:25 90:16 101:23,24 102:10 111:5,9,14
globe
67:5
go
2:3,17 3:2,10,23 4:9 9:9 17:16 19:13 23:17 25:17 26:2 27:14 30:12 34:18 36:7 42:18 53:2 72:10 74:2,19 104:22 105:25 112:17
goals
38:3 56:4 86:1
goes
8:21 101:19
going
2:16 3:25 4:1 5:18 7:8 7:18 14:25 15:1 19:7 19:13 22:23 24:16 25:13,25 26:3,6 27:18 30:12 40:17 41:23 52:21 53:4,7,14 55:16 69:18 72:14 74:2 90:23 91:9 92:9,10,11 98:9 105:2,18,25 109:20 113:18,24 115:7,20
gold
7:13
gone
12:25 52:2 69:16
good
2:2 4:15 28:1,17 36:20 40:6 42:22 53:22 54:2 71:8 79:24 81:8 84:20 86:7 97:12,23 108:11 110:19 111:2 112:15,24
goods
34:19
governed
21:4
government
28:15 29:6 31:3 35:5 37:1 38:20 55:20 64:17 67:10,14 68:2,5 87:23 100:23 101:16 104:2 109:9
governments
55:16
government's
51:10
government-owned
101:14
grab
100:6 113:14
gracious
27:13
graduated
81:11
grandchildren
47:6 62:7 70:4 109:15 109:15
grandfather
87:15,18,18
grandfathers
83:9
grandmother
46:5
grants
108:19
grasp
97:24
grass
48:8 103:8
grave
40:22
great
5:18 20:19 34:17 51:23 60:17 83:8 87:17 109:15
greater
48:17
greatest
83:22
greatly
2:14 7:6 63:9
Green
53:24 54:1,5 56:11
Greene
57:14,16
greenhouse
36:12 60:7 64:6 73:10 81:24
Greenland's
72:6
Greet
106:8
Greg
68:15,17
Grenter
56:25 57:1
grew
43:21 63:12 83:7 89:6 89:15 93:9
Grim
110:19,22
ground
9:9 20:8 30:3 44:4 47:22 49:13 60:23 65:20 73:20 81:18 107:9
group
20:6 24:5 30:14,15 45:8 48:8 59:7 71:4 81:4 91:3
groups
23:24
grouse
42:6 52:1 79:2
grow
89:14
growing
18:14
growth
49:24 78:15
guarantee
26:9
guess
93:20
guidelines
23:5
guys
7:20 92:8,19 114:6

H

habitat
42:6 78:12 86:23 103:8
habitation
86:12
habitats
77:22 79:21
half
41:5 43:4 60:21 69:24 111:11
hand
24:12
handling
55:9
hands
96:9
Hanna
36:20,21
Hanson

72:9
happen
13:22
happening
99:15
happens
93:20 96:8
happy
2:21 20:24 24:13
hard
7:12 20:5 37:13 54:9 61:17 84:10
hardship
29:11
hardships
29:18
harm
34:17,20 51:20 75:15 109:10 113:6
harmed
51:19 109:8
harmful
48:23 49:2
harms
57:25
Harold
86:15
head
36:15
headed
101:7
heading
70:25
health
5:4 9:24 33:1 42:1 48:13,15 49:13 50:1,4 50:18,23 51:8,16 52:7 53:16 58:23 59:20 60:13 79:8 80:7 82:7 89:14 93:13 94:8,18 111:19 114:14,15,24
healthier
113:8
healthy
29:24 42:14 76:14 79:14
heap
89:8
hear
2:6 4:23,25 6:23,25 7:3 7:17 15:7 18:8 20:13 24:19,23 25:6,21 26:12 61:6 100:7 110:18
heard
19:20 22:13 23:5 61:10 61:13 94:12 97:19 98:12,23
hearing
5:13 12:10 31:8
hearings
66:10
heart
89:16 93:14
hearts
44:22
heat
50:9,10 51:14 70:15 75:6 108:2
heaviest
78:4
heavy
49:10,23 59:18 78:17 98:10
held
10:24 14:12 21:24 117:6
Hello
45:12 48:4 56:25 74:1 76:1 93:1
help
2:19,21 4:21 12:7 19:19 20:24 21:25 25:20,22 54:15 86:3 116:2
helpful
22:2 66:23
helping
24:8
helpless
74:21
helps
25:16 68:23
hemlock
51:25
herds
42:11,13,14 79:11,12
here
2:12 3:16 4:9,17 5:12 5:17,21 6:1 7:19 8:23 10:7,8 11:13,23 14:22 17:11 20:14 22:22 24:4 25:22 26:13 27:23,25 30:24 34:12 37:4,8 39:3 40:5 43:2 43:8,18 45:17 48:7,13 51:23 52:10,20 58:6 66:7 68:8,19 71:10 77:19 79:25 83:2,15 84:16 86:9 87:8 88:24 89:6,24 91:1,6 92:7 93:10 94:14 95:20 97:19 98:6 104:10,19 105:1,7,22 110:14 114:6,8 115:7 115:25
hereby
117:3
heritage
52:5
heroin
96:13,15,19 113:3
Hescox
42:22,24
Hi
5:16 66:5 68:15 95:14 102:22
high
40:18 67:1 78:17
higher
15:13 89:16
highest
73:7
highlight
66:23
highlights
101:9
highly
106:22
hike
88:3
hinders
84:23
Hinge
86:18
hiring
112:16
historic
104:13 106:14 107:22
history
29:14 83:16
hit
25:24 40:17
hold
6:22 20:2 23:22
holding
15:10,11
home
3:19 29:22 35:23 37:4 42:6 57:18 63:14 79:3 99:16 101:12
Honhold
27:22 28:1,2
hook
35:20
hope
51:7 52:17 63:17 115:17
hosting
66:10
hot
75:7
hottest
60:16
house
75:17,20 105:22
houses
74:23
human
48:15 51:8 52:7 73:17
humanity
69:6 102:17
humans
74:16 93:19
hundred
117:3
hundreds
46:21 55:2 79:2

hunting
44:4
hurricanes
51:15
hurting
32:19 112:21
hydraulic
57:13
hydro
62:11
hypocrisy
101:10

I

ice
72:5,6
iceberg
111:15
Idaho
11:15
idea
3:24
identified
6:24 8:5 13:17 14:17 15:6
identify
15:20
identifying
21:7
ignore
101:3
illicit
96:13,24
illness
49:25 50:8
illnesses
109:2
immediate
79:16
immediately
11:20
immense
77:6
immune
50:6
impact
1:5 2:11 4:22 12:6 13:9 13:19 14:11 18:1,22 28:15 29:3,9 48:17 65:11 77:7,23 80:24 97:22 99:14 110:7 115:14
impacted
50:2 55:6 57:21
impacting
102:11
impacts
5:4 16:10,11,20,21 17:1,3,7,21 21:8 32:3 32:6 36:10 43:12 47:2 48:14 50:18 52:7,18 65:14 77:15 77:20 80:8,25 87:12 87:13 98:17,21,22 99:1,7,12,13,18,20 114:17
impairs
49:24
imperiled
42:6
implementation
56:20
implore
82:15
important
4:19 6:13,17 7:19 10:18 12:17 13:21 14:24 25:5 32:14 33:20 37:7,21 57:5 67:9 73:21 87:25 88:12 99:23 104:13 105:5 107:1 108:7 109:11 111:23
importantly
45:4 101:18
imports
5:9
impose
29:18 92:16
imposed
29:6
imposes
64:8
impossible
39:8 76:15
improperly
38:14
improve
13:15 56:17 88:1
improved
56:21
include
35:8 42:17 50:7 54:18 79:18 85:18
included
22:19
includes
11:14 82:10 102:6
including
5:7 17:20,23 19:2 35:19 79:3
inclusive
20:3
income
47:5 72:1 109:6
incongruent
34:23
inconsistencies
35:9
inconsistency
61:1
incorporate
98:15
incorporated
19:21,25 105:11
increase
50:15 78:2 102:7,18
increased
16:16 19:2 50:7 55:22 58:15 86:2,22
increasingly
46:2
Incredibly
38:19
incumbent
32:24
independent
35:5,12 88:10
indicated
25:11 71:16
indicator
72:21
indirect
50:13 97:2 98:22,25 99:14,18
individual
38:24 54:10
individually
109:24
indoor
111:23
induced
46:3,11
industries
55:10 112:5
industry
28:8,11,18,23 29:24 30:4 31:15 43:20 44:19,21 46:9 57:25 62:13 69:21,25 101:1 111:16 112:2
infamous
52:21
inflated
28:14
influenced
62:4
influences
18:24
influxable
70:8
inform
22:1 100:15
information
4:4 22:3 27:1 38:16 105:16
informed
93:18 105:14
infrastructure
55:8 111:8
inherit
82:20
initial
39:20
initiatives
46:17
innovation
82:5
input

8:7 14:14 16:1 18:8 19:20 20:7 21:12 22:17 77:10 105:10 105:23
insect-borne 50:15
insecurity 50:14
insightful 104:20
Inspector 31:5
inspired 95:23
instead 68:11 99:6 104:12
integrity 40:25
intends 56:7
intense 51:15
intensively 63:7
intently 7:5
interest 27:4
interesting 61:14
interests 56:21 65:25 84:13 107:10
Interior 12:12 30:23 31:4 33:15 37:23 39:6 56:17 77:4 86:15 106:14 108:6
Interior's 66:13
intern 66:6
internalized 59:1
internet 3:18,21 105:24
introduce 4:12 5:15 22:21 27:19 27:22
introduced 91:20
introduction 7:25
invented 66:21
investigators 35:6
investing 82:6
investment 54:18
investments 90:1
invite 7:8 104:20
involved 9:12 34:1 105:8
involvement 22:10
islands 6:11
issuance 8:21
issue 9:14 33:21 34:2 37:7 61:16 81:2,20 98:9 106:12 107:2
issued 8:20,22 9:11 80:23
issues 14:25 21:7 22:4 31:10 57:4,11 88:25 89:17 89:25 93:13 105:5 116:3

J

JACK 110:19
Jackson 44:3
James 72:9 97:12,13
Jane 76:25,25
January 12:11 60:18
jeering 20:11
Jeremy 27:22 28:1,2 30:11
Jewell 12:12 81:1 83:13 86:16 106:13
Jim 40:6,6
job 17:24 19:19 20:2 112:13,15
jobs 28:11,17,24 29:4,10 30:5 34:9 54:3 55:3 55:14 103:19,21 112:23
Joby 101:7
job-killing 29:16
join 28:4 87:5
joined 110:10
joining 110:13
Joshua 30:19,19
Juan 6:11
July 19:23 75:4
jump 25:25
June 1:8 117:8
justice 46:1 57:2,8,10
Justin 88:21,21

K

Karina 66:5,5
Kasserman 102:22,23
Kate 61:7
Katie 1:17 19:8,16 27:21 61:8
keep 20:11 25:23 26:3 30:2 69:7,18 107:9
Keeping 73:19
Keith 27:23 28:3 112:10
key 6:25 64:2
keying 8:3
Keys 6:12
Khari 53:22,23
kid 91:15
killing 112:13
kinds 90:6
Kirchner 76:25,25
Kirkpatrick 108:12
know 3:18 5:19,23 15:5 20:5 25:14 27:16 28:9 29:5 32:15 33:12 41:4 42:4,19 48:13 52:19 63:15 66:14 68:24 75:23 76:6 92:20 95:11 107:8
knowing 18:15 94:8
known 19:19 51:6 82:3
knows 70:16
Kochanski 68:15,17
Kornze

1:16 5:15,16 7:17 30:22 104:23 110:9
Kotcon
97:12,13
Kraybill
106:7,8
Krissy
102:22,22

L

L
1:21 117:2,12
lack
44:16 89:19
Ladies
61:6
lagged
41:25
lakes
52:12,13
Lamburg
43:22
Lance
110:11 115:2,21,22
land
1:3 2:7 6:3 8:1,17,18 12:2 17:6 29:21 30:23 31:15,20 32:3 32:12 37:3 41:20 56:15 62:21 66:16 67:16,22 75:9,10 82:7 82:11,16,23 84:3 87:2 89:11 91:17,24 92:4 92:14,17 94:18,21 95:4 101:21 103:9 104:8 108:18 110:12 110:21 113:11 114:10 114:20 115:13 117:6
lands
6:6 9:1 10:12 16:17,19 28:12 29:2 32:20,21 33:1,14,19 34:14,16 35:1,2,22 36:3 37:12 41:23 42:16 43:24 47:23 50:20 51:11 52:18 53:3,11 56:3,6 56:10 71:16,19 73:20 77:7,8,16 80:19 84:18 85:1,10,16 87:13 88:13,15 90:21 94:5 94:20,25 95:4,9 103:7 103:8 104:12 106:16 106:17,24 107:13 108:20,22 110:25 114:10,21,23
landscape
15:16
landscapes
84:22
large
6:8,16 29:21 101:13
larger
92:21
largest
35:23,24 49:4 57:17,19 101:4
Larry
33:22,22 41:11
Las
91:11
last
8:6 10:10,11 13:20 14:12,12 18:14 21:24 31:6 33:4,17 35:14 36:24 37:9,16 38:3 39:18,19 62:14 84:1,6 85:24 87:19 88:2 90:1 91:1 100:11 101:2 104:17 115:8 116:4
lasting
30:4 77:6
Lastly
27:11
lasts
19:22
lately
18:7
later
22:20 93:14 94:9 105:13
Laura
59:11,12
Lawrence
1:9 117:7
laws
70:8
lawyers
69:2
lays
21:18
leach
78:22
lead
49:10 51:14 71:21 76:8
leader
82:5
leadership
46:14 83:14 88:18
leading
36:11 49:18
leads
70:15
learn
67:18
learned
63:8,16,18 93:14
learning
49:24 93:7 94:11,23
lease
5:3 8:17,20,21 9:3,11 10:25 13:3,8,11,25 15:9,10,16,23 29:7 31:17 32:7 36:17 38:12,15,21 39:10 40:22 58:11 64:10 69:24 80:21 85:8,9 106:24 107:12
leased
8:25 12:20 85:7 87:2 106:17
leases
10:4,6,8 11:23 12:19 12:24 13:17 31:23 37:5,17 39:13 41:7,17 53:14 58:10 64:25 65:23 81:15,20 85:1,2 85:3 92:9,14 94:19,20 98:9 103:8 104:12 108:19 114:10,21,22
lease-by-lease
60:6
leasing
1:4 5:10 8:14 12:9,16 15:15,21 18:10 28:6 28:20 31:13 32:6,11 34:25 38:1,19,25 41:3 42:15 47:8 50:19 54:12 56:18 58:8,15 60:10 64:1,15,17 67:19 68:22 77:5 80:6,8 83:15,20 84:22 86:22 87:13 88:19 91:23 92:3,17 98:3,7 98:13,16 99:1,4,7,15 100:20 103:15 104:3 104:6 106:15 108:9 108:17 109:13 110:24
least
85:24 107:11
leave
3:4 24:16 26:20 94:25 110:10
leaves
47:21
Leers
91:8,8
left
24:4 68:8
legacy
66:17 103:1 104:5
legally
37:23
legislation
93:25
legislator
94:1
less
22:14 40:3 43:22 85:14 112:23 113:1
Lesser
78:14
letting
91:24
let's
20:9 27:17
level
15:16 17:10,12 46:3,7 49:13 55:15 72:10,14

78:3 108:3
levels
34:2 72:3,19 73:5 81:25
liabilities
58:25
liability
46:8
lie
101:18
lies
42:5
life
5:23 43:11 48:14 52:24 73:17 74:7 78:24 89:14 94:9 97:20
lifeblood
55:11
lifestyle
76:14
lift
98:10
light
18:23
limit
25:20,24
Linda
110:11 115:2,20,22
line
75:3
linking
64:5
listen
7:17
listened
31:7
listening
7:5 8:5 14:13 21:23
lists
52:11
literally
35:20
little
11:3 14:21,22 25:14 38:18 43:21 61:19 62:4,10 93:21
livable
102:19
live
3:17 23:1 36:2 43:19 45:24 46:6 48:5 49:4 57:22,24 58:4 63:11 63:11 65:5 69:6 75:18 77:1 86:8 88:8 88:24 91:11 102:23 105:24,25 106:8 108:12 115:3,4,16
lived
63:22,24 83:10 94:7 95:21
livelihoods
29:24 54:20
lives
5:20 58:3 59:22 62:19 70:5 89:15 97:4
living
58:21 76:13 79:14 82:13 91:12 103:20
lobby
3:11 71:12
lobster
46:9
local
32:4 54:21 55:15,16 102:10 108:14
localized
36:10
located
2:23
locations
65:7 66:11
locking
39:12
logistical
2:17
logistics
4:11
long
27:11 29:14 31:10 35:2 60:5 61:16 62:12 63:10 68:24 69:3 70:2 78:21 83:16
longer
44:12 45:5 60:11 69:22 100:10
longwall
35:23
look
5:12 7:1 8:8 9:12 17:13 18:15 32:13 40:20,21 54:9 56:18 61:17 67:16 79:16 84:10 98:6 99:6 105:3
looked
74:20
looking
13:15 17:11
looks
25:12 98:24 109:19
loophole
41:11
loopholes
41:15 64:22
lose
95:4
loss
28:10 51:15 52:4 67:24 68:4
losses
38:9 39:14 72:16
lost
35:13 41:12 82:10 95:3
lot
5:24 6:17 10:19 11:22 12:10 14:1 18:6,13 63:15 66:25 69:12 91:12,14 92:21 98:12 98:17
loved
95:2
low
47:5 64:25 65:2 71:2 85:9 109:6
lower
54:23
lowering
103:11
lung
49:14,16 74:6
lungs
44:22 48:22
Lyon
40:6,7

M

mac
84:5
Madison
90:3,4
mail
66:19
main
46:9 88:25
Maine
46:7
mainstay
46:10
maintain
56:8
maintenance
55:10
major
67:24 77:23 79:5,9 99:21 108:25
majority
11:11,17 42:4 65:19 81:17 101:6
makers
64:10
making
7:12 46:19 70:11 101:17 105:15 113:3
malnutrition
50:14
man
61:20 62:5
manage
6:5,9 11:23 12:4 56:6 104:3
managed
32:23 37:17 62:16 84:19 112:6
management
1:3 2:8 6:3 8:2,17 19:18 30:20,23 37:3,6 56:16 75:9,11 79:19 101:21 108:18 110:12 110:21 114:20 115:13 117:6

manager
30:21 53:24 62:14 77:3
managers
31:15
managing
8:2,11
Mann
45:12,13 73:11
manner
20:4 22:25
Mantell
30:19,20
map
11:13
margin
69:19
Maria
84:1
Mark
83:3,3
marked
62:24
market
10:14 15:12,14 35:10 35:15 38:6 39:2,5,16 41:6,15 70:23 71:1
marketplace
39:15 64:13 107:17
markets
17:24,24 39:17
Mars
48:8
Martin
81:8,10
Mary
114:5,7
massive
51:14 102:25
materials
71:22 78:10,22
matter
4:10 43:11 49:8
mature
48:21
maximizing
15:13
maximum
25:9 70:18
meal
52:15
mean
100:10
meaningful
104:9
means
7:10 57:24 71:20 75:19 85:20 93:3 116:1
meant
63:13
Meanwhile
92:3
measurable
85:15 100:24
measure
16:11
measures
47:15
mechanisms
18:11 50:12
medical
106:9 113:7
medication
96:12
medications
96:7,10,23
medicine
62:25 63:4
meet
38:2 114:24
meeting
1:6 2:9 3:3,8,17 4:18 19:13,15 20:3,12 21:3 21:22,25 22:7,24 27:3 27:11 30:13 36:14 110:8 113:23 115:9 115:15 116:5,18 117:6
meetings
116:14
melt
108:4
melting
72:5,7,7,8,9 73:4
member
27:19 45:13 48:7,9,10 81:11 108:14
members
6:18,18 40:9 45:23 71:13,14 80:2 87:21 95:25
mention
33:5 44:23 87:12 114:15
mentioned
14:11 21:2 44:12 47:11 47:16 79:5 92:8
mentioning
112:3
mercury
49:10,20,22 52:10 71:21 99:13
mess
90:24
message
93:22
metal
49:23
metals
49:10 78:17
methane
73:5,5,8,9 85:11
methanol
112:8
methodology
39:10
methylcyclohexane
112:8
Mexican
6:11
Mexico
11:16 36:15
Michael
73:11
Michelle
63:21
MICHELLS
63:21
microphone
20:22,25 24:4,6,9,10 24:11 25:2 30:15,16 30:17 45:9,10 59:8,9 71:5,7 81:5,7 91:4,6
microphones
24:2,3 25:4
mid
75:4,18
middle
26:1
Middlebury
67:4
might
18:2 94:3 98:2 112:24 113:1,6
mike
7:9
miles
35:25 41:19,21 44:2 52:12,23 77:24 82:14 89:6
Miller
93:1,2
million
33:16 34:4 40:9 43:4 45:23 68:1 72:4,5 87:21 111:11,20
mindful
28:21
minds
7:23
mine
8:15 9:9,23 36:2,3 40:23 41:17 44:7 57:19 68:7 81:3 103:9,17,23 108:19
mined
9:2,2 11:12,12 31:25 34:16 35:16 41:19 44:5 78:9 83:9 85:16 103:4,7
minerals
1:16 6:7 7:10,13 37:13
miners
10:22 29:22 82:10 87:24
mines
10:1 14:7 32:10 34:5 42:9 43:24 45:5 55:7 65:9 83:12

mine's
9:8
minimum
32:1 85:22 87:11
mining
7:14 9:5 14:6 17:7 29:14 35:23 40:25 41:17 48:16 51:6,11 53:11 57:12 64:8 68:22 77:15,18,23,24 78:1,3,6,11 83:17 86:19 89:7,20,24 90:19 95:21,22 96:3 96:20,21 98:17 99:21 100:16 101:16 112:2 112:6 114:13
minions
112:16
minority
109:7
minute
7:24 25:19,24 109:21
minutes
25:10 26:17,18 48:6 83:11 93:10 106:3 110:2 113:16
misdemeanor
92:1
misrepresent
60:7
missed
49:18
missing
83:1 91:4
mission
86:21 98:8 100:15
Mitchell
42:22,24
mitigate
16:21
mitigated
17:9 32:7
mitigation
17:9,13
mix
18:4 37:16
models
54:11
modernize
14:15
modernized
56:20
modernizing
8:8
Molly
24:7,7
moment
12:8 100:22
momentum
100:25
Moms
59:13
Mom's
48:10
Monaca
75:18
monetary
51:5
money
10:19 67:14 76:21 92:22 99:22 102:18 104:7
monitor
9:17 111:4
monitoring
8:25
Montana
11:10,14,19 79:4 84:3 88:3
month
52:16
months
92:2
moratorium
29:7
Morgantown
97:13
Mosley
53:22,23
mother
48:7 74:5
mothers
49:22
motivated
82:2
mountain
62:23
move
13:3 14:3 45:2,10 59:9 71:6 81:6
moved
91:19
moves
115:19
moving
47:1 53:8 55:13 83:10 103:12 104:1
Mt
65:6
mule
42:7,13 79:1,10,12
multiple
26:15,16
multitude
31:10
mutually
54:4
Myers
61:6,9,12,12

N

naive
60:11
name
19:16 20:23 24:25 28:2 30:19 36:20 45:12 48:4 51:2 53:22 56:25 59:12 61:14,19 63:21 66:5 68:16 76:1 79:25 81:9 83:3 86:8 88:21 91:8 93:2 97:12 100:12 106:7 108:11 110:15 113:25 114:6
nation
8:6 34:13 35:25 45:1 55:5 95:3
national
6:21 7:11 12:25 17:23 21:4 35:1 36:23 40:7 40:8 51:3 56:23 65:11 77:2 79:6 80:21 83:5 84:19 85:25 86:9,13 87:7,21 88:9,13 91:13,16,25 100:14 102:4
nationwide
28:24 30:4
nation's
6:2,6,7,15 11:2,6 16:23 18:3 37:15 51:9 82:23
native
43:1 66:9 81:11
natural
9:18 61:22 62:2,10 70:12 79:7 86:12 89:9 103:8
nature
60:8,19 91:21
NDC
83:16 84:17
near
87:16 89:24
nearby
114:14
nearly
35:13 76:14 111:20
neat
24:19
necessarily
33:6
necessary
92:14
need
2:18 3:8,13 13:17 21:1 27:5,13 30:25 31:11 31:15,24 38:8 50:21 59:24 62:23 64:2 65:4 70:18,19 71:1 75:12,13 76:6 85:15 86:21 87:14 88:1 98:13,14,15,18 114:18
needed
8:8 64:18
needs
13:22 16:25 18:18,21 20:21 32:16 42:19

47:11,13 52:5 61:16 64:1 70:17 82:24 85:24 92:15
negative 29:3
negatives 76:7,17
Neil 1:16 5:15,16 104:23 110:9
neither 41:3
net 42:21 74:23
Network 42:25 43:4
Nevada 91:11
never 5:23 43:25 44:6 61:13 74:6 76:4 80:7
new 11:16 12:16 13:12,16 14:7,8 33:8 39:12 54:11,20,23 55:1,3 66:20 79:18 81:15,20 85:2 91:21 94:10 103:19,19,21 114:9 114:21
next 52:2 100:10 108:11
niece 96:1
nitrogen 49:9
nonprofit 95:19 100:14
non-Federal 16:17
non-partisan 36:23
non-producing 85:3
non-profit 90:1
normal 49:16
normally 78:5
north 11:14,21 48:6 88:3
Northern 77:1
Notably 79:12
note 10:18 13:21 14:24 23:3 47:16 83:7 110:9
noted 84:2
notes 19:14 117:5
nothing 40:3
noticed 74:20
number 6:24 10:8 11:25 14:4 14:16 17:15 22:13 23:20 24:1,6,12 26:10 30:14,15,16,17 31:13 45:10,10,11 59:8,9,10 71:6,6 80:11,12,14,15 81:5 83:1 91:1,1,4,5,6 91:7 94:5 99:20 100:8
numbers 23:24 39:10 74:17
numerous 22:9 31:5 47:10
nursing 49:21
nuts 40:19

O

Obama 46:13 59:23 106:13
Obama's 84:8 101:19
objectives 16:24 19:14 66:1
Obviously 17:15
occupation 68:17
occur 16:14 92:11
occurs 55:25
ocean 6:10 46:11 108:4
oceans 72:18,19,25
October 75:18
offer 13:2
office 9:5,7,18 27:24 31:4 38:20 66:20 87:1
officials 109:10
offshore 64:20
often 34:16 38:24 39:11 55:10 58:20 59:18
Oh 61:11
Ohio 61:13 63:2,4 80:1,9 86:9 87:7,16,17 88:9 91:9 96:4 112:9
Ohioans 88:12
oil 15:11 37:13 60:21 64:20 69:13 80:22 81:2
okay 20:17 74:19 76:21 91:2 114:5
old 32:10 36:5 63:6 65:8 90:15 96:1 103:22
once 8:20 9:11 23:22 53:4
one 3:14,15 6:13 8:10 9:4 12:6 23:19 26:16 29:14 30:17 31:13,22 38:22 41:7 42:13 43:18 44:11 49:4 52:8,15 57:15 60:21 67:25 76:6 79:13,14 80:9 85:8 89:15 91:16 93:15 94:5 98:2 104:16 112:4 117:3
ones 22:3 26:24 68:3 95:2
one-third 11:1 36:2 74:10
online 46:24 77:2 115:24
on-line 55:2
open 10:14 15:2 21:7 97:7
operation 35:24 62:17
operations 7:14 53:20
operator 8:15 13:22
opinion 20:17
opinions 20:10 66:8
opportunities 22:10 54:14 55:19 82:18 103:20
opportunity 21:11 26:9 30:9,24 39:7 40:4 54:7,8 58:6 59:12 68:16 71:14 76:3 77:11 81:9 86:17 88:6 94:17 100:21 103:25
oppose 111:10
options 82:17
orange 89:10
Orchard 108:13
order

12:13 23:13,24 24:15 29:5 56:5 60:19 65:20 81:2,24 104:7
organ
48:24
organization
6:4 24:25 33:24 36:24 38:5 40:8 45:15,18 48:8 57:11 59:13 71:11 87:20 95:19 100:14 110:16 111:19 114:1
organizations
40:11 48:11 94:12 100:18
OSM
9:11 85:18
OSMRE
9:6,12
other
5:10 8:23 10:17 17:1,4 17:6 18:24 19:1 20:10 26:5 29:23 31:5 42:7 44:24 47:15 54:14 58:24 70:16 71:21 106:5,19 111:1
others
6:19
otherwise
56:13
ounce
61:23
outdated
66:15
outdoor
63:22 111:24
output
33:16
outside
3:10 42:11 114:8
overall
16:6,23 54:6 69:6 70:21
overdose
96:16,25
overdue
35:2 47:9
overhaul
47:9
overhauled
42:20
oversaw
34:4
overtake
107:16
overtook
66:19
overusing
59:25
overview
106:2
overwhelming
28:22 88:11
owe
88:16
own
5:23 7:22 37:25 45:17 66:8 86:25 88:23 110:23 111:2,17 112:20
owned
37:5 43:24 64:11 101:16
ownership
12:2
owns
57:15
oxide
49:9
Oxycontins
96:11,11
oxygen
73:1
ozone
49:14
O'Brien
76:1,2
O'Hara
114:7

P

PA
48:5
packed
105:22
pages
61:9 117:4
panel
25:6 71:14 104:21
panelists
27:12 109:22
parent
49:1 59:16,17
parents
91:11
Paris
81:23
parks
91:13,16,25
part
4:19 5:21 16:8 37:15 66:22 67:9 86:1,20 102:5
partially
74:2
participate
115:18 116:8
participation
2:15 65:17 116:10
particular
49:20 96:1
particularly
4:25 18:23 49:6 57:6 58:9,12
particulate
49:8
parts
11:15 72:4,4 73:6
passage
83:17
passed
33:6
past
34:22 57:17 61:16 95:21
path
94:10
patients
63:6
Patrice
48:4,5
Patrick
56:25 57:1 61:19 62:6 62:12,18,19
Patterson
1:17 2:2 19:11,17 30:11 36:19 45:8 48:3 51:1 53:21 56:24 59:7 61:5,8 63:20 66:4 68:14 71:4 73:25 75:25 76:24 79:23 81:4 82:25 86:6 88:20 90:25 92:25 95:13 97:11 100:2 102:21 104:15 105:6,21 108:10 109:17 110:5 113:13,21 115:1,6,12
pause
12:9,15,18,23 13:11 14:2,9 106:15 114:9 114:21
pay
58:16,21,22
paying
31:21 64:23 106:23
payments
10:17
pays
58:19 67:6
Peabody
35:19
peak
11:4
peer-reviewed
60:18
PEIS
12:6 15:2 21:4 22:1,2,4
penalized
92:1
pending
12:24 13:5 29:8
Penn
33:23 75:17
Pennsylvania
1:10 34:3,5 35:22 43:1 43:9,22 45:25 51:23 52:10,11,20 53:23

57:9 63:25 65:6 75:19 83:8,11 112:11
Pennsylvania's 29:20
pensions 34:9
people 20:6,14 23:9,24 25:19 28:23 29:19 43:8,18 44:25 47:5 49:25 51:18 57:4,7,22,24 58:3 69:4 72:13 74:16,21 75:1,15 80:10 82:8 87:24 90:2,11,11 92:13 94:13,15 96:5,6,22 107:8 109:8,8,12 112:7 113:1,7
percent 6:5,6 11:5,7,9 28:12 31:22,23 36:16 38:21 41:5 45:22 60:22 64:4,5,20 73:1 79:10 87:4 88:11 99:9 102:6 103:5
performance 41:17,25 88:2
period 4:6 19:22,24 22:18 77:10 105:11
permafrost 73:4
permanent 42:2,16 114:22
permit 9:8,14
permitted 103:2
permitting 8:22 9:8
Perry 51:2,2
person 24:21,23 25:9 26:16,17 26:18 57:3 100:11
personal 61:11 66:8 76:4 83:7 88:23 91:10 97:8 104:25
Personally 89:5
person's 22:16
petroleum 111:22
phase 19:9 64:15 92:16
phase-out 84:25 85:2
phasing 82:5
Philadelphia 46:2
phone 3:9 24:21
phones 3:7
phrase 66:21
physicist 68:18
physics 70:8
picture 11:21 16:6
piecemeal 60:5
pieces 91:17
piles 78:7,7 89:8
Pittsburgh 1:10 5:17 37:8 48:6 81:11 88:24 93:5 106:9 108:13 114:8
place 9:16 44:2 67:1 102:19
plagued 38:1
plan 40:23 46:15,17 64:16 93:24 101:20
planet 33:2 34:24 51:14 73:17 76:8,12
Plankten 72:25
plankton 72:24
planned 9:13 47:21
Planning 19:18
plant 62:14,15
plants 46:22 48:16 49:3,5 55:7 99:10 103:6 109:5
play 25:14 73:21
played 36:5 89:7
Pleasant 65:6
please 3:3,7,10 20:23 23:17 24:16,20,24 25:17 26:15 27:17 30:16 40:21 45:9 83:2 91:6 94:24 99:16 100:6 110:15 113:25 116:7
pleased 37:2
pleasure 5:17
plenty 24:17
plus 115:4
point 4:3 32:5 36:13 39:20 41:16 71:17 113:6
pointed 41:11
points 40:18 41:2
poison 93:19 112:6
poisoned 34:14 45:6
policies 29:16 46:21 68:4 85:25
policy 13:1 21:5 36:25 65:12 101:11 113:11
pollutants 49:7
pollute 60:1 108:25
polluted 36:1 103:23
polluter 112:4
pollution 43:11 44:8 45:20 46:11 48:15,24 49:2,12 52:3 53:17 60:12,17 74:9 74:10 77:17 78:4,20 80:11,13 96:4 99:12 101:11 102:8,9 107:18 111:19,24 112:1
poor 32:11 102:11
population 43:13 48:18
populations 79:20 102:12
portion 19:12 28:25 30:13 55:22 115:8
pose 114:13
position 100:23
possesses 55:20
possibility 102:18
possible 21:14 23:9 25:22 28:19 36:17 70:24 71:2 74:24
post 40:25 66:20 101:8
poster 21:17

potent
73:9
potential
16:14 18:11,12,16
potentially
47:3
poverty
112:25
Powder
11:10,19 35:16 38:21 41:20 42:12 79:4 88:4
power
4:2 46:17,22 48:16 49:3 55:7 62:11,15 71:17 75:3,5 93:11,23 99:10 103:6 109:5 112:22
practicable
20:1
practice
62:22,25
prairies
42:5
precedence
102:17
precipitation
102:7
predicted
108:1
Predictions
73:12
pregnant
49:21
prepare
12:14 65:10
Presence
78:10
present
24:15 40:5 69:18
presentation
4:3 7:24
presented
92:19
preserve
67:22 82:7
president
33:23 36:14 40:7 42:24 45:15 46:13 53:8 59:23 84:8 101:19 106:12
President's
84:6
pressure
4:12 86:23
pretty
97:23
prevalent
33:10
prevent
107:5
previous
11:3 87:4,15
pre-mining
42:9
pre-teen
96:18
price
84:5 103:11 107:13,15
prices
28:14 41:8 54:23 106:18
pricing
17:22 18:22
primarily
57:9,11
priorities
101:18
priority
35:4 94:5 108:7
prison
92:2
privatized
44:20
probably
43:18
problem
36:9 60:10 92:22
problematic
100:20
problems
32:15,16 38:2 51:16 53:17 70:16 90:12 98:12 108:21
procedures
106:3
proceed
24:2
PROCEEDINGS
1:1
process
2:15 4:20 13:7 15:2,3 19:14 21:7,17,19,21 22:8,11,14 23:4,14 32:6 41:3 56:12 59:3 86:19 89:11 97:23 105:9 115:19
processes
70:13
processing
65:9 100:17
produce
34:19 112:21
produced
10:12 11:8 29:2 37:17 62:9
producing
11:5 22:23 79:9
production
8:14,25 9:17,22 10:15 11:18 12:19,22 16:12 16:16 17:2,20 28:16 34:25 64:5 65:1
productivity
40:25 78:15
professor
63:3 71:9 95:15
profitable
106:23
profits
44:21
program
1:4 2:10 4:4,19 5:5,10 6:2,15 7:2,12,21 8:9 10:3 13:16 14:15 16:2,15,22,22 17:16 17:18,21 18:2,20,22 21:4,13,15 28:6,20 30:25 31:1 32:13,19 33:3 34:4 36:21 37:4 37:7 38:1,7,19 40:15 40:18,22 41:13 42:19 47:8,20 53:24 54:6 58:7 61:4 64:1,3 66:14 77:5,6,21 79:18 80:6 83:4,5,15,20,23 84:1,8,11 91:23 92:4 98:3,13 99:15 104:3,6 108:9,17,22 109:13 110:6 113:22 115:14
programmatic
1:5 2:10 4:22 7:23 12:5 12:15 13:9,13,18 14:10,19 17:10 19:21 21:10,11 29:8 80:18 81:2 97:25 105:8 110:6 113:22 115:14
programs
6:13 46:21 99:4,8
programs's
65:13
Program's
35:8
progress
45:19 47:17
prohibitions
79:19
project
105:15
projected
18:4,10 19:3
projects
114:13,23
project's
66:1
project-by-project
17:12
promise
61:18
promised
34:10
pronghorn
42:7,14 79:1,11
property
6:9 58:2 92:6
proposed
65:23 113:11
proposing

97:24
prospect
28:13
protect
48:9 79:20 88:13 102:14 104:8 114:19
protected
85:10 91:22
protecting
34:23 54:3
protection
54:19 64:2,18 77:14
protections
47:11 79:19 87:6
proud
87:19 93:22
provide
3:12 37:2,24 39:6,8 82:17 88:7 113:24
provided
28:22
provides
47:25 111:16,19
providing
4:3 55:11 105:23
pro-life
43:5
public
2:9 4:18,19 5:4,6,21 6:4,5,18 8:3,12,18 9:1 9:10 10:11 11:8,11 16:5,19 19:22 21:12 22:10 30:13 33:19 34:16 35:1,22 39:7,25 42:16 50:20 51:11,16 52:18 53:3,11,16 56:6 56:8 64:9 65:16,24 66:16,22 71:16,19 73:20 77:7,9,16 80:7 80:19 85:5 87:2,13 88:10,13 94:5,20,20 94:25 95:9 103:6 104:8,12 108:20,22 110:25 113:11,23 114:10,21,23 116:5
publicly
59:23
published
22:20
purpose
21:25
purposes
114:12
put
12:15 55:23 67:1 75:13 85:5 90:23 101:8 106:15 113:4
puts
75:4
putting
29:10 53:8
P-R-O-C-E-E-D-I-N...
2:1
p.m
1:8 4:8 105:19,20 110:3,4 113:19,20 115:10,11 116:17

Q

quality
17:5,5 63:9 77:15 89:13
quantities
101:13
question
15:24 31:8 53:1 58:19
questionable
41:11
questions
2:19 6:17 8:4 12:7 14:23 15:6,22 19:5 21:16,20
quick
10:2 23:3 27:14 110:9
quickly
3:24
quite
59:18

R

Rachel
93:17 95:14,14
radical
111:7
rain
72:22
rainfall
107:22
raise
24:11 31:24,25 64:22 87:10,10
raised
6:19
raising
85:21 86:2
Rakovan
95:14,15
ramp
69:25
ramping
69:20
ranches
103:8
Randell
71:8,9
range
69:8 78:23
Ranii
114:5,7
rapid
45:19 47:17
rapidly
47:1 52:20 86:20 107:16
rate
31:21,25 69:13,18 70:9 72:9 73:7 78:15 85:22 87:10
rates
41:13 64:19,22,24 86:2 89:16
reach
111:11
reaction
96:20 97:3
ready
106:5
Reagan
38:4
real
3:24 8:10 10:2 60:8 62:22 97:20 100:24 102:15 103:16
reality
54:23 101:3
realize
98:8
realized
89:9
really
7:6 12:17 13:10,24 14:7 19:6 22:15 61:17,25 77:9 82:1 98:24 105:22
Reaper
110:19,22
reasons
98:11
recap
96:21
receipt
26:8
receive
23:23 37:11
received
19:23 22:14,17 23:6
receiving
31:19 32:1
recent
42:10
recently
41:9,18 62:12,24 68:18 107:20 113:4
Recess
110:3 113:19
Recessed
105:19 115:10
recipients
26:15
reclaim
34:5 35:21 41:18 42:8
reclaimed
41:21,23 44:1,6 45:6
reclaiming
32:10 85:16 103:22
reclamation
9:6 40:24,24 41:25 62:21 65:4 79:17 88:1 89:2,11 90:12

98:14 99:23 103:22
recognize
2:13
recognized
53:15
recommend
52:14 53:18
recommendations
92:16
reconvene
113:18
record
13:1,2 32:9,12 43:14 60:17 108:1,3
recorded
22:24 73:6,8
recover
102:24
recreated
63:22
recreation
33:17
recreational
114:11
red
11:13 28:13
reduce
29:1 52:3 59:24 107:4
reduced
38:15 58:1
reduction
41:1 46:16,20 55:15 72:23
reductions
85:23
reefs
72:21
refers
21:6
reflect
35:3
reform
30:25 38:8 40:14 58:6 64:3 86:22 87:8,14 88:19 89:2 98:13
reformed
47:12
reforming
21:14 79:17 89:2
reforms
34:25 64:2,18 65:5 77:21
refuses
39:9
regarding
77:14
regardless
22:12
region
79:6,9
regional
17:23 53:24 54:10 55:25
regulation
50:12 62:19
regulations
28:9 30:1,3 66:18 67:1 112:13
regulators
29:17
regulatory
18:24 103:2
reiterate
27:5 92:12
relate
16:23
related
17:19 57:12 71:15
release
41:1 69:9,14
released
38:5 73:5 84:7 104:2
releasing
70:20
relevant
99:3
remain
60:23 65:19 81:17
remaining
47:22,23 107:3
remarks
4:2 30:10 104:21 115:21
remediate
94:25
remember
20:16 32:24 94:6 110:15 113:25
remind
116:4
reminder
3:12 23:1 25:17 59:22 105:9
remove
70:13
renewable
33:9 46:23 47:19 50:23 53:9 54:25 65:2 67:5 67:21,21 73:15,18 95:11 97:9 107:16,18
renewables
59:3 94:10
renewal
85:2
rents
10:17 16:3
repeat
94:19
repercussions
42:17
report
20:1 22:19 35:12 41:18 83:21 84:7 105:12
reported
1:21 41:10
reporter
1:21 22:22 25:3,7 110:18 114:3 117:12
reporting
33:15
reports
31:3
represent
43:8 68:4,19 110:16 114:1
representation
67:11
representative
29:13 112:10
representatives
110:20
representing
25:1 71:11
represents
43:4
reproduction
78:15
Republican
59:15
requesting
81:14
required
37:23 78:21
research
69:5 88:11 111:3,18
resent
67:7
reserved
24:5
reserves
60:21,22,23
reside
43:1
resist
99:5
resolution
40:13 87:22
resolutions
81:22
resolved
31:12
resource
8:3,12 9:14 39:22 65:2
resourcefulness
82:4
resources
5:6 9:19 11:8,25 14:6 17:4 31:20 32:21,23 32:25 37:12 40:1 56:2 70:19 79:7
respect
3:7 25:19 26:4
respectful
20:9 104:19 106:4
respiratory
49:15 109:2
response
49:14

responsibilities
6:9 7:11 8:13
responsibility
6:14 39:23 109:14
responsible
38:8 94:16
rest
105:10
restore
53:3 104:4
restoring
52:25 103:22
restriction
73:22
result
5:6 29:15 42:15 52:23 55:14 78:3,11 111:6
resultant
77:17
resulting
37:18
results
93:13
resume
98:3
Resumed
105:20 110:4 113:20 115:11
retired
62:12 74:20 93:3
retirement
46:23
retrain
45:3
return
15:24 16:4,7 37:11,24 55:21,23 67:13 85:20
returns
5:7
revamp
108:8
revenue
9:19 10:20 16:1 35:14 37:19,22 54:21 68:5
review
7:23 12:15 13:13 32:15 33:4 38:3 54:12 61:15 65:15,17 66:13 77:4 81:15 83:14 85:17 90:18
reviewed
22:18
revision
46:18
revoking
114:22
reward
83:22
rewarding
62:13
Ridge
44:4
ridiculously
74:25
rigged
38:23
right
4:7 18:16,25 20:17 24:7 31:20 44:9 68:12 88:17 94:4 99:20 100:5 104:17 105:6 110:1 114:8
rights
57:16,23
right-hand
23:21
rise
46:4,8 72:10,10 81:25 108:4
rises
72:15
rising
54:23 95:5
risk
29:10 50:4 109:3
river
11:10,19 35:17 38:21 41:20 42:12 79:4 88:4 90:3,3,4,8,11 93:10 112:9,9
rivers
36:1 89:23,23
rob
47:6
Robin
45:12,12 81:8,10
robust
54:18
rock
7:12 37:13 106:18
rocks
41:8
role
8:11 73:21
rolling
39:13
Ronremoeller
79:24,25
room
2:5,21 3:16 21:18 23:18 24:3 26:23
roots
48:8
Rothfus
28:3,21 29:16 112:11
Rothfu's
27:24
rough
52:1
roughly
6:6 28:11 64:4
roving
20:25
royalties
5:8 9:21 10:16 16:3 41:14 58:15 68:22 86:3
royalty
31:21,24 40:23 41:5,12 64:19,22,24 85:22 86:2 87:10
ruining
72:20
rules
10:1 20:8 70:20
running
14:5
Ryan
84:9

S

safe
50:22 69:8
safety
9:24 10:1 42:21 69:19 114:25
sage
42:6 79:1
sake
73:13,15
sale
5:5 13:8 39:10,21,25 101:13
sales
10:25 15:10,12 29:7 38:21
Sally
106:13
same
72:23 88:6 112:21
San
6:11
save
104:7
say
27:9 32:22 35:6 45:18 57:3 89:18 90:14 104:23 107:8 109:25 111:25 115:22
saying
31:2
scale
17:17
scarred
34:13
scars
84:22
schedule
27:12 70:7,7
scheduled
4:7 15:10
school
49:18 91:19
science
36:8 61:2
scientific
65:18 69:5 89:17 90:18
scientifically
63:18

scientist
81:16 95:24
scientists
51:12,24 107:25
scope
22:1 65:16 80:25 85:17
scoping
1:6 2:9 4:18,19 15:3 19:22,24 20:1 21:2,5 22:17,19 105:11,12 110:7 113:23 115:15 116:17 117:6
Scottdale
65:6
Scream
93:18
screens
15:19,21 25:12
script
74:3,19
sea
46:3,7 72:10,14 108:3
seat
2:4 26:4
Seattle
66:9 94:15
second
8:24 10:7 80:17 89:4
seconds
90:14
secrecy
38:17
Secretarial
12:13 29:5
Secretary
12:11 39:6 81:1 83:13 86:15,16,18 106:13
secured
3:4
securing
16:4
security
16:24 29:4 67:15 116:12
sediment
77:25 78:1,4
see
2:6,25 11:24 15:20 16:16 69:1 73:4 84:11,17 85:4 97:9 111:7 113:16
seeing
46:8 51:21 91:16
seeking
56:17
seem
30:2
seemed
74:21
seems
66:17 107:11
seen
18:13 36:5 58:20,25 91:18 101:1 102:6
segment
28:16
self
98:14
self-bonding
44:13 47:12
Seltweiger
33:22,22
Senator
84:1
sending
66:19
senior
36:21 83:4
sense
6:21 13:14 36:22 37:10
sentence
26:1
series
14:12
serious
50:5 71:15 102:13 108:20 109:3
seriously
42:20 47:9 98:7 109:8
serous
58:9
serve
23:15 45:14 56:21 97:14
services
67:16
serving
84:13
session
5:22 71:18 105:2
sessions
6:22 8:5 14:13 21:23 77:10
set
6:8 14:25 15:19 38:3 70:8
several
8:11 9:4 18:14 83:11 83:12 95:24 98:2
severance
9:15
severe
34:15 66:1 78:18
shall
111:10
share
7:3 20:7 31:19 32:20 39:9 46:25 66:7 67:17 77:11 106:24
shared
32:25 33:2,14 104:25
Sharing
88:23
sheets
105:17
shellfish
46:9
shift
54:25 84:23
shipment
101:9
ships
34:18
shockingly
69:17
short
68:23,25 69:17 72:16 83:23 85:4 91:9 105:3
shortly
27:16
short-changed
35:7
short-term
79:17
should
5:8,9 14:2 15:9,11,15 16:5,7,9 17:9 18:9 21:8 22:4,5 28:16 32:6,10 33:18 52:6 54:18 58:16 61:24 64:21 65:24 67:14 85:5,8,17 86:3 87:8 94:22 95:9,10 103:11 104:6 108:23 113:11 114:11
shoulder
106:22
shouldn't
13:16
shout-out
87:6
show
13:23 41:17 74:17,23 74:25 75:21,21,23 102:16
showed
42:12
shown
46:13 72:1
shows
75:11 89:17 115:8
shredded
42:19
shrouds
38:16
side
2:24 3:9 21:17
Sierra
45:13 54:1 76:2 80:1 81:10 88:22 91:9 93:5 97:16 108:14
signal
71:1
signed
12:13 13:1,6 26:11 105:16
significant

28:15,25 29:3 38:8 46:20 55:12 71:18,20 80:24 101:2
significantly 38:15
signs 3:1
sign-in 105:17
silence 3:6
Silent 93:17
silently 29:17
silver 7:13
similar 21:23 23:4
Simple 69:15
simply 27:7 34:22
since 28:3 31:24 34:1 39:17 63:16 66:25 100:10 102:7
sincere 104:24
sincerely 5:19 7:6
single 31:23 34:16 36:6 57:21
sir 106:5
sit 29:17
site 40:23 77:24
sites 41:14 65:9 103:1,23 104:5
six 26:17 92:2
sixteen 117:4
sixth 2:9
size 17:16
Skype 24:22
slag 89:8
slated 46:22
sleet 15:4
slope 63:23
slowing 59:3
slowly 25:2 95:4 110:17 114:2
small 46:6 55:11 63:1
smart 61:20
SMCRA 83:18
smell 63:13
smoked 74:7
social 17:20 47:24 67:16 98:16 107:14
society 30:21 64:9 66:7
socioeconomic 17:14,15
software 68:18
soil 78:6 85:20 114:15
soils 6:7
solar 37:14 64:12 75:3,5 112:18,22
sold 84:3
Solid 1:16 7:10
Soluations 19:18
solution 71:3 95:11 107:18
solutions 32:17
some 4:1,3,24,25 8:3,22 10:2 14:23 15:5 17:18 18:16,24 19:5 20:8 21:18 33:8 43:6 55:5 55:22 67:8 70:6 74:15 76:9,10 78:6,13 78:19 89:24 90:2 97:17,18 98:10 99:2 103:21 105:4 112:17 115:21
someone 2:20 20:23 27:7 52:6
something 5:22 13:21 33:13 67:7 74:3,12,13 97:6
sometimes 69:1
somewhat 69:8
somewhere 98:4
son 88:2
sons 62:7 88:5
soot 94:6
sorry 25:15 78:7 97:8 115:2
sort 97:18
sought 56:1
souls 111:5,11,20,25
sound 36:25 112:24
soup 40:19
source 37:21 73:1 101:4
sources 19:1 50:23 54:21,25 73:15,19 97:10 106:20 111:23
south 11:15,20
southern 87:7 96:4
southwest 46:1 107:24
southwestern 57:9
sp 43:22 111:3
spare 106:11
speak 20:15,22 23:12,16,22 24:15 25:1,10 26:9,25 30:24 42:23 59:12 68:8,16 76:4 100:5,10 109:19 110:17 111:15 113:14 114:2
speaker 3:16 23:15,18,20 26:8 30:17 45:11 59:10 71:6 81:6 83:1 90:25 91:5,7 100:4,6,8 104:16 108:11 109:19
speakers 26:7 43:15
speaking 3:13 23:4,6,10 26:14 26:20 28:2 45:17 81:9 88:23 106:3 108:15
special 20:20 87:6
species 42:8 78:14,16 79:2
specific 22:5
specifically 14:18 76:17 112:5
speeding 45:20

spending
7:7
spent
63:1 91:12
spewed
71:22
spews
44:6
spirituality
91:14
spite
62:20
split
10:19
spoil
78:7
spoke
57:4 94:14
spoken
92:13
spread
34:15
Springdale
93:9,20
square
41:19,21 75:2
St
87:17
staff
21:19
stage
27:15 48:14 110:10
stake
92:23
stakeholders
68:24,25 69:3
stance
102:14
stand
20:6
standard
17:9
standards
17:13 41:22 46:18 85:16 114:25
staring
90:15
start
6:2 30:17 50:21 68:10 68:21 69:20,23 82:12 86:14
started
2:3,16 19:12 23:7 30:12
starting
85:1
starts
70:3
state
1:14 4:13 6:12 17:22 24:25 27:7 33:24 34:7 40:10,12 43:14 43:24 51:24,25 52:1 52:11 63:4 80:3,11,16 89:25 99:16 110:15 113:25
stated
34:23 102:2
statement
1:5 2:11 4:22 13:9,19 14:11 29:9 65:11 86:21 101:17 110:7 115:15
statements
12:6 57:6
states
1:15 4:14 10:5,6,9,19 11:24 12:1,2,4 14:14 18:21 36:4 37:20 46:19 78:23 81:22 82:3 98:24 99:1,4,7,8 100:22 101:4,12 108:24 109:9,12
state's
9:15 87:1
station
26:22
stations
93:11
statistics
10:3 92:20
stay
105:8,14 107:6
Steelworkers
53:25
stem
100:24
stenotypy
117:5
step
27:15 106:15
stepfather
96:2
steps
21:18 68:11 100:24
stick
4:10
still
11:5 19:24 43:25 48:21 92:9 102:9 107:3 109:5,23 112:3 116:5
stop
70:17
stopped
92:15
stories
43:17
storm
46:3
storms
108:3
story
36:5 88:24 89:23 91:10
strategic
41:4
stream
52:12 55:15 115:16
streamed
3:17
streaming
23:2 105:24 115:4
streams
10:21 16:1 36:1 52:12 52:24 58:1 89:10 99:13 103:24
street
96:13 108:13
stress
50:9
stretch
31:10
strict
114:24
strides
46:20
strip
34:5 43:24 78:3
stripped
113:12
strong
46:13 100:19
strongly
53:18
struggled
34:13
struggling
28:7 102:24
stuck
53:4
student
67:3 81:12
studies
67:4
study
31:22 38:6 41:6 42:10 60:19 79:8 80:25 97:23
submit
26:23 27:2
submitting
40:15 45:16 110:23
subsided
34:14
subsidies
75:14
substance
113:2
substantial
52:8 102:15
substantially
70:12 85:21
substitution
16:14
succeeded
55:20
suffer
113:7
suffered

29:15 63:7
sufficient
53:3
sulfur
49:9
summarize
97:18
summarized
84:9
summary
56:15
summer
8:6 14:12 88:2
supplanting
38:10
supplier
6:16
suppliers
29:23
supply
19:2 29:1 55:10
support
18:20 21:3 27:7,10 28:17 43:6 44:10 51:10 68:9 73:17 84:25 108:15 109:12 114:9
supporter
66:16
supporters
40:9 45:23 80:2
supports
28:23 56:11
suppress
78:14
sure
6:20,22 7:12 19:20 23:22 24:17 25:20 45:5 76:9 105:15 110:17
surface
9:5 31:25 77:25 112:24
surge
46:3
Survey
56:7
survive
34:13
sustainable
33:25 82:16 86:4
sweet
91:10
sweetheart
36:7
system
38:11,13,14,24 39:13 54:8 56:18,21 67:19 103:3
systems
48:20,25 54:13
Szollosi
86:7,8
Szybist
83:3,3

T

table
3:16 23:17,18
tact
47:23
take
2:4 3:8 4:7 12:8 22:8 26:4,15 27:14 42:8 43:6 52:2 54:8,15 63:17 88:14 96:15 102:13 105:3,18 109:20 113:15 116:2
taken
26:14 110:3 113:19 117:5
takes
5:24 102:17
taking
5:20,21 7:1 9:16 27:24 100:24 101:22
Talia
76:1,1 94:13
talk
6:1 8:23 10:7 12:8 18:18 95:20 97:6 103:13 109:24
talking
18:19 108:16
tape
28:13
tasked
8:13 9:19
tax
54:21 55:13,15 58:1 67:13,24 75:13 94:24 106:22
taxation
67:10
taxes
67:6
taxpayer
38:9 39:14 47:11 64:18
taxpayers
5:7 31:18 32:19 35:6 35:13,20 36:22 37:6 37:10,11,24 38:13 39:22,24 40:2 56:22 58:5 67:25 68:3 83:24 84:14 85:19 87:8 104:7 106:21
taxpayer-funded
104:11
teach
97:20
team
7:11 116:11,12
technical
40:16
technologies
33:8 55:1
technology
19:3 24:20 66:20 67:21 67:21
tee
14:21
teenage
96:16,25
teenagers
96:9
tell
43:17
telling
36:9
temperature
50:11 81:25
temptation
99:5
ten
39:18
term
21:6 68:23,24,25 69:3 70:3 72:16
terms
9:3 68:22 72:15,22 89:13 98:3
terrible
32:9
testimony
98:23 99:3 110:23
thank
2:12 4:15,16 5:11 7:16 19:9,11 27:21 30:9,11 30:21 31:7 33:20,21 36:18,19 40:4 42:21 42:23 45:6,8 48:1,3 50:24 51:1 53:20,21 56:15,23,24 59:6,7,11 61:4,5 63:19,20 66:3 66:4,10 68:12,14,15 71:3,4,13 73:23,25 75:24,25 76:3,23,24 77:3 79:22,23 81:3,4 81:8 82:22,25 83:13 86:5,6 88:18,20 90:24 90:25 92:24,25 93:1,4 95:12,13 97:10,11 100:1,2,9 102:21 104:14,15,18 105:6 105:17,21 106:12 108:9,10 109:15,17 110:12,13 112:1,5,10 113:12,13,17 114:5,5 114:25 115:1,6,17 116:11
thanks
61:15 111:5 115:23 116:15
thing
13:20 58:18 102:16
things
7:21 44:24 67:8 75:14 75:15 76:12 97:19
think
7:19 11:4 20:5 57:5

58:8 61:16 62:23 66:23 70:6 82:25 89:8 90:17 92:21 98:18 106:2 107:10 113:9 116:2
thinking 68:10,21 74:15,15
thinks 62:8,21
third 11:6,7 57:17 60:21
thorough 65:10 81:15
thought 26:2 113:10
thoughts 4:23 6:23 14:19 104:20
thousand 78:2
thousands 28:10 52:12,13,23 55:3 63:6 77:18
threat 46:10
threaten 29:17
threatened 112:18
threatening 29:11
threats 114:13
three 10:21 16:1 22:9 25:10 25:19,24 26:18 32:3 46:5,5 74:25 83:23 85:14 91:20 106:3
thrive 86:11
thriving 34:9
throughout 11:25 22:11 23:11 34:12 105:2 115:25
thrown 62:11
ticket 23:21
time 2:13 5:20 7:7,20 10:24 23:25 24:17,22 25:18 25:23 26:7 27:4,14,15 27:25 33:21 65:14 67:2 68:9 69:17 72:23 73:24 78:21 82:22 90:18,22 91:13 91:15 93:3,7 95:12 96:18 100:3 102:13 103:11,25 105:4 106:11 108:9 109:22 113:12 116:2,10
timer 25:11,12,16,22
times 15:12 22:13 26:14 73:9 78:2
tip 111:15
tissue 49:14
today 2:13,16 3:3,13,20,25 4:9,20 5:12 6:1 7:4,7 7:17 19:19 20:3,15 22:22 23:9 25:21 26:7,13 27:4,12,25 28:4 30:10,24 36:8 40:5,18 48:13 50:21 50:24 53:15 59:12 66:7 68:16,19 72:3 74:4 77:13 83:16 84:16 88:24 90:24 94:14 97:19 98:6,23 99:3 102:1 103:13 105:1 110:23 112:14 114:6 115:16 116:10 116:13
today's 19:15 21:22 22:7,23 27:3
together 47:21 92:18
Toledo 86:8
Tomcik 48:4,5
Tomsend's 83:21
ton 69:14 84:4
tons 10:12 37:18 69:10 84:4 103:5
top 7:1 44:2 59:16 84:8 88:25
topic 18:5
tops 62:23
total 10:25 75:5
tour 75:17
tourism 90:7,10
toward 55:13 104:13
towards 45:2
town 37:5 43:21 63:1 87:16
towns 55:11
township 95:18 114:7
toxic 44:7 49:23 71:21
toxicologist 59:14
Toy 66:5,5
track 25:23 32:11
tract 8:18
tracts 29:21 38:15,25 39:12
trade 96:24
traffickers 113:5
transactions 85:21
transcript 1:1 22:23 115:4 117:5
transition 47:21,25 54:11,16 55:5 55:24 59:4 64:16 73:14,18 86:4 87:23 103:18 104:4,9,13
transitioning 47:18 103:16
transparent 56:12 65:16
transportation 16:13 17:2 55:8 83:5
transporting 89:20
traps 70:14
tree 51:24
trees 44:8
tremendous 116:1
tribal 35:2
tributary 112:9
trillion 40:2
tropical 72:22
trouble 42:1
trout 51:25 90:4
true 99:24 117:4
truly 7:6 39:21 77:11
truthful 58:12
try 107:6
Tuesday

1:8 117:8
turbine
61:20
turn
19:7 27:18 60:3 113:2 115:20
TURNER
110:19
two
24:2 25:12 31:18 36:24 40:12 46:6 48:7 62:6 74:24 83:8 85:13 88:25 89:23 93:11 96:1 100:3
two-fold
44:11
type
7:14 91:21
types
5:25

U

ultimate
42:2
ultimately
107:1
unaffected
12:23
unanimously
40:13
uncertainty
70:21
under
13:13 21:4 29:5 38:3 38:19,23 42:5 46:10 65:11 86:14 103:2
undercut
34:19
undercutting
65:2
undergraduate
67:3
underground
57:12,19
underlining
101:10
undermining
101:24
underneath
32:21 103:9
undersigned
117:2
understand
12:17 33:11 53:13 56:5 59:17 70:23 74:12,14
understanding
27:17
undervalued
39:11,13
undue
16:19 114:13
unfair
106:16,21
unfairly
106:19
Unfortunately
77:16
unhealthy
79:12
union
82:9
unite
86:10
United
10:5 12:1,2 14:13 18:21 36:3 37:19 53:25 78:23 81:21 82:3 98:24 99:8 100:22 101:3,12 108:24 109:9,12
University
63:4 71:10 81:13 97:21
unmined
81:17
unnecessary
16:18
unreclaimed
43:23 65:8 78:6
unsuitability
15:18
unsustainable
76:8
updated
35:3
upper
23:21
urge
44:25 79:16 80:4,17 81:1 98:6
urgency
47:17
urgent
35:4
urgently
87:14
urges
28:21
urging
99:5
USA
102:1
usage
96:19
use
15:19 18:11 26:24 31:19 42:2 52:19 55:23 70:18,22,24 100:17 108:23 111:6 114:12
uses
17:6
using
104:2
usual
98:4
Utah
11:15 63:24 91:12
utility
44:19
utilizing
82:15
U.S
5:9 27:23 28:12,18 34:19 35:13 56:3,7,16 64:4,5 67:6 101:10 102:5 103:6 104:2 107:22

V

VA
106:9
valuable
2:14 20:4 91:15
valuated
21:6
valuation
38:14 39:9,20
value
15:14 35:10,10,16 38:6 39:3,6,17,21
values
33:18 58:2
valuing
33:14
vandalism
91:25
various
34:2
vast
11:17 35:22 65:19 81:17 88:9
Vegas
91:11
verbal
3:13
verbose
7:18
verification
8:14
verifying
9:1
vernacular
66:22
viability
82:11
vibrant
28:18
Vice
40:7 45:14
view
15:17 58:7 60:11 91:21
Virginia
62:19 63:12 71:10 77:1 97:14,15,20 99:11,16 99:21 102:2,6 107:23
virus
50:16
visiting
105:3,14
voice

6:21
voices
69:1 88:14
volunteer
93:4
volunteering
93:24
voting
22:14
vulnerable
46:2 47:4 48:18,20 50:10 79:21 102:11 102:15

W

want
2:8,12 3:12 4:23 12:8 14:21 15:20 22:6,21 23:8,16 24:18 57:6 66:9,12 75:23 76:3 92:12 103:13,25 104:18 106:12 115:17 115:22
wanted
97:6
wants
2:4 8:15
warm
72:19
warming
46:11 62:2 73:3 90:16 101:23 107:6,7 111:6 111:14
warmth
63:13
Warrick
101:7
Washington
6:12 57:10,14 83:6 84:2 101:8
Washington's
29:15
Wasser
88:21,22
waste
44:7
watch
3:19
watchdog
36:23
watching
107:20 115:16,17,24
water
17:5 32:4 41:24 42:16 52:9 75:7 77:15,25 85:10 95:5 109:1 111:25 112:7 113:8
waters
34:14 37:13 45:6 84:18
waterways
114:15
waves
108:2
way
6:10 12:1 15:10 33:5 44:17 72:25 74:15 78:24 84:9 95:1 103:14
ways
13:15 21:25 47:10 75:12
wearing
2:20
weather
50:8 107:21
web
23:2
website
3:21 105:15 116:7
week
36:14 84:1,6 87:19
weeks
40:12
welcome
2:8 3:2 4:17 27:8 75:20 110:5 113:21
welcoming
4:2
well-documented
100:19
well-protected
91:17
went
34:11
west
11:12 30:6 62:19 63:12 71:10 90:3 91:12 95:2 97:13,15,20 99:11,16,21 102:2,6 107:23
western
10:6 12:4 53:1 63:23 63:25 99:1,4,8,11,12 99:19
we'll
3:25 8:23 10:7 13:7 20:24 23:10
we're
8:24 13:12 14:4,25 15:1 17:11
we've
8:13 12:9 13:17 15:6
whatever
27:9 53:19
whole
41:16 50:1
wide
33:24 34:14
Widelife
40:7
Wiesenmayer
71:8,9
wife
62:6 82:12
Wilderness
30:21 66:7
wildfires
51:14 107:24
wildlife
17:5 42:10,17 44:8 51:4,9,15,21 77:2,14 78:12,19 79:6,9,20 85:10 86:10,11,13,14 86:23 87:21 88:9 114:16
Wilkes-Barre
83:10
Williamsport
83:8
wind
37:14 64:11 112:18
wishes
109:18
witnessed
44:15
witnessing
107:25
woefully
41:5
woman
94:14
women
49:21 52:14
wonder
53:10,12
wonderful
62:6 116:11,13
words
92:12
work
32:16 33:6,20 45:25 56:19 57:11 66:6 68:13 75:14,21 77:1 88:22 100:15 102:23 103:16 106:9 113:5 116:14
worked
33:2 34:3 36:25 37:9 43:20 87:18
worker
54:20
workers
34:19 45:3 48:1 54:10 54:16 55:6,24 56:22 99:20
working
10:23 51:3 83:16 86:10 93:23,24 106:11
works
25:16 57:8 82:14
world
82:5 86:20 93:19 95:3 101:5,17 102:19 111:18
worldwide
60:23
world's
111:8
worry

26:1 28:17
worse
36:9
worsened
63:9
worst
60:20 65:20
worth
10:13 76:22 112:3
wrap
25:17
written
26:19,23 43:16 97:17 116:6
wrong
66:17 67:8
Wyoming
11:10,15,19 79:4

Y

yard
43:23
yards
43:23
year
10:11 12:11 14:12 21:24 33:18 39:20 58:10 60:16 68:1 69:15,16 75:4,6 96:1
years
11:3 12:3,21 22:9 31:6 35:3,14 37:9 38:12 39:18 43:21 44:19 52:2 57:17 61:10 62:8 63:1,5,8,14,23 63:24 64:21 69:17 77:18 78:5,8,23 83:21 85:14 87:4 90:1,14 91:20 92:8,11 108:1
yellow
11:21
yesterday's
102:1
yields
78:1
Yough
89:24
Youghiogheny
89:22
young
48:7 49:22 63:6 66:24 76:16 94:13,14
y'all
109:25

Z

zero
25:13 69:25 74:23 80:11,14
zika
50:16
zones
42:12

$

$135
75:2
$19
40:1
$200
34:4
$22.46
75:6
$30
41:12 83:24
$300
71:23
$45
33:16
$500
92:3
$68
71:25
$730
68:1
$9.5
37:18

1

1
24:4 30:14,15,18 45:10 59:9 71:6 81:7 91:4
1.5
82:1 107:6
1:10
1:8
10
6:5 7:24 30:15 85:14 90:1
100
43:22 45:21
100,000
80:10
11
42:14 45:8 59:10 89:8
116
117:4
12
41:5 72:11,12 84:4
12th
29:20 112:11
13
64:5
14
43:20 69:16
15
37:9 45:9 93:12
16
59:7 71:7
17
49:19
175,000
80:2
18
63:24
18.5
64:20
180
72:4
1920
33:5
1922
87:17
1950s
94:7
1958
102:7
1960s
93:18
1971
34:1
1984
33:3
1990
31:24 38:22

2

2
24:6 30:16 43:4 45:11 59:8 71:7 72:13 81:5 82:1 91:6 107:5
2.4
45:23
20
12:21 58:10 59:8 92:8 92:11 93:10
20s
48:23
2004
74:6
2006
10:10 53:25
2010
87:1
2011
83:19 87:1
2012
35:12
2013
38:5,22
2014
112:7
2015
10:4 11:1 60:18
2016
1:8 33:7 60:16 117:8
2029
69:20,24
2030
111:12
2040
70:1,2
2050
60:24
21
71:4 81:6
21st
84:21
22
63:22
23

83:1 91:1,2
25
71:5 78:5
26
81:4 91:7
28
1:8 90:14 91:5 117:8
28th
19:23

3

3
42:14
3,000
35:25 73:6 78:23
3.8
10:16
3:11
105:19
30
6:6 23:10 31:6 35:3,13 35:14 48:6 64:21 79:10 81:5 83:20 90:14 109:21 110:2 113:16
30,000
80:22
300
42:7
300,000
112:7
306
10:4
31
91:3 100:4,8
32
10:25 100:4
33
84:4
3338
12:13 29:6
35
91:3
350.org
71:11 93:6
36
69:14,16
3763
108:12

4

4
4:8
4.3
10:12 37:18
4.9
31:22
4:00
105:20
4:10
110:3
4:30
4:8
40
11:4 28:11 38:12 64:4 99:9 103:5
40s
70:4
400,000
111:5
44
11:4,7
450
41:19
46
41:20
460
72:3
460,000
87:2

5

5
24:5 30:14 49:19 78:5 93:12
5:20
110:4
5:25
113:19
50
36:16 40:10 78:8
50th
62:24
500
69:9,15

6

6
30:15 40:9 45:11 87:20
6.8
10:15
6:30
113:18
6:35
113:20
6:40
115:10
60
96:17
60s
44:5
63
10:13
65
78:8
65,000
29:10

7

7
4:9,9 111:20
7:00
115:11 116:9,17
70
73:1
70s
34:5
70,000
43:8
71
87:3 102:6
72
89:6

8

8
42:13
80
60:22 73:9
800
78:23
83
88:11
86
52:11
88
11:9

9

90
31:22 38:21 52:2