

EXPANDING THE ROLE OF STATES IN EPA RULEMAKING

HEARING BEFORE THE SUBCOMMITTEE ON ENVIRONMENT COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY HOUSE OF REPRESENTATIVES ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

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EXPANDING THE ROLE OF STATES IN EPA RULEMAKING

TUESDAY, MAY 23, 2017

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENVIRONMENT,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, D.C.

The Subcommittee met, pursuant to call, at 10:04 a.m., in Room 2318, Rayburn House Office Building, Hon. Andy Biggs [Chairman of the Subcommittee] presiding.

LAMAR S. SMITH, Texas
CHAIRMAN

EDDIE BERNICE JOHNSON, Texas
RANKING MEMBER

Congress of the United States
House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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Subcommittee on Environment

Expanding the Role of States in EPA Rulemaking

Tuesday, May 23, 2017

10:00 a.m.

2318 Rayburn House Office Building

Witnesses

Mr. Misael Cabrera, PE, Director, Arizona Department of Environmental Quality

Ms. Becky Keogh, Director, Arkansas Department of Environmental Quality

Deborah L. Swackhamer, Ph.D., Professor Emerita, Hubert H. Humphrey School
of Public Affairs and Professor Emerita, Environmental Health Sciences,
University of Minnesota

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY**

HEARING CHARTER

Monday, May 22, 2017

TO: Members, Subcommittee on Environment
FROM: Majority Staff, Committee on Science, Space, and Technology
SUBJECT: Subcommittee Hearing: “Expanding the Role of States in EPA Rulemaking”

The Subcommittee on Environment will hold a hearing titled *Expanding the Role of States in EPA Rulemaking* on Tuesday, May 23, 2017, at 10:00 a.m. in Room 2318 of the Rayburn House Office Building.

Hearing Purpose:

The purpose of this hearing is to examine the relationship between federal and state government agencies and how they interact to address environmental regulations, such as regional haze, ozone, and cross-state air pollution.

Witness List

- **Mr. Misael Cabrera, PE**, director, Arizona Department of Environmental Quality
- **Ms. Becky Keogh**, director, Arkansas Department of Environmental Quality
- **Dr. Deborah L. Swackhamer**, professor emerita, Hubert H. Humphrey School of Public Affairs and professor emerita, Environmental Health Sciences, University of Minnesota

Staff Contact

For questions related to the hearing, please contact Majority Staff at 202-225-6371.

Chairman BIGGS. The Subcommittee on Environment will come to order. There we go.

Without objection, the Chair is authorized to declare recesses of the Subcommittee at any time.

Welcome to all of you, especially to our witnesses, to this hearing today, which is entitled, "Expanding the Role of States in EPA Rulemaking." I recognize myself for five minutes for an opening statement.

I'm grateful to have all of you here for this hearing entitled, "Expanding the Role of States in EPA Rulemaking."

The Tenth Amendment protects States from being bullied by the federal government. Instead of allowing complete and unchecked power at the federal level, the Constitution ensures that states retain their authority on issues not expressly defined.

Unfortunately, the previous Administration must have skimmed over that part of the Constitution, deciding instead to impose complete control over states and their economies. This was certainly the case with the Environmental Protection Agency. Far too often, states found themselves forced to comply with costly and unachievable environmental standards, all for little or no benefit.

As the EPA gains new leadership, the states must be given a larger role on environmental policy and not cede any more authority to unelected bureaucrats in Washington, DC. The EPA under Obama—under President Obama routinely overstepped its authority, promulgating unnecessarily stringent standards without regard to state abilities or local expertise.

In implementing nationwide ozone standards, to use one significant example, the Agency chose an uninformed one-size-fits-all regulatory agenda without regard to the unique challenges each state may face.

In October 2015, the EPA lowered the national ozone standard from 75 parts per billion to 70 parts per billion. Southwestern states like my home State of Arizona are unable to comply with this standard solely due to our geographic location, which the EPA conveniently ignores when issuing standards.

Arizona experiences a slightly amount of naturally occurring ozone emissions—excuse me, a significant amount of naturally occurring ozone emissions, which contribute greatly to volatile organic compound emissions, or VOCs. Power plants, oil refineries, industrial sources, and other stationary sources account for one percent of Arizona's VOC emissions, yet this is not something the EPA readily admits or acknowledges.

Although the EPA's shortcomings on setting ozone standards are reprehensible, the way this agency has dealt with the regional haze program is even more egregious. This rulemaking merely aims to increase the clarity and color the human eye can see when visiting national parks and other protecting—protected federal wilderness. You heard me correctly. The goal of this rule is not to improve human health in any way and does nothing to prevent environmental hazards. It is an ostensible aesthetic measure. And, shockingly, implementing this rule will cost individual states hundreds of millions of dollars.

When Congress enacted haze regulations, the original intent was to have states dictate how to implement the program. The EPA

was tasked with giving guidance to states while at the same time granting them deference to decide how to implement the program. Congress envisioned a true partnership. Perhaps if the EPA had made an earnest effort to partner with states and truly listen to their feedback, Americans would not be paying the cost of hollow and ineffective regulations.

Thankfully, the new EPA Administrator Scott Pruitt has expressed an intent to work with states in a cooperative manner to create positive change. This hearing will help aid this endeavor by giving state officials the opportunity to voice their states' needs. I hope this hearing will act as a step forward—excuse me, step forward and a step toward ensuring a true partnership between states and the federal government.

[The prepared statement of Chairman Biggs follows:]



COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Lamar Smith, Chairman

For Immediate Release
May 23, 2017

Media Contact: Kristina Baum
(202) 225-6371

Statement of Environment Subcommittee Chairman Andy Biggs (R-Ariz.)
Expanding the Role of States in EPA Rulemaking

Chairman Biggs: Welcome to today's hearing, entitled "Expanding the Role of States in EPA Rulemaking."

The 10th Amendment protects states from being bullied by the federal government. Instead of allowing complete and unchecked power at the federal level, the Constitution ensures that states retain their authority on issues not expressly defined.

Unfortunately, the previous Administration must have skimmed over that part of the Constitution, deciding instead to impose complete control over states and their economies. This was certainly the case with the Environmental Protection Agency. Far too often, states found themselves forced to comply with costly and unachievable environmental standards, all for little or no benefit.

As the EPA gains new leadership, the states must be given a larger role on environmental policy and not cede any more authority to unelected bureaucrats in Washington, D.C. The EPA under Obama routinely overstepped its authority, promulgating unnecessarily stringent standards without regard to state abilities or local expertise.

In implementing nation-wide ozone standards, to use one significant example, the agency chose an uninformed "one-size-fits-all" regulatory agenda without regard to the unique challenges each state may face.

In October 2015 the EPA lowered the national ozone standard from 75 parts per billion to 70 parts per billion. Southwestern states like my home state of Arizona are unable to comply with this standard solely due to our geographic location, which the EPA conveniently ignores when issuing standards.

Arizona experiences a significant amount of naturally occurring ozone emissions, which contribute greatly to volatile organic compound emissions, or VOC's. Power plants, oil refineries, industrial sources, and other stationary sources account for 1 percent of Arizona's VOC emissions, yet this is not something the EPA readily admits.

Although the EPA's shortcomings on setting ozone standards are reprehensible, the way this agency has dealt with the regional haze program is even more egregious. This rulemaking merely aims to increase the clarity and color the human eye can see when visiting national parks and other protected federal wilderness.

Yes, you heard me correctly: the goal of this rule is not to improve human health in any way and does nothing to prevent environmental hazards. It is an aesthetic measure. And, shockingly, implementing this rule will cost individual states hundreds of millions of dollars.

When Congress enacted haze regulations, the original intent was to have states dictate how to implement the program. The EPA was tasked with giving guidance to states while at the same time granting them deference to decide how to implement the program. Congress envisioned a true partnership. Perhaps if the EPA had made an earnest effort to partner with states and truly listen to their feedback, Americans would not be paying the cost of hollow regulations.

Thankfully, the new EPA Administrator Scott Pruitt has expressed an intent to work with states in a cooperative manner to create positive change. This hearing will help aid this endeavor by giving state officials the opportunity to voice their states' needs.

I hope this hearing will act as a step toward ensuring a true partnership between states and the federal government.

I yield back.

###

Chairman BIGGS. Without objection, I'd like to enter into the record a written statement from the Wyoming Department of Environmental Quality discussing the important relationship of state environmental agencies in federal rulemaking.

[The information appears in Appendix II]

Chairman BIGGS. And I will yield back the balance of my time.

And I now recognize the gentlewoman from Oregon, the Ranking Member, Mrs. Bonamici, for an opening statement.

Ms. BONAMICI. Thank you, Mr. Chairman, and thank you to all of our witnesses for being here today.

Before we talk about the topic that is the title of this hearing today, "Expanding the Role of States in EPA Rulemaking," we need to discuss the basis of these rules themselves. The existence of the EPA and its core mission to protect human health and the environment stemmed from a failure of the states to safeguard their residents from pollution in the air, water, and soil. EPA's role as a federal environmental regulatory body was meant to provide an even playing field for all Americans, regardless of geography because the health of our families is not something we can leave to chance.

The mission of the EPA is to protect human health and the environment, and the Agency's purpose clearly states that its efforts to protect Americans from significant risks should be based on the best available scientific information. As Members of the Science Committee, it is important for us to focus on the oversight of the federal research undertaken by agencies in our jurisdiction. For the EPA, this means allowing the Office of Research and Development to continue its leading-edge scientific research that forms the basis of agency actions, including rulemaking.

The back-to-basics agenda that EPA Administrator Scott Pruitt has touted recently with the focus on environment economy and engagement appears to have little overlap with the Agency's stated mission to protect human health and the environment. Further actions by both the EPA Administrator and the Trump Administration have shown an increased proclivity toward promoting industry interests over public health whether by refusing to renew the terms of eligible members of the Agency's Board of Scientific Counselors or proposing to gut funding for the EPA's Office of Research and Development, the office that conducts the research that forms the basis of environmental protections.

This Administration and my colleagues on the other side of the aisle in this committee are quick to forget the condition of our environment prior to the existence of the EPA when pollution was pervasive in our air, water, and soil. Let me be clear: Our work is not done. Just because we cannot see the pollution around us know that—now that our rivers no longer catch fire and our cities are not as choked by smog does not mean that the EPA can close up shop or retreat. In fact, we need the EPA now more than ever.

The American people agree. During a recent call for comments on what EPA regulations to modify, repeal, or replace, thousands of Americans pleaded to keep in place environmental safeguards with some even warning that we would be doomed to repeat our history if we dismantled existing protections.

Although I'm concerned by the Administration's broad actions against science across the agencies, I'm especially troubled by the

specific EPA actions because the seriousness of the Agency's mission, to protect the public from environmental risks.

That's why am pleased that we have Dr. Swackhamer here today to highlight the scientific foundation of these environmental safeguards and the importance of continuing to press forward on scientific research both internally at the EPA and additionally through grants.

I look forward to a discussion starting today and I hope continuing into the future about the integral role that scientific inquiry plays in informing policy and risk at the EPA in order to keep our constituents safe and healthy in the communities we are also honored to represent.

With that, I'd like to thank the witnesses for being here today.
[The prepared statement of Ms. Bonamici follows:]

OPENING STATEMENT
Ranking Member Suzanne Bonamici (D-TX)
of the Subcommittee on Environment

Committee on Science, Space, and Technology
Subcommittee on Environment
“*Expanding the Role of States in EPA Rulemaking*”
May 23, 2017

Thank you, Mr. Chairman. And thank you to our witnesses for being here today.

Before we talk about the topic that is the title of this hearing today, expanding the role of states in EPA rulemaking, we need to discuss the basis of these rules themselves. The existence of the EPA, and its core mission to protect human health and the environment, stemmed from a failure of the states to safeguard their residents from pollution in the air, water, and soil. EPA’s role as a federal environmental regulatory body was meant to provide an even playing field for all Americans, regardless of geography, because the health of our families is not something we can leave to chance.

The mission of the EPA is to protect human health and the environment, and the agency’s purpose clearly states that its efforts to protect Americans from significant risks should be based on the best available scientific information. As members of the Science Committee, it is important for us to focus on oversight of the federal research undertaken by agencies in our jurisdiction. For the EPA, this means allowing the Office of Research and Development to continue its leading-edge scientific research that forms the basis of Agency actions, including rulemaking.

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proposing to gut the funding for the EPA's Office of Research and Development, the office that conducts the research that forms the basis of environmental protections.

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I look forward to a discussion starting today and I hope continuing into the future about the integral role that scientific inquiry plays in informing policy and risk at the EPA in order to keep our constituents safe and healthy in the communities we're all so honored to represent. With that I would like to again thank the witnesses for being here today, and I yield back the balance of my time.

Ms. BONAMICI. And, Mr. Chairman, I would also like to ask for unanimous consent that a letter be introduced into the record. This letter was sent to EPA Administrator Scott Pruitt last week requesting additional details surrounding the decision to not renew the terms of nine eligible members of the EPA's Board of Scientific Counselors. It is signed by the Ranking Members of the full Science, Space, and Technology Committee and the Energy and Commerce Committee, as well as the Ranking Members of their respective Oversight and Environment Subcommittees.

Chairman BIGGS. Without objection.

[The information appears in Appendix II]

Ms. BONAMICI. Thank you, Mr. Chairman, and with that I look forward to the testimony and yield back the balance of my time.

Chairman BIGGS. Thank you.

I now recognize the Chairman of the Full Committee, Mr. Smith.

Chairman SMITH. Thank you, Mr. Chairman, and also thanks to the witnesses for being here today.

Mr. Chairman, the United States Constitution asserts that state governments retain power when not directly superseded by the federal government. This is explicitly stated in the Tenth Amendment.

Unfortunately, during the previous Administration, the relationship between the Environmental Protection Agency and state governments eroded to the point that states were micromanaged by the federal government at every turn, often at great detriment to their local economies.

The EPA sought control over state interests and routinely downplayed state concerns in order to enforce a costly partisan agenda that did little to better the environment. For instance, when EPA regulations mandated that states create plans to meet environmental standards, the EPA routinely usurped these plans and created far stricter plans for states with little or no negotiation. This isn't the relationship our Founding Fathers envisioned when they created the Bill of Rights. This is the implementation of a unilateral environmental agenda.

What's also troubling is that the regulations EPA proposed, finalized, and forced onto states during the previous Administration were routinely shown to be based on suspect science. The EPA often cherry-picked what science to utilize, and amazingly didn't even possess some of the data they supposedly used for regulations.

Not surprisingly, the EPA has been broken for years. That's why the Committee approved two important pieces of legislation this year: the HONEST Act, and the Science Advisory Board Reform Act. These bills, passed by the House and sent to the Senate, will promote scientific integrity and assure that scientific advice and counsel is no longer lopsided.

I am encouraged that President Trump and Administrator Pruitt are working hard to return the EPA to its rightful place as an honest agency that isn't plagued by a one-sided agenda. Unfortunately, this is a big task. Even now, staff at the Agency is working to undermine the President's authority by continuing to conspire with environmental allies of the past Administration who want to impose costly, job-killing regulations on American taxpayers.

Recently, science integrity officers at the EPA have scheduled a stakeholder meeting to discuss the Agency's scientific integrity

practices. The stakeholders invited to this closed, invitation-only meeting reads like a “who’s who” of environmental activists with little diversity among viewpoints.

It is clear that certain employees at the EPA continue to undermine the current Administration and are doing so in near-secret meetings. A meeting like this should not take place without balanced representation of all stakeholders. Or even better, the meeting should be open to all who wish to attend.

Under the previous Administration, science advisory panels and boards at the EPA were packed with “experts” of the same mindset, acting as a rubberstamp of the Agency’s agenda. These same “experts” also were found to be double-dipping. They are routinely funded by EPA grant money but then advise the Agency on the same issues they were funded to examine. This is a clear conflict of interest. I am disappointed that some employees continue to push a secret, one-sided agenda instead of working with the Administration.

This Administration is returning EPA to its rightful agenda of relying on good science, not cherry-picked or non-existent science. And I applaud the work of Administrator Pruitt and look forward to working with him to make sure regulations are providing the most benefit to our states and their citizens.

With that, I again look forward to hearing from our witnesses today, and yield back the balance of my time.

[The prepared statement of Chairman Smith follows:]



COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Lamar Smith, Chairman

For Immediate Release
May 23, 2017

Media Contact: Kristina Baum
(202) 225-6371

Statement of Chairman Lamar Smith (R-Texas)
Expanding the Role of States in EPA Rulemaking

Chairman Smith: Thank you, Mr. Chairman, and thanks to our witnesses for being here today.

The United States Constitution asserts that state governments retain power when not directly superseded by the federal government. This is explicitly stated in the 10th Amendment.

Unfortunately, during the previous Administration, the relationship between the Environmental Protection Agency and state governments eroded to the point that states were micro-managed by the federal government at every turn, often times at great detriment to their local economies.

The EPA sought complete control over state interests and routinely downplayed state concerns in order to enforce a costly partisan agenda that did little to better the environment.

For instance, when EPA regulations mandated that states create plans to meet environmental standards, the EPA routinely usurped these plans and created far stricter plans for states with little or no negotiation. This isn't the relationship our founding fathers envisioned when they created the Bill of Rights. This is the implementation of a unilateral environmental agenda.

What's more troubling is that the regulations EPA proposed, finalized, and forced onto states during the previous Administration were routinely shown to be based on suspect science. The EPA often cherry-picked what science to utilize, and amazingly didn't even possess some of the data they supposedly used for regulations.

Not surprisingly, the EPA has been broken for years. It isn't just limited to senior management officials making the calls; it is evident throughout the agency. That's why the Committee approved two important pieces of legislation this year: the HONEST Act, and the Science Advisory Board Reform Act. These bills, passed by the House and sent to the Senate, will promote scientific integrity and assure that scientific advice and counsel is no longer lopsided.

I am encouraged that President Trump and Administrator Pruitt are working hard to return the EPA to its rightful place as an honest agency that isn't plagued with a one-sided agenda.

Unfortunately, this is a big task. Even now, staff at the agency is working to undermine the President's authority by continuing to work closely with environmental allies of the past Administration who want to impose costly, job-killing regulations on American taxpayers.

Recently, science integrity officers at the EPA have scheduled a stakeholder meeting to discuss the agency's scientific integrity practices. The stakeholders invited to this closed, invitation-only meeting reads like a "who's who" of environmental activists with little diversity among viewpoints.

It is clear that certain employees at the EPA continue to undermine the current Administration, and are doing so in near-secret meetings. A meeting like this should not take place without balanced representation for all stakeholders. Or even better, the meeting should be open to all who wish to attend.

Under the previous Administration, science advisory panels and boards at the EPA were packed with "experts" of one mindset, acting as a rubberstamp to the agency's agenda. These same "experts" were also found to be double-dipping. They are routinely funded by EPA grant money, but then are tasked to advise the agency on the same issues they were funded to examine. This is a clear conflict of interest, and I am disappointed that some employees are continuing to push a secret, one-sided agenda instead of working with the Administration.

This Administration is returning EPA to its rightful agenda of relying on good science, not cherry-picked or non-existent science. I applaud the work of Administrator Pruitt, and look forward to working with him to make sure regulations are providing the most benefit to our states and their citizens.

With that, I look forward to hearing from our witnesses today, and yield back the balance of my time.

###

Chairman BIGGS. I now recognize the Ranking Member of the Full Committee for a statement, Representative Johnson.

Ms. JOHNSON. Thank you very much, Mr. Chairman and our distinguished Ranking Member and witnesses.

Environmental protections that limit damage to the environment and protect the public from toxic exposure should be based on solid scientific evidence. Five decades ago, a Republican President established the Environmental Protection Agency to ensure that this was the case. Some of us still remember that the EPA was created because the states were not doing a good job in regulating private industries and in safeguarding the health and safety of their residents.

In the years and decades before EPA was established, rivers were literally causing—catching fire because of flammable chemicals dumped into them. Smog engulfed the air in certain cities exacerbating health ailments, and children played in urban areas immersed with toxic chemicals.

Richard Nixon established the EPA to assist state environmental agencies by providing them with the scientific research necessary to successfully carry out their mission to protect the public. He believed a federal scientific agency was needed to help the nation address critical environmental issues because he knew they could not be successfully addressed with each State acting on their own. In his message to Congress in July of 1970, President Nixon said the EPA was needed to make a coordinated attack on the pollutants which debase the air we breathe, the water we drink, and the land we grow our food.

Certainly, environmental problems still exist today. However, as a nation, together we have made steady progress in addressing them. These achievements have been made by relying on creditable environmental science that has helped to enlighten policymakers and politicians alike in order to help develop constructive policies and reasonable regulations to protect the public. But abandoning these or this responsibility will not help protect the environment or improve the public's health. Rather, it will turn back the clock more than 50 years.

Many of the proposed environmental policies and regulations coming from this Administration and the Science Committee majority have already put us on a road back to a time when industries polluted unimpeded. The public suffered and politicians stayed silent. I am concerned that, today, the Trump Administration is attempting to silence federal scientists and offer alternative facts rather than scientific evidence.

The decision by EPA Administrator Scott Pruitt earlier this month to not renew nine of the 18 members of the Agency's Board of Scientific Counselors is just the latest example of this Administration's effort to silence scientists. The EPA has also scrubbed references to climate change from its websites, and the Administrator recently ignored the research finding of EPA's own scientists who recommended banning a toxic chemical and instead sided with the insecticides manufacturer.

We are fortunate that, today, Dr. Deborah Swackhamer is here to provide us with her perspective on these unfortunate events. Dr. Swackhamer is a Professor Emeritus of Science, Technology, and

Public Policy, as well as a Professor Emerita of Environmental Health Science at the University of Minnesota, bringing a wealth of scientific expertise to the table. She is also the current Chair of EPA's Board of Scientific Counselors and the former Chair of EPA's Science Advisory Board.

Although she's testifying today in her personal capacity as a scientist expert and not representing any of EPA's Science Advisory Boards, I am glad she has decided not to stay silent. I look forward to hearing her perspective on how the federal government can rely on science to develop appropriate environmental policies and regulations.

In closing, I'd like to remind my colleagues that the EPA was created by a Republican President to preserve environment—to preserve the environment and protect the public health, not the profits of private corporations. The EPA's fundamental mission, however, appears to be under attack. The efforts to alter EPA's mission, downgrade its legal authority, and silence its scientists will endanger the public and threaten the environment against the public's will.

However, science has proven repeatedly that science cannot be silenced. Scientific facts are supported by evidence, not opinions. Distorting or dismissing scientific facts do not alter scientific knowledge. I hope that this committee, this Congress, and this Administration can get back to the basic principles of good governance where science forms a solid bedrock that helps to educate policymakers and inform their public policy choices.

I look forward to the testimony of our witnesses, and I thank you, Mr. Biggs. And I yield back.

[The prepared statement of Ms. Johnson follows:]

OPENING STATEMENT

Ranking Member Eddie Bernice Johnson (D-TX)

Committee on Science, Space, and Technology
 Subcommittee on Environment
"Expanding the Role of States in EPA Rulemaking"
 May 23, 2017

Environmental protections that limit damage to the environment and protect the public from toxic exposures should be based on solid scientific evidence. Five decades ago a Republican President established the Environmental Protection Agency (EPA) to ensure this was the case. Some of us still remember that the EPA was created because the States were not doing a good job in regulating private industries and in safeguarding the health and safety of their residents.

In the years and decades before the EPA was established, rivers were literally catching fire because of flammable chemicals dumped into them, smog engulfed the air in certain cities exacerbating health ailments, and children played in urban areas immersed with toxic chemicals.

Richard Nixon established the EPA to assist State environmental agencies by providing them with the scientific research necessary to successfully carry out their mission to protect the public. He believed a federal scientific agency was needed to help the nation address critical environmental issues because he knew they could not be successfully addressed with each State acting alone. In his message to Congress in July 1970, President Nixon said the EPA was needed *"to make a coordinated attack on the pollutants which debase the air we breathe, the water we drink, and the land that grows our food."*

Certainly, environmental problems still exist. However, as a nation – together – we have made steady progress in addressing them. These achievements have been made by relying on credible environmental science that has helped to enlighten policymakers and politicians alike in order to help develop constructive policies and reasonable regulations to protect the public. But abandoning this responsibility will not help protect the environment or improve the public's health. Rather, it will turn the clock back fifty years.

Many of the proposed environmental policies and regulations coming from this Administration and the Science Committee Majority have already put us on a road back to a time when industries polluted unimpeded, the public suffered and politicians stayed silent. I'm concerned that today, the Trump Administration is attempting to silence federal scientists and offer alternative facts rather than scientific evidence.

The decision by EPA Administrator Scott Pruitt earlier this month to not renew nine of the 18 members of the Agency's Board of Scientific Counselors (BOSC) is just the latest example of this Administration's efforts to silence scientists. The EPA has also scrubbed references to climate change from its websites and the Administrator recently ignored the research findings of EPA's own scientists who recommended banning a toxic chemical (*Chlorpyrifos*) and instead sided with the insecticide's manufacturer.

We are fortunate that Dr. Deborah Swackhamer is here today to provide us with her perspective on these unfortunate events. Dr. Swackhamer, a Professor Emerita of Science, Technology, and Public Policy as well as a Professor Emerita of Environmental Health Sciences at the University of Minnesota brings a wealth of scientific expertise to the table. She is also the current Chair of the EPA's Board of Scientific Counselors and the former Chair of the EPA's Science Advisory Board. Although she is testifying today in her personal capacity as a scientific expert and not representing any of the EPA's science advisory boards, I am glad she has decided not to stay silent. I look forward to hearing her perspective on how the federal government can rely on science to develop appropriate environmental policies and regulations.

In closing, I would remind my colleagues that the EPA was created by a Republican President to preserve the environment and protect the public's health, not the profits of private corporations. The EPA's fundamental mission, however, appears to be under attack. The efforts to alter the EPA's mission, downgrade its legal authority, and silence its scientists will endanger the public and threaten the environment. However, history has proven repeatedly that science cannot be silenced. Scientific facts are supported by evidence, not opinions. Distorting or dismissing scientific facts does not alter scientific knowledge. I hope that this Committee, this Congress, and this Administration can get back to basic principles of good governance where science forms a solid bedrock that helps to educate policymakers and inform their public policy choices.

I look forward to the testimony of our witnesses. Thank you Chairman Biggs. I yield back.

Chairman BIGGS. Thank you.

Let me introduce our witnesses today. We have a great panel here with us. And our first witness today is Mr. Misael Cabrera, Director of the Arizona Department of Environmental Quality. Director Cabrera is a registered professional engineer. He received his bachelor's degree in civil engineering from the University of Arizona.

Our next witness will be Ms. Becky Keogh, Director of the Arkansas Department of Environmental Quality. Ms. Keogh received her bachelor's degree in chemical engineering from the University of Arkansas.

And our final witness today is Dr. Deborah Swackhamer, Professor Emeritus of the Hubert H. Humphrey School of Public Affairs and Professor Emerita of Environmental Health—excuse me—Environmental Health Sciences at the University of Minnesota. Dr. Swackhamer received her bachelor's degree from Grinnell College and her master's and Ph.D. from the University of Wisconsin Madison.

I now recognize Mr. Cabrera for five minutes to present his testimony.

**TESTIMONY OF MR. MISAEEL CABRERA, PE, DIRECTOR,
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mr. CABRERA. Mr. Chairman, Members of the Committee, I am greatly appreciative of the opportunity to offer testimony today.

As we discuss expanding the role of states in the U.S. Environmental Protection Agency rulemaking, we should also discuss its corollary: reducing the role of EPA in state rulemaking. Let me explain. The Clean Air Act calls for states to prepare implementation plans when national air quality standards are not being met. The state implementation plans contain state-specific rules, rules that are developed through extensive stakeholder involvement and designed for environmental protection and local effectiveness.

When EPA rejects a state plan or when it issues its own federal implementation plan, it effectively coerces states to write state rules in the specific way that EPA sees fit. One example of this is what I'd like to call the "EPA regional haze maze."

In 1990, Congress established the regional haze program calling for states to develop plans for regional progress towards the national visibility goal set in 1977. Congress also established authority for Visibility Transport Commissions and mandated the Grand Canyon Visibility Transport Commission.

In 1992, EPA established the Commission addressing specific parks and wilderness areas in a nine-state region made up of eight Governors, four tribal leaders, four ex-official federal organizations with the Arizona Governor serving as the Chair. Once established, the Commission formed working committees of over 200 experts in air quality, regulatory programs, and economics.

In 1996, the Commission issued a final report with recommendations to EPA. At that point, EPA should have implemented the Commission's recommendations. Instead, we were led further into the EPA regional haze maze.

In 1997, EPA proposed regulations that totally ignored the Commission's findings.

In 1998, upset Western Governors provided guidance to EPA on how to implement the Commission recommendations, and the Senate held oversight hearings.

In 1999, EPA issued revised regulations with two programs: a general program for any State and an optional program for the Commission States.

In 2004, Arizona, New Mexico, Utah, and Oregon were the first states in the nation to submit regional haze plans. The next few years included court challenges to EPA rules and states trying to appease the desires of EPA.

In 2009, EPA published a finding that 34 states had failed to submit state plans by the regulatory deadline and that three states, including Arizona, had failed to submit required elements of the plans.

In 2011, Arizona determined that the—that implementing the regional haze requirements under the optional program would not be feasible and submitted a replacement plan under the general program.

In 2011, Earth Justice sued EPA for failing to act on the plans. EPA and Earth Justice settled, requiring EPA to act on a submitted state plan or issue a federal plan.

In 2012, EPA partially disapproved Arizona's submittal and issued a federal plan for several facilities in Arizona. EPA's plan had an estimated cost of over \$500 million.

The worst part of the EPA regional haze maze is that after 20 years of extensive stakeholder meetings and negotiations, multiple commission reports, two state plans, four lawsuits, a federal plan that would cost over \$500 million, after all that, the modeled improvement to visibility would not be perceivable to the human eye. Let me repeat that. EPA's insistence on controls that cost over \$500 million would not have created a perceivable visibility difference in the Grand Canyon State.

Given that states now have mature regulatory programs, unlike 40 years ago, and technical expertise, EPA should give deference to competent state regulators who develop state plans and state-specific rules. Only in rare instances where minimum criteria are not met should EPA reject state plans or issue a federal plan. In short, we should absolutely expand state involvement in EPA rule-making, and we should reduce EPA involvement in state rule-making via the state implementation planning process set forth in the Clean Air Act.

In closing, I would like to mention that I am very encouraged by EPA Administrator Pruitt's statements regarding a renewable of collaborative federalism and the Environmental Council of States' work on the same issue.

Thank you very much. I'll open to any questions.

[The prepared statement of Mr. Cabrera follows:]

Testimony**U.S. House Committee on Science, Space, & Technology****Subcommittee on Environment****Tuesday, May 23, 2017****by****Misael Cabrera, Director**

Mr. Chairman, members of the Committee. My name is Misael Cabrera, I am the Director of the Arizona Department of Environmental Quality, and I greatly appreciate the opportunity to offer testimony today.

As we discuss expanding the role of States in the U.S. Environmental Protection Agency (EPA) Rulemaking, we should also discuss its corollary: reducing the role of EPA in State rulemaking. Let me explain, the Clean Air Act (CAA) calls for states to prepare Implementation Plans when national air quality standards are not being met. These State Implementation Plans (state plan) contain state-specific rules; rules that are developed through extensive stakeholder involvement and designed for environmental protection and local effectiveness. When EPA rejects a state plan or when it issues its own Federal Implementation Plan (federal plan), it effectively coerces states to write state rules in the specific way that EPA sees fit. One example of this is what I like to call, *"The EPA Regional Haze Maze."*

- 1990 - Congress established the regional haze program calling for states to develop plans for reasonable progress toward the national visibility goal set in 1977. Congress also established authority for visibility transport commissions and mandated the Grand Canyon Visibility Transport Commission ("Commission").

- 1992 – EPA established the Commission addressing specific parks and wilderness areas in a nine state region made up of eight Governors, four Tribal Leaders, four Ex-Officio Federal organizations, with the Arizona Governor serving as the Chair. Once established, the Commission formed working committees of 200 experts in air quality, regulatory programs, and economics.
- 1996 – The Commission issued a final report with recommendations to EPA.

At that point, EPA should have implemented the Commission’s recommendations. Instead, we were led further into “The EPA Regional Haze Maze:”

- 1997 - EPA proposed regulations that totally ignored the Commission’s findings.
- 1998 - Upset Western Governors provided guidance to EPA on how to implement the Commission recommendations and the Senate held oversight hearings.
- 1999 - EPA issued revised regulations with two programs: a general program for any state (40 CFR 51.308), and an optional program for the Commission states (51.309).
- 2004 - Arizona, New Mexico, Utah, and Oregon were the first states in the nation to submit regional haze plans. The next few years included court challenges to EPA rules, and states trying to appease the desires of EPA.
- 2009 - EPA published a finding that 34 states had failed to submit state plans by the regulatory deadline and that three states, including Arizona, had failed to submit required “elements” of the plans.
- 2011 - Arizona determined that implementing regional haze requirements under the optional program (CFR 51.309) would not be feasible, and submitted a replacement plan under the general program (CFR 51.308).
- 2011 - Earth Justice sued EPA for failing to act. EPA and Earth Justice settled requiring EPA to act on a submitted state plan or issue a federal plan.
- 2012 - EPA partially disapproved Arizona’s submittal, and issued a federal plan for several facilities in Arizona. EPA’s plan had an estimated cost of over \$500 million.

The worst part of “The EPA Regional Haze Maze” is that after 20 years of extensive stakeholder meetings and negotiations, multiple Commission reports, two state plans, four lawsuits, a federal plan that would cost over \$500 million...after all that...the modeled improvement to visibility will not be perceivable to the human eye. Let me repeat that: EPA’s insistence on controls that cost of over \$500 million would not have created a perceivable visibility difference in the Grand Canyon State.

Given that States now have mature regulatory programs and technical expertise, EPA should give deference to competent State regulators who develop state plans and state-specific rules; only in rare instances where minimum criteria are not met, should EPA reject state plans or issue a federal plan. In short, we should absolutely expand State involvement in EPA rulemaking and we should reduce EPA involvement in state rulemaking via the state implementation planning process set forth by the Clean Air Act.

In closing, I would like to mention that I am very encouraged by EPA Administrator Pruitt’s statements regarding a renewal of collaborative federalism. I am also encouraged by the ongoing work of the Environmental Council of States to partner with EPA towards that end. Together we can establish a new relationship where Congress establishes the laws, EPA sets the minimum standards, and the States are free to execute without unnecessary cost or waste.

Thank you for this opportunity to provide testimony, and I am happy to answer any questions that you might have.



Misael Cabrera, P.E.

Governor Doug Ducey appointed Misael Cabrera as director of the Arizona Department of Environmental Quality on August 17, 2015. He previously served as the agency's deputy director since October 2011 under former ADEQ Director Henry Darwin, functioning as chief of staff and directly overseeing the agency's operations, including its budget and administrative support functions. With Director Darwin, Misael led ADEQ in an agency-wide transformation to apply Lean principles and techniques and deliver better, faster, cheaper environmental protection for the citizens of Arizona.

Before joining ADEQ, Misael worked in a variety of project, managerial and operational leadership roles for both small and multi-national environmental consulting companies. His work experience includes projects in Mexico, Costa Rica, South Korea, and Italy where he managed to learn a bit of Italian. Misael is also fluent in Spanish. Misael has a B.S. degree in Civil Engineering and is a registered professional engineer.

Chairman BIGGS. Thank you.
Director Keogh?

**TESTIMONY OF MS. BECKY KEOGH, DIRECTOR,
ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY**

Ms. KEOGH. Chairman Smith, Chairman Biggs, Ranking Members, and Members of the Committee, I am Becky Keogh. I hail from the great State of Arkansas and bring greetings from your former colleague and now my boss Governor Asa Hutchinson.

Since taking on the humbling and exciting role of serving in Governor Hutchinson's Cabinet as Director of the Department of Environmental Quality and now including our Office of Energy, I have been a vocal proponent of returning environmental rulemaking to its constitutional roots, something known as cooperative federalism.

Unfortunately, over the past eight years, that once noble partnership that balanced state and federal responsibility and accountability has morphed into something better described as coercive federalism where the State is more pawn than partner.

In Arkansas, we have been authorized to administer every program that the EPA makes eligible for state delegation, but despite that delegated authority and our status as a co-sovereign, the EPA treated us, and other similarly situated states, as petulant children with the EPA acting as a "helicopter mom" of the worst order.

Only days before Administrator Pruitt took the reins of EPA, correspondence between EPA and the Department of Justice referred to Arkansas as a "recalcitrant" litigant. And at times we were. It was our only course left available to states that would not assimilate or accept the EPA overreach.

However, I am pleased to report we are amidst a season of change. In short time Administrator Pruitt has been in place, we are seeing extraordinary change in the environmental landscape. The State's struggle and promise of progress is well illustrated using a story frame penned by Steve Straessle, the Principal of Catholic High School for Boys in Little Rock, Arkansas. Some of you may have heard of the school where Congressman French Hill's son attends when it entered the national spotlight this year for turning away helicopter parents.

On the first day of school, stop signs were placed on the school's entrance that read, "If you are dropping off your son's forgotten lunch, books, homework, equipment, et cetera, please turn around and exit the building. Your son will learn to problem-solve in your absence." It is not accidental that I have chosen this frame to—for my testimony with the story of Principal Straessle's year-end letter.

In this letter, he also recalled a hike he took with his children along Tennessee's Fiery Gizzard Trail where he noticed a phenomenon that occurred again and again: trees growing out of boulders along the creek. He noticed these were not twigs but rather instead were 3-foot-diameter-thick trees that reached several stories into the sky. He noted it was curious that boulder trees were as tall as the others further into the bank, but the root systems were wrapped around rocks that served as foundation. Fate had deposited seeds on top of the rocks, and these seeds had grown over the decades.

He continued, "You can't help but think those trees, as they grew, looked longingly at the comrades on fertile ground that had no visible problems as they sprouted. The other trees were on solid soil, and their root depth was uninhibited. But boulder trees had to figure a way around obstacles. They had to wrap their roots around the boulder, envelop it, and work painstakingly to reach the soil." Impressively, these trees must have struggled as they leaned far over the creek and into the sunlight that otherwise blocked by better-fed vegetation.

"Boulder trees have an unfair life. They start in thin dirt on top of a rock. But those trees persevered. Instead of cursing the rock, they made those rocks into the firmest foundations and reached evermore for sunlight that would nourish them, that would help them grow. Reaching for the light is important."

And that is why I am testifying to you today. We states have wrapped our roots around rocks, reached over the creek and into the sun. Over the past decade, we withstood sparse soil and overcast skies. We, like boulder trees, wrapped ourselves around what held us back, "enveloped it, smothered it with strength, and used it as pedestal for engagement and a rallying cry for perseverance."

Often with limited resources, we states sought ways to be efficient in affecting environmental outcomes and to be flexible with the ability to flourish with less. While the bank trees flourished in the regulated growth and uniformity, we learned that progress and process were not synonymous. A prolonged permit yields protracted protection. We observed firsthand the futility of attempting to turn a boulder tree into a bank tree. State and federal differences should define us, not divide us.

As we move forward into the light, know that we boulder trees, while unique in our appearance en route to soil and sun, are no less mighty than the bank trees. In fact, the State's struggle to grow has enhanced our strength. The country's landscape is enriched when we can recognize the beauty of forest and trees. We look forward to working with our federal partners as we reach for the light together.

Several specific paths have been offered in my written comments that will return us to our constitutional roots where states and EPA are partners in planting of progress and harvesting of success.

And I offer a final optimistic prologue. In a personal meeting with Administrator Pruitt, he assured me that EPA will seek new paths of partnership, promising that "the future ain't what it used to be." I am encouraged that we states will be allowed to implement and execute legally sound and scientifically informed environmental policy from our firmly rooted, rock-solid foundation as opposed to shifting federal sands of late. If given the opportunity to lean toward the light together, we can achieve success of biblical proportion.

Thank you so much, and I look forward to your questions.

[The prepared statement of Ms. Keogh follows:]

Testimony of Becky W. Keogh
Director, Arkansas Department of Environmental Quality
to the
Congress of the United States
House of Representatives
Committee on Science, Space, and Technology
Chairman Lamar S. Smith of the 21st Congressional District of Texas
“Expanding Roles of States in EPA Rulemaking”
March 23, 2017
Washington, D.C.

Chairman Smith, Ranking Member Johnson, Subcommittee on Environment Chairman Biggs, and Members of the Committee, my name is Becky Keogh, and I hail from the great state of Arkansas, and bring greetings from your former colleague, and now my boss, Governor Asa Hutchinson. In 2015, Governor Hutchinson appointed me to serve in his cabinet as the Director of the Arkansas Department of Environmental Quality and the Arkansas Energy Office. Since taking on this humbling and exciting role, I have been a vocal proponent of returning environmental rulemaking to its constitutional roots, something known as cooperative federalism. Unfortunately, over the past eight years that once noble partnership that balanced state and federal responsibility and accountability had morphed into something

better described as coercive federalism, where the state was more pawn than partner.

In Arkansas, we have been authorized to administer every program that the EPA makes eligible for state delegation. But, despite that delegated authority and our status as a co-sovereign, the EPA treated us (and other similarly situated states) as petulant children, with the EPA taking on the role of “helicopter mom” of the worst order. In fact, only days before Administrator Scott Pruitt took the reins of the EPA, my lawyers were unintentionally copied on an email chain between the EPA and the DOJ that referred to Arkansas as a “recalcitrant” litigant. And, at times, we were. It was the only course left available to states that would not assimilate and accept the EPA overreach.

However, I am pleased to report that we are amidst a season of change. In the short time Administrator Pruitt has been in place, we are seeing extraordinary change in the environmental landscape. I believe our state’s struggle and the promise of progress can best be illustrated using a metaphor I first read in a year-end letter from Steve Streassle, the Principal of Catholic High for Boys in Little Rock, Arkansas. Some of you may have heard of this school (where Congressman French Hill’s son attends) when it was placed in the national spotlight for turning away helicopter parents. On the first day of school, “STOP” signs were placed on each entrance that stated: “If you are dropping off your son’s forgotten lunch, books, homework, equipment, etc., please TURN AROUND and exit the building. Your son will learn to problem-solve in your absence.” It is not accidental that I have chosen to frame my testimony with the story from Principal Streassle’s year-end letter.

Principal Straessle’s address recalled a hike he took with his children over Easter break along the Fiery Gizzard Trail in south central Tennessee where he “noticed a phenomenon that occurred again and

again: trees growing out of boulders along the creek.” He noted that these were not twigs of the Charlie Brown Christmas tree variety, but instead “were three-foot diameter thick trees that reached several stories into the sky.” He noted that it was curious that the “boulder trees were as tall as the others further into the bank, but their root systems were wrapped around rocks that served as foundation. Fate had deposited seeds on top of rocks and those seeds had grown over the decades.”

Principal Straessle continued:

You can’t help but think that those trees, as they grew, looked longingly at their comrades on fertile ground that had no visible problems as they sprouted. The other trees were on solid soil and their root depth was uninhibited. But the boulder trees had to figure a way around their obstacle. They had to wrap their roots around the boulder, envelop it, and work painstakingly to reach the soil. It was impressive to see how they must have struggled as they leaned far over the creek and into the sunlight that was otherwise blocked by the better fed vegetation.

Boulder trees have an unfair life. They started in thin dirt on top of a rock. But those trees persevered. Instead of cursing the rock on which they perched, they made those rocks into the firmest foundations and reached ever more for the sunlight that would nourish them, that would help them grow. Reaching for the light is important.

That is why I am testifying today. We states have wrapped our roots around the rocks and reached over the creek into the sun. Over the past decade we withstood sparse soil and overcast skies. We, like boulder trees, wrapped ourselves around what held us back, “enveloped it,

smothered it with strength, and used it as our pedestal for engagement and a rallying cry for perseverance.”

Often with limited resources, we the states sought ways to be efficient in effecting environmental outcomes and to be flexible with the ability to flourish with less. While the bank trees were flourishing in their regulated growth and uniformity, we learned that progress and process are not synonymous. A prolonged permit process yields protracted protection power. We observed firsthand the futility of trying to turn a boulder tree into a bank tree. Our differences should define us not divide us. So, as we move forward into the light, know that we boulder trees, while unique in our appearance and route to soil and sun, are no less mighty than the bank trees. In fact, our struggle to grow has enhanced our strength. The country’s landscape is enhanced when we can recognize the beauty of both the forest and the trees. We look forward to working with our federal partners as we reach for the light together.

I offer more specific paths to light and fertile soil below. I hope these technical remarks will be useful as we begin to till the soil into finer bits for planting seeds that return us to our constitutional roots, where states and the EPA are partners in the planting of progress and the harvesting of success.

SO₂ designations

Pursuant to section 107(d) of the Clean Air Act (CAA), the EPA was required to designate areas as either “unclassifiable,” “attainment,” or “nonattainment” for the 2010 one-hour sulfur dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS). On June 3, 2010, EPA revised the primary health based SO₂ NAAQS by establishing a new one-hour standard at a level of 75 parts per billion (ppb), which is met on an air quality monitoring site when the three-year average of the

99th percentile of one-hour daily maximum concentrations do not exceed 75 ppb. On August 5, 2013, EPA published a final rule establishing air quality designations for twenty-nine areas in the United States for the 2010 SO₂ NAAQS, including two areas in Arkansas.

Typically, when EPA establishes a new national ambient air quality standard (NAAQS) or revises an existing standard for each criteria air pollutant, it sets in motion a series of actions aimed at ensuring that air quality throughout the country meets those standards. It is the job of **states and tribes to submit NAAQS designation recommendations to the EPA**, not third party non-governmental organizations, except during a comment period, as to whether or not an area is attaining the national ambient air quality standards for a criteria pollutant. After working with the **states and tribes, EPA will “designate”** an area as attainment or nonattainment for the standard. EPA is required to promulgate designations for all areas of the country within two years of promulgation of the revised NAAQS.

After EPA published initial SO₂ designations, three lawsuits were filed alleging that EPA had not met the deadlines to designate counties around the country. On March 2, 2015, the U.S. District Court for the Northern District of California accepted a proposed settlement agreement among the EPA, Sierra Club, and the Natural Resources Defense Council to resolve this litigation concerning the deadlines for completing SO₂ designations. The court-approved order directed EPA to complete designations for all remaining areas in the country in up to three additional rounds:

On August 21, 2015, EPA issued its Data Requirements Rule, which required modeling or actual monitoring for categories of sources based on annual SO₂ emission rates. The Data Requirements rule directs **state and tribal air agencies** to characterize current air quality. At the time of

the EPA settlement, the timelines seemed reasonable for completing designations. There were some different protocols for the states to choose from to determine within the timelines whether areas that were initially designated unclassifiable or unclassifiable/attainment due to lack of available information were actually in attainment and could be classified by the state and EPA as in attainment. In the event ambient monitoring was chosen by the state, monitors had to be operational by January 1, 2017; then the first three years of data would be collected for calendar years 2017-2019; and then the intended designation process for the such area would be completed in 2020.

For those states that chose modeling for such areas, the modeling needed to conform to EPA modeling guidelines. The accepted near-field refined dispersion modeling protocol, for example, is AERMOD, which is listed in Appendix W, 40 CFR Part 51, and is one of the EPA modeling protocols required to be used for State Implementation Plan revisions for existing sources and for New Source Review and Prevention of Significant Deterioration programs. For those states that chose to model sources under the rule, the affected areas were to be designated by EPA by December 31, 2017, based on the results from the modeling.

However, the guidelines and deadlines ultimately were not appropriate or fair due to unanticipated delays by EPA in determining the final AERMOD modeling protocol. As a result, and very unfortunately, some accepted AERMOD modeling protocols/calculations were modified twenty months into the process of the states undertaking to perform SO₂ designations. The AERMOD Revision Rule did not become effective until May 22, 2017. Arkansas is currently in the midst of uncertainty as to information that has been submitted to comply with the SO₂ Data Requirements Rule. At every step, Arkansas has timely complied with the requirements of the rule.

Despite our timely compliance, EPA Region 6 has inappropriately allowed third-party modeling to derail the approval process. EPA first allowed our Round 2 submission to be stalled by faulty Sierra Club modeling. The modeling was basic, unrefined, and did not adhere to the Data Requirements Rule, and incorrectly combined emissions in a cumulative fashion resulting in concentrations above the NAAQS. EPA would not have allowed this submittal by a state and confirmed in correspondence to the state that the third party modeling was premised on several factors that are inconsistent with the modeling protocol. Now, EPA has delayed its approval of our Round 3 submission, again referencing the fact that 3rd party modeling could be an important consideration.

In addition, states are being forced to aim for a moving target in regards to the modeling EPA will accept. EPA's modifications in the published final AERMOD regulation rendered the originally-proposed AERMOD models unacceptable in many cases. States, including Arkansas, had relied upon these models to determine whether the affected areas in their states met the 75 ppb SO₂ one-hour standard. Some states found themselves in a situation in which the model they had relied upon is no longer applicable and their counties no longer meet the one-hour SO₂ standard due to no fault of affected sources or the affected states. The AERMOD Revision Rule was published in the Federal Register as **final fifteen days after the deadline of January 1, 2017** for states to have air monitors installed and operational. This delay rendered the option for an affected state to install SO₂ air monitors untimely under the above described deadlines. The delayed modifications to the AERMOD model are extremely unfair to those sources, and states that relied on the original model, and have wasted the time, money and resources of the affected sources and states, also creating confusion and more delays for those states to obtain the proper designation. We believe it is reasonable

for EPA to take action to extend compliance dates for affected states to reassess the methods used to properly determine attainment designation and to allow them time to institute such methods. These deadlines should be extended at least twenty months from the final effective date of the AERMOD Revision Rule.

ADEQ is currently working with its contractor on updated modeling in response to EPA's letter of March 8, 2017. We have now spent twenty-one months and \$75,000 to provide modeling to address concerns by EPA Region 6 in response to 3rd party modeling and will be forced to continue to spend funds to if EPA's current policy is continued. These funds are being expended to reach the same result that could have been achieved if EPA had merely accepted the initial model.

We request that the imposed deadlines to determine compliance with the SO₂ standard by affected sources and states should be extended due to the unanticipated delayed modifications to EPA's air modeling protocol. We also request that Arkansas and other affected states be allowed to reassess and choose alternative methods, including monitoring, to demonstrate compliance.

Regional Haze

In late 2016, Arkansas achieved unprecedented progress improving visibility in the Buffalo River National Park and Caney Creek Wilderness Area according to IMPROVE monitoring data. Despite this improvement, Arkansas was not celebrating the improved scenic beauty at these areas because Arkansas could have made even greater improvement at Buffalo River National Park and Caney Creek Wilderness Areas if EPA had approved the State Implementation Plan (SIP) that Arkansas submitted eight years before. Instead, the state was

grappling with EPA final Federal Implementation Plan (FIP) for Regional Haze for this planning period.

On September 27, 2016, EPA's final Federal Implementation Plan (FIP) was published in the Federal Register. The Final FIP will require installation of more than \$2 billion in control technology at the White Bluff, Flint Creek, and Independence power plants. EPA is requiring this burdensome and expensive control technology even though monitoring data showed that Arkansas has surpassed its reasonable progress goals for this planning period is improving visibility at a greater rate than that needed to achieve the goal of the program: natural visibility conditions by 2064.

EPA took several shortcuts to reach its conclusion that more than two \$2 billion in control technology should be required to achieve visibility improvement that has already occurred. To save time, EPA relied upon modeling that it admitted was "unrefined" compared to the modeling it relied upon in Texas. EPA did not consider significant reductions in emissions by the facilities that had been achieved through the use of low-sulfur coal. In addition, EPA ignored the fact that visibility improvements to be gained from the installation of this equipment are virtually nil in this planning period. Even though Regional Haze sets a "visibility standard," the improvement cannot be seen with the naked eye.

Arkansas is one of the least wealthy states in the nation, and the electric rate increases that will result from these expensive controls will disproportionately impact some of the nation's poorest communities without any need for these controls to meet the goals of this program. No visibility improvement from these requirements will be seen in the first implementation period, which ends next year, because of the time required to order and install these controls. Not only could all of this

have been avoided, but Arkansas could have made even greater progress had EPA relied upon the expertise of the states and simply approved the Arkansas SIP when it was submitted in 2008.

Arkansas urges EPA to return the Regional Haze program to the states and allow Arkansas to submit a SIP that addresses appropriate controls based on accurate and up-to-date visibility trends while considering the cost of controls and the remaining useful life of affected facilities. Any resolution must provide the State of Arkansas with the opportunity to revise its state plan, thereby vesting the state with rightful control over the fate of its own environment.

It is only fitting that these technical comments contain an optimistic prologue. In a personal meeting with Administrator Pruitt, he assured me that the EPA will seek new paths of partnership, noting that “the future ain’t what it used to be.” I am encouraged that we states will be allowed to implement and execute legally sound and scientifically informed environmental policy from our firmly rooted, rock-solid foundation rather than the shifting sands of late. If given the opportunity to lean toward the light together, we can achieve success of Biblical proportion.



Becky W. Keogh, Director
Arkansas Department of Environmental Quality

Becky Keogh has served as the Director of the Arkansas Department of Environmental Quality (ADEQ) since 2015. She has been engaged in a unique range of technical and managerial roles across government, private industry, and environmental consulting throughout her career. Director Keogh previously held positions as a Vice President and Senior Consultant for an international environmental and engineering firm. She served as Deputy Director of ADEQ from 1996–2006. She was subsequently appointed to serve on the Arkansas Geological Commission from 2006–2009. Immediately prior to her appointment by Governor Asa Hutchinson as ADEQ Director, she was employed in an environmental and regulatory management role for an international resources corporation.

Director Keogh has been an active member and alumni member of the Environmental Council of the States (ECOS) since 1997. A well-respected leader among her counterparts in other states, she was elected by her peers as one of only four officers for ECOS. Additionally, as Director, she testified on behalf of the rights of states before the Senate Environment and Public Works Committee in 2016—specifically noting the atmosphere of coercive federalism at the time between states and the EPA.

An Arkansas native, Director Keogh has a degree in chemical engineering from the University of Arkansas. She is married, has three children, and has four grandchildren.

ADEQ's Vision:

To lead in protecting the quality of air, water, and land resources,
and to support environmentally responsible economic growth.

Chairman BIGGS. Thank you.
Dr. Swackhamer for five minutes.

**TESTIMONY OF DR. DEBORAH L. SWACKHAMER,
PROFESSOR EMERITA, HUBERT H. HUMPHREY
SCHOOL OF PUBLIC AFFAIRS AND PROFESSOR EMERITA,
ENVIRONMENTAL HEALTH SCIENCES,
UNIVERSITY OF MINNESOTA**

Dr. SWACKHAMER. Good morning, Chairman Biggs, Ranking Member Bonamici, and distinguish Committee Members. My name is Deb Swackhamer, and I'm a former Professor from the University of Minnesota where I held appointments in the Humphrey School of Public Affairs and in the School of Public Health. I'm trained as an environmental chemist, and I have worked on environmental policy for the State of Minnesota. I have served as Chair of the U.S. EPA Science Advisory Board, and I currently serve as Chair of EPA's Board of Scientific Counselors.

That said, I speak to you today as an environmental science and policy expert and not on behalf of the U.S. EPA or the State of Minnesota. My perspectives and statements are mine alone.

The hearing today is to explore the tension between states and EPA regarding environmental regulation. My comments today are to underscore the critically important role of science in environmental decision-making, regardless of whether it takes place at the state or the federal level.

Our federal environmental statutes from the 1970s set up a national regulatory framework that honors and empowers the roles of states. The federal role is to ensure consistency across multijurisdictional watersheds and airsheds and to establish a minimum bar of environmental quality that allows our citizens to safely drink our water, eat our fish, and breathe our air. The states' role is to implement this framework because they know their states better than Washington, D.C.

This framework works for a number of reasons. First, we are well aware that air and water do not respect or follow geopolitical boundaries. Second, this framework works because of the inclusion of robust science. The essence of environmental protection is the protection of our citizens' health. To protect public health, you must have clean air and safe drinking water. In other words, you must have a clean environment.

To achieve this, one must establish acceptable exposures of pollutants using the best scientific evidence available. Thus, science is the bedrock, the foundation of human health and environmental protection. This scientific foundation must be independent of politics and must be robust. Our federal EPA and our state environmental agencies must have the best available science or they will not be protecting public health. Without science supporting environmental decision-making at any level, public health loses.

Environmental issues are complex, and thus the science to address them requires many disciplines and perspectives. Much of the scientific evidence that is needed to protect public health can be done more efficiently and effectively at the federal level where they can take advantage of national laboratories, multidisciplinary sci-

entific capacity, and access to national and international scientific communities.

However, the President's proposed 2018 budget reduces investment in EPA's science programs, an ominous indication that the foundation of science to support policy is being marginalized by the current Administration. If not EPA, then who will provide the needed scientific evidence? There is no indication of how the scientific capacity would be replaced. In fact, pass-through programmatic dollars to the states are also cut in the proposed budget.

Cutting environmental protection funds to the states will further decrease science-based policy and the states' capacity to produce sound policy. States will not be able to make up the difference. This results in a double lose-lose situation for public health.

EPA's job is not finished. The proposed cuts in science budgets and the marginalization of science in environmental protection have been justified by some that we have done enough, that these investments are no longer necessary. Nothing could be further from the truth. We've made tremendous progress in the improvement of our environment and in reducing illness, but it is a myth that we can coast on these successes.

Four out of 10 of our nation's lakes and rivers do not meet basic water quality standards. It is estimated that more than 200,000 people die prematurely each year in the United States as a result of air pollution exposures. These exposures cost the U.S. economy over \$100 million per year in health costs. Marginalizing science will make these numbers worse. The majority of U.S. citizens do not want to go backward.

What is at stake if there's a decline in support of science at the federal and state levels? Should we follow this path that will lead to a decline in public health, a decline in our community's health, and put our country at a competitive disadvantage? It erodes the future health and well-being of our children and our grandchildren. Investing in and maintaining our preeminence in environmental science and ensuring its use in sound environmental policy will put us on a much better path.

Thank you for the opportunity to speak today.

[The prepared statement of Dr. Swackhamer follows:]

**House Subcommittee on the Environment
Committee on Science, Space, and Technology, U.S. House of Representatives
“Expanding the Role of States in EPA Rulemaking”
Room 2318 Rayburn House Office Building
May 23, 2017**

**Written Testimony submitted by Deborah L. Swackhamer, Ph.D.
Professor Emerita, University of Minnesota**

My name is Deborah Swackhamer, and I am a Professor Emerita from the University of Minnesota where I held appointments in Science, Technology, and Public Policy in the Humphrey School of Public Affairs, and also in Environmental Health Sciences in the School of Public Health at the University of Minnesota. I also co-directed the Water Resources Center in Minnesota. I am trained as an environmental chemist, with an emphasis on understanding exposures of toxic chemicals in the environment. I also have worked on developing water resources policy for the State of Minnesota. I served as Chair of the U.S. Environmental Protection Agency (EPA) Science Advisory Board from 2008-2012, and currently serve as Chair of the EPA's Board of Scientific Counselors. I speak to you today as an environmental sciences and policy expert, and not on behalf of the U.S. EPA or the State of Minnesota. My perspectives and statements are mine alone.

Key Points.

- Environmental protection must address the fact that pollution does not recognize political boundaries – there is a role for both States and the Federal government.
- Environmental protection is fundamentally about protecting the health of citizens, which requires protecting the quality of our air and water.
- Robust science, not politics, should form the bedrock upon which decision makers develop environmental regulations and policies.
- In general, the capacity to produce and collate robust scientific evidence is found at the federal level, and not at the state level.
- Progress in environmental protection has been achieved, but there is still much to be done to protect public health. Continued investment in EPA science is needed to achieve the protection of public health.
- The future health and well-being of our communities, and of our children and grandchildren, is at stake.

States vs. EPA in Rulemaking. The hearing today is to explore the tension between States and EPA regarding environmental regulation. My statements to this Subcommittee are to underscore the critically important role of science in environmental decision-making, regardless of whether it takes place at the State or the Federal level.

There is a reason and rich history as to why environmental protection is structured the way it is in our country. Our Federal statutes, passed with overwhelming bipartisan support by the Congress in the 1970s, set up a regulatory framework that also honors and empowers the role of States. The Federal role is to ensure consistency across multijurisdictional watersheds and airsheds, and to establish a minimum bar of environmental quality that allows our citizens to safely drink our water, eat our fish, and breathe our air. The States' role is to implement the framework to meet those minimum criteria, because they know their states better than Washington DC does. This framework is a robust and balanced one, and has worked well over the last 47 years for a number of reasons: scale of the problems, involvement of science, and cost efficiencies.

Geographic Scale of Pollution. We all are well aware that air and water do not respect or follow political boundaries. In fact, many state boundaries were established along shared river courses, setting up the need to manage air and water in a multijurisdictional, regional manner. EPA delegates the responsibility of implementing the federal statutes to the States, but maintains some control over setting the national standards. Having 50 states set 50 different standards for a given water pollutant would be highly disruptive, chaotic, and exceedingly expensive to the regulated community, to say nothing of being ineffective.

Role of Science. Environmental protection is at its essence the protection of our citizens' health. To protect public health, you must have clean air and safe drinking water – in other words, you must have a clean environment. To achieve this, one

must establish acceptable exposures of pollutants – to lower the risk of adverse health outcomes – using the best scientific evidence available. Thus science is the bedrock, the foundation, of human health and environmental protection.

Science-based evidence informs but does not dictate policy in the United States. Policy emerges through consideration of many factors including economic factors, technical feasibility, and social and political acceptability. However, all *good* environmental policy has a firm scientific foundation. The scientific foundation must be independent of politics, and must be robust. In environmental science, this means it must be based on a collection of evidence, which is then reviewed and critiqued by other independent scientists. When it comes to environmental regulations, given our litigious society, the regulation that survives a court challenge is one that is based on the best available science. So: our Federal EPA and our state environmental agencies must be able to have the best science available to them, or they will not be protecting public health. Without science supporting environmental policy making, public health loses.

Regulatory Science Must Be Robust. The science that is used to support environmental regulations is a compilation of evidence from many sources. Dozens if not hundreds of publications from federal and international agency research programs, academic publications, and private sector studies are reviewed to produce a consensus regarding a hazard, a source of a pollutant, or the type and degree of an adverse outcome. In EPA, these assessments are usually reviewed by the Science Advisory Board or in some cases the National Academy of Sciences, where an independent assessment of the science and conclusions is conducted.

The EPA Office of Research and Development (ORD) conducts research that others do not, to fill in gaps in our understanding of environment and health. Their research is directed by the needs and requests made from the Program Offices within EPA (such as the Office of Water and Wastewater, the Office of Air and Radiation) and from the Regional Offices. The requests from the Regions are

because the states within those regions have identified certain needs and do not have the scientific capacity to address them. This research conducted in ORD is reviewed for its quality and integrity by the Board of Scientific Counselors (BOSC), which is an independent check on whether the science being done at EPA is consistent with its strategic plan and mission, and is state-of-the-art. This third-party advice provides critical feedback and guidance to the Assistant Administrator of ORD.

A fundamental principle of robust science is that it is reviewed by an independent set of peer scientists, who have no personal or professional stake in the outcome of the review. All research that is published in top scientific journals is peer-reviewed. EPA has wholeheartedly embraced this principle for the science that it conducts – ongoing research is reviewed by BOSC (and others when published) and constructive criticism and recommendations are provided to the Assistant Administrator. EPA Administrator Pruitt has recently not renewed half of the 18 BOSC Executive Committee members for a second term, stating through a spokesman that more representation from the regulated community is needed on the committee. This may lead to the perception that science is being politicized and marginalized within EPA. BOSC does not review regulations or the scientific evidence that is compiled to support regulations, it reviews science that is filling in information gaps that may or may not be used in regulations. Thus BOSC members appointed from the regulated community must be esteemed scientists with no conflict of interest, or the independence and objective review the BOSC offers may become biased by special interests.

The Nature of Environmental Science. Environmental issues are complex, and thus the science to address them requires approaches that are interdisciplinary (for instance a cell biologist and a genetic biologist), multidisciplinary (for instance, a pathogen microbiologist and a water treatment engineer), and transdisciplinary (for instance, natural science experts working with economists and behavioral scientists). This involvement of many disciplines and perspectives makes it

expensive, both in terms of human resources and research costs. Simply put, State agencies have limited capacity to do this breadth or quality of science. In addition, it makes no sense to decentralize the science – that would be inefficient and create redundancies – something that is wasteful and the Congress generally does not like. Much of the scientific evidence that is needed to protect public health is best done at the Federal level, where they can take full advantage of capital resources such as laboratories, scientific capacity to attack large problems (such as the Cancer Moon Shot), and collate scientific evidence from across the national and international scientific communities. States have excellent scientific resources, but these are appropriately focused on using science to implement policy through risk assessments or permit calculations.

It should also be noted that when a city or a state has an environmental crisis, the states often turn to EPA for the science needed to address the issue. EPA serves as the backstop for the states when there is an emergency, and as you know, crises are non-partisan. Examples where EPA scientists stepped in and responded to large scale science crises include the rapid assessment of the oil dispersant that was used after the Deep Water Horizon spill; the clean up levels of soils in the yards of homes inundated by Hurricane Katrina; and more recently, the challenge of preventing toxic algae blooms from shutting down drinking water supplies for Toledo and other Lake Erie cities.

Who Will Provide the Needed Science? The President's proposed FY2018 budget reduces investment in EPA's science programs, an ominous indication that the foundation of science to support policy is being marginalized and less valued by the current administration. If not EPA, then who? There is no indication of how this scientific capacity would be replaced – in fact, pass-through programmatic dollars to the states are also cut in the proposed budget. Cutting environmental protection funds to the states will further decrease science-based policy and states' capacity to produce sound policy. My own state of Minnesota is well-regarded for its progressive stance on environmental protection. But even there, the Legislature has

proposed significant cuts to the budget of the state environmental protection agency. Thus the Federal cuts would be compounded by state cuts - a double lose-lose for the health and environment of Minnesota citizens. States will not be able to make up the difference in Federal cuts.

Federal Science Works. An example of the need for science in regulatory decision making is the National Center for Computational Toxicology. This research collaborative is part of the EPA Office of Research and Development, and has spent the last several years producing computerized models and high capacity cell-based approaches to predicting whether a chemical is potentially toxic. This precludes the enormous expense of animal based toxicity studies, and allows many more chemicals to be assessed in far less time. In collaboration with other federal agencies, they have assessed over 9000 chemicals, allowing policy makers to focus on the chemicals of higher risk and eliminate the focus on those with little or no risk. This research, seen by many as the world-wide gold-standard, could not be done at the state level – it required the scale of federal investment and resources. Without it, we would be regulating the wrong chemicals or not regulating the right ones well – again, imperiling public health.

EPA's Job is Not Finished. The proposed cuts in science support and the marginalization of science in environmental protection has been justified by some in part by statements that we have done enough, these investments are no longer as necessary. Nothing could be further from the truth. We have made tremendous progress in the improvement of our environment and in reducing illness and premature deaths through our environmental regulation, but it is a myth that we can coast on these successes. Four out of ten of our nation's lakes and rivers still do not meet basic water quality standards. Even in the great state of Minnesota, Land of 10,000 Lakes, over 4000 water bodies are listed as not meeting water quality standards. It is estimated that more than 200,000 people die prematurely each year in the U.S. as a result of air pollution exposures. These premature deaths, and hospital illnesses caused by air pollution, cost the US economy over \$100 Million

dollars per year. Marginalizing science will reverse the trend in improvements to these numbers, and cause them to worsen again.

What is at Stake? The path laid out portends a decline in support of science at the federal and state levels. Should we follow this path, it will lead to a decline in public health, a decline in our communities' health, and put our country at a competitive disadvantage. It erodes the future health and well-being of our children and our grandchildren. Investing in and maintaining our pre-eminence in environmental science, and ensuring its use in sound environmental policy, will put us on a much better path.

Thank you for the opportunity to provide these comments.

Deborah L. Swackhamer, PhD
Professor Emerita, University of Minnesota

Dr. Deborah L. Swackhamer is Professor Emerita at the University of Minnesota of Science, Technology, and Public Policy in the Humphrey School of Public Affairs and Environmental Health Sciences in the School of Public Health. She also directed the Water Resources Center from 2002 until 2014. She received a BA in Chemistry from Grinnell College, IA and an MS and PhD from the University of Wisconsin-Madison in Water Chemistry and Limnology & Oceanography, respectively. After two years post-doctoral research in Chemistry and Public & Environmental Affairs at Indiana University, she joined the Minnesota faculty in 1987. She officially retired from the University in 2015, and continues to work informally with researchers and decision makers on water resource policy.

In 2012 Dr. Swackhamer completed a 4 year term as Chair of the Science Advisory Board of the US Environmental Protection Agency, and served as a member of the Science Advisory Board of the International Joint Commission of the US and Canada from 2000-2013. She currently serves as Chair of the US EPA Board of Scientific Counselors. She is a member of the National Academy of Sciences Board of Environmental Science and Toxicology. She served as President of the National Institutes of Water Resources in 2011-2012.

Dr. Swackhamer received the prestigious Founders Award from the Society of Environmental Toxicology and Chemistry for lifetime achievement in environmental sciences in 2009. She is a lifetime Fellow in the Royal Society of Chemistry in the UK. In November, 2014 she was named an Inaugural Fellow of the international Society of Environmental Toxicology and Chemistry. She received the Warren A. Hall Medal from the Universities Council on Water Resources in 2017 for her lifetime achievements in water resources research and education.

Chairman BIGGS. I thank each of the witnesses for their testimony. I appreciate it.

Members are reminded that committee rules limit questioning to five minutes, and I recognize myself for five minutes.

Director Cabrera, can you tell me how much work do states put into creating their SIPs and whether you think there might be a disincentive for states to use their resources to create these plans when the EPA tends to replace them easily with federal implementation plans? And we have up the regional haze allusion—the modeling that you alluded to in your statement.

Mr. CABRERA. I can tell you that in the states we look forward to developing the state implementation plans because we feel that state implementation plans are better than federal implementation plans 100 percent of the time.

I can also say that it is a bit disheartening when we develop these plans through extensive modeling, extensive scientific study and calculation only to have EPA officials from our region nitpick and really question all of our analysis.

In the end, we're put in a position where we have to comply with EPA's demands because they always have the ability to reject our plans and then issue a federal plan. So it puts the states in a very awkward position of we have to comply or else we're faced with the threat of a federal implementation plan.

Chairman BIGGS. You know, Arizona's ability to comply with ozone standards is often hindered by naturally occurring weather events such as dust storms. These dust storms, for instance, blow dust from rural areas to cities, which result in those areas exceeding the national ambient air quality standards. EPA has an exceptional events exemption to this to discount for such naturally occurring events. In your opinion, does the exceptional events exemption work in practice, and what are the problems with the execution of this exemption?

Mr. CABRERA. So for dust exceptional events, the State of Arizona was a leader across the nation in developing a streamlined approach to making those demonstrations. In other words, when there is a major wind event that creates a lot of dust in the air, it is inappropriate to regulate businesses for something that nature did. As a leader in that area, we shared our process with the EPA. They then implemented an exceptional events rule.

Unfortunately, they added to our streamlined process what's called mitigation measures. So according to those rules, which were modeled on Arizona's initial efforts, we now have to figure out a way to mitigate for nature. And that is a very difficult thing to do, and I would state that it's not really scientifically possible.

Chairman BIGGS. In particular with these dust storms that we get to see in the Phoenix area, can you describe how big they are and how the local news seems to be able to understand it but the federal administrators don't?

Mr. CABRERA. One of the things that's a bit disappointing is when all the major news media pick up on what is called a haboob, which is a 100-plus-foot-high wall of dust that looks a lot like the movie from *The Mummy*. And everybody understands that it's a natural event to have EPA then require us to spend tens of thousands of dollars producing a document to explain what everybody

else saw and documented through the news media. So in that respect it's a bit wasteful to have to explain an exceptional event that everybody considers obvious.

Chairman BIGGS. Can you speak to the impact of downwind ozone on Arizona areas that are currently in nonattainment? Particularly, what's the greatest contributor to ozone in Arizona and do the current EPA standards account for that?

Mr. CABRERA. EPA's own emissions calculations suggest that in certain areas of the State, especially in Yuma, Arizona, which will be found to be in nonattainment for the new ozone standard, the overall proportion of ozone comes from either California, Mexico, or other international sources. And so it puts us in a very awkward spot of applying regulation on a community that did not create the pollution. And it's a community in Yuma County that already has a very high unemployment rate. And so what we're doing in effect is rewarding upwind states like California with longer compliance time frames because they are in extreme nonattainment, and then imposing more restrictive regulation on counties that did not create the pollution in the first place.

Chairman BIGGS. Thank you. And I'm just about out of time so I am going to go to Ranking Member Bonamici.

Ms. BONAMICI. Thank you, Mr. Chairman.

Dr. Swackhamer, nine of the 18 members of the EPA's Board of Scientific Counselors had their terms expire on April 27, and all nine of those members were previously told that their names would be submitted to the EPA management for renewal to serve a second three-year term on the board. And that had been the normal practice in the past. But a week later, all nine board members were told that their terms would not be renewed, and apparently, an EPA spokesman said that Administrator Pruitt wanted more industry representatives to serve on the board.

So I know you're the Chair of the board and—but I know you're here in your private capacity, but will you please answer a couple of questions briefly from your perspective? And then I have another question.

First, were you surprised about the decision to not renew the terms of those nine members, and were you given any explanation about it?

Dr. SWACKHAMER. Chairwoman Bonamici, we were all a little surprised, those of us who sit on the committee. I was surprised simply because it is—it was expected that those terms would be renewed. Typically, terms are renewed unless there is some reason such as the expertise is no longer needed or the person chooses to stay, not—

Ms. BONAMICI. Were you given an explanation?

Dr. SWACKHAMER. No, other than the—what we all saw in the press and what came out from the—from Administrator Pruitt spokesman, who said that they wanted to not just renew a previous Administration's appointments and that they wanted to broaden the—more of a regulatory—the regulated community involvement in the committee.

Ms. BONAMICI. So now it's my understanding that two board members resigned in protest after the dismissal, so now instead of

18 members, there's only five, including you. Are you concerned about the future of the board in light of that?

Dr. SWACKHAMER. Let me just clarify those numbers. So nine members of the 18 had served one term and were expected to be renewed. All nine had requested renewal. The four members had rotated off because they finished a second term, so they were done with their term limit and they were rotated off. The two members that you more recently may have heard about were members of a subcommittee. So the nine plus the four left us with five members left on the Board of Scientific Counselors.

I'm obviously concerned. My committee is no longer populated, so I'm anxious to make sure that it gets repopulated as quickly as possible. And my understanding is that that's part of what the Administration is planning to do is to repopulate this committee.

Ms. BONAMICI. Thank you. And my second question is changing topics a bit. I fear that the Trump Administration's actions to date and planned policies will lead to some public-health tragedies in individuals states and across the nation. The committee majority's focus on expanding the role of states while limiting the EPA's role in developing science-based safeguards is also troubling. For example, the Administration is proposing to cut the EPA's budget by more than 30 percent, but they also want to cut grants to states. Five state environmental agencies depend on the federal government for more than half their budgets, and more than half of all state environmental agencies rely on the federal government for at least a quarter of their budgets.

These cuts will have devastating consequences across the United States. Attempts to increase the burden on states to hold steady or improve their commitment to public health and environmental protections will simply not be possible. Many of us came from State Legislatures, and we know the budget challenges already. The end result will be less federal oversight, fewer scientific studies on environmental hazards, and more damage to the environment and public health.

You mentioned in your testimony also air and water know no state boundaries. So can—from a—can you from a scientific perspective, do you agree that turning over more regulatory authority to states while scaling back the role of the EPA puts public health at greater risk? And if so, can you tell us how and why?

Dr. SWACKHAMER. My concern is that the science that's needed to develop good environmental policy, whether it's done at the state or federal level, will simply not be available if the path that we're going down currently continues to be followed. I am not going to comment whether states or the federal government should be making these standards or regulations, with all respect to my two colleagues here. It's more that I want to make sure the science is used it to make sure that the states have the adequate science that they need and that the federal government has the adequate science that they need to move forward and to protect human health. If we don't have the science, we're not going to protect public health.

Ms. BONAMICI. I appreciate that. I do want to note it's my understanding that in his confirmation hearing Administrator Pruitt had suggested that he may disallow or at least review a waiver to allow

states to issue more stringent rules like California with their auto emissions, which I find to be blatantly inconsistent.

And before I yield back, Mr. Chairman, I'd like to ask for unanimous consent that a bipartisan letter be introduced into the record. This is a letter to Administrator Pruitt expressing concern about the dismissal of several members of the Board of Scientific Counselors at the EPA.

Chairman BIGGS. Without objection.

[The information appears in Appendix II]

Ms. BONAMICI. Thank you. And I yield back. Thank you, Mr. Chairman.

Chairman BIGGS. Thank you.

The Chair recognizes the gentleman from Florida, Mr. Posey.

Mr. POSEY. Thank you, Mr. Chairman.

I've never met anyone who wants to have dirty air or dirty water for themselves, their family, or future generations. And I've always pretty much taken the position that the government closest to the people works best, is usually the most efficient. I'm a strong believer in the idea that people who actually live and work in an area are best positioned to lead efforts to protect their environment. Local leaders have firsthand knowledge of the unique challenges their environment faces and are invested in the health and sustainability of their surroundings in a way that bureaucrats in far-off government offices never could be.

Unfortunately, there are those who think Washington has a monopoly on both good ideas and compassion in stewardship for the environment and who would think—seek to displace the state and local role in environmental policymaking. To me, I think that would be a mistake. Of course, I understand the need for cooperation at all levels of government for maximally effective government stewardship and environmental stewardship. However, I'm concerned that during the past Administration we moved from federal cooperation to coercion. It's essential that we get back to common ground I believe.

Ms. Keogh, can you please describe what cooperative federalism means and how this model may have been undermined?

Ms. KEOGH. Thank you. We at the State of Arkansas have seen a number of programs where the cooperation that was helpful to the State to result in an efficient program was undermined through federal intervention and federal plans similar to what our—my colleague from Arizona has experienced in that regional haze maze. We've also seen areas where we've been second-guessed on our science similarly in SO₂ designations that we're recently going through, as well as even in our water-quality programs where duplication results in redundancy and use of data that's not even vetted through peer review.

So we are concerned that we do not have the right relationship with EPA, and we're working strongly with this Administration and we appreciate their support to work with us to find a more efficient, effective delivery not only with states but also with our local partners. I'd like to say local governments, private business, and citizens can be meaningful partners and not considered polluters. Thank you.

Mr. POSEY. Thank you. How do you think we get back to this co-operative federalism approach?

Ms. KEOGH. Well, I think it's important to have the conversation we're having today, let states inform science policy early, and work to streamline decision-making. We at the states collectively and individually have been working on a blueprint to give specific recommendations to the Administrator, and we hope that that will benefit them. We want to build science into the process. We understand there's an important role for EPA to play, and we want to talk about those roles and responsibilities not only of government but of those outside government to affect positive solutions in what is now a 45-year-old program.

I'm ready to let my children grow up and leave the house. I think they can do as well or even improve on what I've accomplished in government, and so I'm looking forward to this new day in environmental progress.

Mr. POSEY. Thank you very much.

Mr. Cabrera, could you give us an example from your experience where a likely well-intentioned federal regulation has actually caused more harm or difficulty for state environmental management than any benefit it might have helped?

Mr. CABRERA. So I think that—Mr. Chair, members of the committee, I believe that the regional haze program is a perfect example. The regional haze program is well-intentioned, and we do not disagree with it. President Grant first established Yellowstone National Park for everybody to be able to enjoy it, and we believe that having clear visibility is important.

Having said that, when EPA completely ignored the Grand Canyon Transport Commission's recommendations, what it did is it put us on a lengthy 20-year process that resulted in no visible improvement to the Grand Canyon. So after 20 years, four lawsuits, lots of activity, lots of waste by both the State and the federal government and lots of stakeholders, the result is no visible improvement. And so we think that EPA's engagement in that arena has not produced the desired result.

Mr. POSEY. Could you once again state the cost of that project?

Mr. CABRERA. The estimated cost was over \$500 million for controls put on power plants in the vicinity of the Grand Canyon.

Mr. POSEY. Thank you.

Thank you, Mr. Chairman. I yield back.

Chairman BIGGS. Thank you.

The Chair recognizes the gentleman from Florida, Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman.

Dr.—am I saying it right—Swackhamer? Thank you. So you taught at the University of Minnesota?

Dr. SWACKHAMER. Yes, I did, for almost 30 years.

Mr. CRIST. Wonderful. I represent Florida's 13th Congressional District. It includes St. Petersburg, Clearwater. It is a peninsula, literally on the peninsula of Florida. So our shorelines are impacted by severe storms and constant coastal erosion, and as a result, there are real concerns by my constituents about tourism, which is how many of us make a living in that part of the State, and we are worried that the erosion may wash it away bit by bit by bit.

So my question would be how important is a federal agency such as the EPA in giving aid to states to understand the science of climate change and helping them to cope with realities of climate change that are already there?

Dr. SWACKHAMER. That's a great question. It's really clearly up to the states to be acting on their own catastrophes, their own issues, whether they're slow-moving or fast-moving emergencies. However, it's unusual for one State to have the scientific expertise to address a crisis or to address something that is a complicated problem, how that erosion occurs, what the impacts are to the coastal zones in Florida, combine that with the nutrient problems that are carried with the soil that erodes, you end up with a problem that is very, very complex. And it's—it does require a large multidisciplinary effort of science to understand that. Then, you can actually mitigate it or implement some change, and that definitely happens at the State level.

But to do the science, to understand the issue, to come up with mitigation strategies, to come up with policies that may alter the insult that's occurring, that requires robust science that for the most part—I'm not saying all science has to be done at the federal level by any means—but the basic science that leads to an understanding of these issues is largely done at the federal level. And the reason is is that the federal level has access to resources. It has access to many more laboratories, access to many more people from many more disciplines, and it has access to the international community, which also does some pretty good science.

So it's that play between understanding the issue at the—using federal resources and then working with states to actually fix it.

Mr. CRIST. Thank you. You know, I come from a State where my successor as Governor is reported to have not wanted people in his administration to use the term climate change. So I think there's an extra overlay as it relates to my constituents to be able to have another agency that can be brought to bear to help protect us and for future generations of Floridians, let alone Americans.

In your opinion, would expanding the role of the states in the EPA rulemaking enhance or hurt our ability to respond to climate change?

Dr. SWACKHAMER. I'm not sure I'm going to directly answer that question as you would—as you might want. I—

Mr. CRIST. You have that right.

Dr. SWACKHAMER. I think that as long as the science is behind the actions taken, whether it occurs at a state or federal level, is the most important thing. But if you take something like climate change, which is larger than any State, the impact on coastal zones goes all up and down the eastern seaboard, the Atlantic coastal areas, up and down the other coasts, including the Great Lakes, we can't view this as a single-State issue. And so the more the states cooperate with the federal government on understanding these broad issues and these bigger threats, that's where the federal government role really shines.

If it's a smaller issue that really just is held within a State, that's a different issue. Then, the State can deal with it. But many of our environmental problems are—don't follow State boundaries. They're bigger than states. They—there's airsheds involved, there's

watersheds involved, there's in some cases international boundaries involved. And so it—there's not a set answer that states should do more or the feds should do more. It's really that these problems are very big and complex, and they need—you need to harness the best possible science you possibly can to address them.

Mr. CRIST. Thank you. I must confess that my past brings a bit of a bias to how I look at these issues. When I was both Attorney General of Florida and then Governor of Florida, we dealt with some significant environmental issues, hurricanes among them, like a ton of them while I was Attorney General, and then while I was Governor, the BP oil spill. So I was delighted to be able to have the federal government, my American Government, come to the aid of my State of Florida in both of those circumstances, without which we would have been in a bad place.

So thank you for your testimony, Doctor.

And thank you, Mr. Chairman.

Chairman BIGGS. Thank you.

The Chair recognizes the gentleman from Texas, Mr. Babin.

Mr. BABIN. Thank you, Mr. Chairman.

And I want to tell all the witnesses we appreciate you being here. Thank you.

There was something—I just wanted to get some stuff straight in my mind on the Board of Scientific Counselors. There's been some controversy and discussion on this, and I'd like to ask Dr. Swackhamer if you don't mind. At the end of April—excuse me, at the end of April, nine members of the BOSC finished three-year terms, right?

Dr. SWACKHAMER. One three-year term.

Mr. BABIN. One three-year term. Did the EPA solicit nominees to fill positions on the BOSC before these members finished their three-year terms?

Dr. SWACKHAMER. I really can't speak to that other than I know there was not a public call because I would have seen the Federal Register notice. So I don't really know what was the intention of EPA inside EPA at that time.

Mr. BABIN. Okay. Well, I think the answer was yes, EPA solicited nominees for these positions and received hundreds of recommendations.

Dr. SWACKHAMER. If I could correct that, that wasn't based on a new call for solicitations. That's based on the fact that when they populate any of their advisory boards, they take nominations, and those nominations stay in place over time. And then they can rely on those nominations also when they go to fill new positions. But that wasn't based on a recent call.

Mr. BABIN. Okay. Well, as I understand it, EPA's Office of Research and Development officials recommended the renewal of the nine members of the BOSC without reviewing hundreds of nominations that they had received. Is that—are you aware of that?

Dr. SWACKHAMER. My understanding is that the Office of Research and Development recommended that those nine members that were already members of BOSC—

Mr. BABIN. Be reappointed.

Dr. SWACKHAMER. —be renewed.

Mr. BABIN. That's right. But there were hundreds of nominations that were recommended.

Dr. SWACKHAMER. There were——

Mr. BABIN. And——

Dr. SWACKHAMER. —nominations—they were nominations that have been received by the Agency over a period of time, and I can't speak to when those nominations came in, but they would have been solicited some time ago.

Mr. BABIN. Well, I think Administrator Pruitt had asked for nominations, and they came in from various sectors of the industries around——

Dr. SWACKHAMER. He's not official—he's not issued an official request for nominations to my knowledge.

Mr. BABIN. Well, if I'm not mistaken, they have hundreds of recommendations and applications.

Dr. SWACKHAMER. And they would have come in before he was Administrator just to be clear.

Mr. BABIN. Okay. Well, let me just understand this. Instead of rubberstamping the renewal of members of the BOSC, a decision was made to review the credentials of hundreds of individuals nominated to be on the board, including members up for renewal and then choose who would serve a three-year term, whether it'd be a new term or whether it would be someone who was reappointed on the BOSC. Why would such an open and honest process be an issue to you?

Dr. SWACKHAMER. So let me clarify also, I think that the process of selecting members to serve on any of the advisory boards at EPA is an open and competitive process.

Mr. BABIN. I would hope so.

Dr. SWACKHAMER. It absolutely in my experience has been. I'm not part of—as Chair of either of the committees that I've served on, I've not participated in the selection process, but I do know how the nomination process works, and it's very transparent and it's very fair. I believe that Administrator Pruitt's intention is to continue to do that process, and we will repopulate this committee.

Mr. BABIN. Okay. Well, I think as far as a time, let me ask you this. The next BOSC meeting is scheduled for August. Is that not correct?

Dr. SWACKHAMER. That's a subcommittee meeting. That is indeed——

Mr. BABIN. Okay.

Dr. SWACKHAMER. —scheduled for August.

Mr. BABIN. So is there enough time—there seems to be enough time for the BOSC to be fully staffed up based on a large pool of these nominees. Isn't that correct as well?

Dr. SWACKHAMER. I believe that EPA staff will have to work very diligently to get enough members to fill out the rest of the vacancies. But yes, it's quite possible.

Mr. BABIN. Three months—you don't think three months is enough time to get this done then?

Dr. SWACKHAMER. Typically, there's quite a vetting process. Once nominations are received, then there is a lot of vetting and a lot of review of conflict-of-interest issues, financial issues, obviously expertise. They want to get a committee that has the correct balance

of expertise, broad expertise, and so there's a lot of review that goes into play looking at the scientific background of the scientists, looking at their publications, looking to see if they have an esteemed record, looking to see if their expertise matches what is needed for EPA. So there's a whole lot of vetting that takes place in between the nomination process and the request to join the committee process.

Mr. BABIN. But there's no rule that says we have to rubberstamp the—

Dr. SWACKHAMER. Absolutely not.

Mr. BABIN. —a second term for everybody that sits on it, right?

Dr. SWACKHAMER. Absolutely not. And I didn't mean to imply that there is—

Mr. BABIN. Okay.

Dr. SWACKHAMER. —a rubberstamp that goes on. Again, if a member is not contributing or if a member is—their expertise is no longer needed, then often they are asked not to ask for renewal or not to agree to renewal.

Mr. BABIN. Okay. Thank you, Dr. Swackhamer.

And I yield back the balance of my time, which is zero.

Chairman BIGGS. That is correct, sir.

The Chair recognizes the gentleman from Alabama, Mr. Palmer.

Mr. PALMER. Thank you, Mr. Chairman.

Dr. Swackhamer, you said there are—200,000 people die each year from air pollution.

Dr. SWACKHAMER. Die prematurely.

Mr. PALMER. But still, it's 200,000 people die from air pollution?

Dr. SWACKHAMER. That's correct.

Mr. PALMER. I've got the top-10 leading causes of death in the United States, and it's not listed among any of them. The closest thing that I can come to that might be pneumonia, and there's 50,000 something people. I don't think you can attribute—

Dr. SWACKHAMER. Air pollution is the exposure. Actually, the illnesses that cause the death are what you're probably looking at so—

Mr. PALMER. Well, you said air pollution causes—

Dr. SWACKHAMER. —heart disease and lung disease, respiratory disease are those that are caused by air pollution.

Mr. PALMER. You're quoting one study from 2013 from MIT.

Dr. SWACKHAMER. No, I—actually, I'm quoting the World Health Organization that just completed a very large study—

Mr. PALMER. I saw that, too.

Dr. SWACKHAMER. Okay. That's what I'm quoting.

Mr. PALMER. I think it calls into question, though, the use of data. And I also wonder, do you feel like you're entitled to another term on the—

Dr. SWACKHAMER. Entitled? No, I don't think anyone on the—

Mr. PALMER. Do you think—

Dr. SWACKHAMER. No, I do not think entitled—

Mr. PALMER. You don't think it makes sense for Administrator Pruitt to have the opportunity to populate his committees and his advisory boards with the people that he wants to put through a vetting process to see if he can improve the quality of the boards or advisory groups that he wants to work with?

Dr. SWACKHAMER. He absolutely has that authority.

Mr. PALMER. Then this shouldn't be an issue. I'm going to ask—

Dr. SWACKHAMER. I would say that it just was an unusual—

Mr. PALMER. —Mr. Cabrera a question.

Dr. SWACKHAMER. —an unusual selection. That's all.

Mr. PALMER. Well, maybe in the last eight years, but I think that he has every right to make a decision on who he wants to have advising the EPA.

Dr. SWACKHAMER. He absolutely does.

Mr. PALMER. Thank you.

Mr. Cabrera, I've watched what's gone on the last few years of the EPA when the EPA was created. It was created with the understanding of cooperative federalism in that Congress would pass the law, the EPA would write the rule, and then the states would do the implementation with broad latitude as long as they achieve the objectives. Did you believe that that is still the operational dynamic that exists today?

Mr. CABRERA. I believe—Mr. Chair, members of the committee, I believe that early in the history of environmental protection it is true that in—that the states sometimes lacked the expertise to implement well, but that was 40 years ago. And in the—today, we can implement well. We can write rules. We can do the science. We can estimate emissions. We can protect our water, our soil, and our air. And I think that EPA perhaps has not caught up with the times and understood that in the—today, states are well-equipped. We have mature programs that are technically competent, and I don't think that EPA has recognized in every case that the states can implement environmental laws well, and in fact in many cases better.

Mr. PALMER. I think you might have added that they usurp state authority in many cases to implement the laws. And I will give you a case in point is the ozone rule, which is a bigger issue in Arkansas I think perhaps than in Arizona. It's a certainly a big issue in Alabama—is that—and we had Administrator McCarthy I think before this committee, and I asked her point blank about the new ozone rule, which will be arguably the most expensive environmental regulation ever imposed on the U.S. economy.

And it was interesting to note this is probably I think in the spring of 2015 that they had just sent the implementation guidelines to the states for the 2008 rule, yet they were introducing a new rule, which they also admitted the technology didn't exist to achieve that standard. And there was an internal memo in the EPA that indicated that if we didn't do anything, we would achieve that standard in ten years. How does that impact your economic planning, Ms. Keogh, in Arkansas? And then you can respond, Mr. Cabrera, afterwards.

Ms. KEOGH. Thank you for the question. We happen to be one of the few states that now attain all the standards and even the proposed standard, but we did suffer greatly, particularly a low—

Mr. PALMER. Let me interrupt you there. You've already achieved the standard without the technology even though there's no technology that really exists that would allow other states to achieve that? You've already achieved it?

Ms. KEOGH. That's correct.

Mr. PALMER. Thank you. Go ahead.

Ms. KEOGH. We had a small community, a rural community that was being impacted, who models showed that in 10 years—and this was ten years ago—that the area would re-attain, yet they were held under federal mandates to—under nonattainment for ten years, held hostage to the local economic development interests until those standards and those technologies became fully—across—available across transportation and other sectors. And so now that area does attain, and that shows that the local area—even though everyone knew ten years ago that this was the solution, the local area was harmed in that ten-year period. The rules and the laws that undermine that—or underpin that decision need to be changed to let local communities thrive while problems are being solved. Thank you.

Mr. PALMER. Mr. Chairman, if I may, I'd just like to follow up on that. When you talk about public health—

Chairman BIGGS. The gentleman's time is expired but you may follow up.

Mr. PALMER. Thank you for your indulgence, sir.

We've had a lot of discussion about the role of science in the EPA and improving public health. I'd just like to point out that some of things that the EPA has done has cost thousands and thousands of jobs and perhaps some—the best thing we can do for an individual or a family's health is a good-paying job. And Ms. Keogh just gave an example of how heavy-handed EPA—even though they were achieving compliance—impacted their local economy in a very negative way. I thank her—I thank the witness for her testimony.

Chairman BIGGS. The Chair recognizes the gentleman from Texas, Mr. Weber.

Mr. WEBER. Thank you, Mr. Chairman. I'm going to have a statement that I want to read into the record, and I hope I have time for a question at the end of it.

When I was in the Texas House, I was on the Environmental Reg Committee. Our colleagues across the aisle said you can't trust industry because all they care about is the almighty dollar and their bottom line. They don't care about people or their workers. So my response to them was and still is if you even wanted to assume for a minute they operated under the idea that the officers and the managers of a company don't give a hoot about their coworkers, which is such a salacious, ridiculous assumption, consider this: Were there to be a release, a fire, a spill or any other such calamity that hurt people, their lives, and the environment, no one wanted that. It stops production, it costs lots of money in lawsuits, and it hurts people. Conclusion: Of course the businesses, at least the overwhelming majority, are good actors.

As for the bad actors, the states, particularly Texas—Texas has the TCEQ, Texas Commission on Environmental Quality, which I understand is the second-largest regulatory agency in the world, second only to the—behind the EPA. That agency will ferret out the bad actors and do everything we can to keep our neighborhoods clean and our people safe. To do anything less would be unthinkable.

States should not be handcuffed by the expenses and the burdens put on them by the EPA. So this idea somehow that states won't take care of their people and their environment is a bogus one. If you'll pardon the analogy, it doesn't pass the smell test. But I guess that those on the other side need a strawman. Then the big, bad businesses will serve their purpose of a strawman, as long as that straw was grown with environmentally friendly fertilizer if you'll pardon the pun.

So that's the statement I want to get in the record because it's crazy that we somehow think industry should be held accountable; they don't really—aren't intent on protecting people and keeping the environment clean.

My question is for you, Ms. Keogh. In what ways would you point out that show the EPA has been either—has ignored Congress or the Constitution when it comes to the states' roles in implementing environmental regulations? In other words, the states have a role. Has the EPA ignored the Congress or the Constitution when it—in my opinion, it usurps its authority and seeks to direct states to act outside their constitutional purview?

Ms. KEOGH. Thank you for that very thoughtful question. We in Arkansas have seen that in real life in the example of our regional haze plan where we've been unable to affect a strong scientific and legal-based document that was meeting all the requirements, and yet we find ourselves ten years later with no advance in pollution control but many dollars invested in legal discussions—

Mr. WEBER. That could have been used better off in the very reason it was needed, not—instead of fighting the legal battles.

Ms. KEOGH. Absolutely.

Mr. WEBER. Sure.

Ms. KEOGH. And we understand it's important that our programs conform and comply with law, and yet we work with EPA often and we find that the programs that we are focusing on are well beyond the legal requirements set forth in the either enacted law or constitutional basis.

Mr. WEBER. Let me point out how out of control the EPA has been in some instances. When I was in the Texas House, we had a Region 6 EPA Director there in the north part of Texas who had to resign because video was uncovered of him, I don't know, a year or two before he became Regional Director—this had been going back five, six years now.

In the video—they had a video of him saying that companies—industry needed to be treated like the Roman gladiators did when they invaded a country. He literally said in the video the Roman gladiators would come into account and crucify the first five men they found and make an example of them. And he said that's the way the EPA needs to do industry.

Now, how does one justify that kind of mindset? It's gotten that prevalent in a regulatory agency that in my opinion is out of control. It needs to be regulated by the states. I so appreciate—I think it was Mr. Cabrera's statement that 40 years ago that was the case, states weren't there, but we've caught up. Did I mention that Texas has the second-largest environmental regulatory agency in the world, second only to the, quote/unquote, vaunted EPA?

So I think it's time that we assume that people and agencies and states want to be good actors. They want to clean up their environment. They want to keep things safe for their people. And we ought to let them do just that.

Mr. Chairman, I'm going to yield you back six seconds.

Chairman BIGGS. Thank you.

The Chair recognizes the gentleman from Louisiana, Mr. Higgins, for five minutes.

Mr. HIGGINS. Thank you, Mr. Chairman.

Ladies and gentlemen, I represent south Louisiana, the heart-beat of the oil and gas and petrochemical industry for the entire country, perhaps the world. Everything around us, the varnish on the table before you, the threads of your clothing are products of the petrochemical industry and the oil and gas industry. No State I don't believe has been more injured by EPA regulatory overreach than the great State of Louisiana and the citizens that I represent. EPA overreach has been incredibly injurious to the hardworking men and women, real Americans, man, with lives, with mortgages, with car notes, with children in school. The impact of the EPA over the last eight years has been quite significant in the real world outside of the bubble of Washington, D.C.

Mr. Cabrera, it's been noted here regarding the replacement of nonscientists at the EPA. According to my research, there are 94,600 environmental science jobs. That's from the Bureau of Labor Statistics, 94,600 environmental scientists in our country. Do you think perhaps they might be considered for those jobs or just the nine?

Mr. CABRERA. Mr. Chair, members of the committee, I believe in competition; I believe in diversity of ideas. I think that with competition and diversity of ideas we get to the best solutions.

Mr. HIGGINS. I concur. There are 7,500, 8,000 graduates every year on average with environmental science degrees. You think perhaps they might be considered for those nine slots?

Mr. CABRERA. Yes, sir.

Mr. HIGGINS. Thank you. Let's move on. During the—since the inception of the EPA, there have been many Presidents from—in political, ideological stances. I think that's certainly a statement beyond debate. Do you believe that President Trump's decisions regarding the EPA are politically motivated from your perspective?

Mr. CABRERA. Mr. Chair, members of the committee, I would hesitate to try to understand Mr. Trump's—President Trump's motivations. I can tell you that Administrator Pruitt's statements are in line with what the State of Arizona and many, many states would like.

Mr. HIGGINS. Thank you. I bring this up because it would seem quite glaring that President Obama's Administration of the EPA was certainly politically motivated. Any reasonable man would agree. The—under the Clean Air Act, the EPA can issue a federal implementation plan when a State fails to develop an adequate plan. A FIP is the most drastic and aggressive action the EPA can take against a state government. President Obama, through his EPA, authored 56 federal implementation plans. The previous three Presidential Administrations issued five.

So if we're going to talk about politics with candor and honesty amongst my colleagues, let us consider the fact that certainly as Presidents change, administrative endeavors change, the nature of federal regulatory agencies will also change, but there's been no more glaring example of political overreach and regulatory—very destructive policies than under the last President.

And I ask Ms. Keogh—am I pronouncing your name right? My sister Bliss was the valedictorian of her class in college with a degree in geology. She went on to serve Louisiana DEQ and retired. She's a brilliant woman. And I certainly respect the work of the states. I observed from the inside the extreme dedication from DEQ employees, dedicated scientists that certainly were committed to protecting the environment. I remind the Committee and those present that we are a union of 50 sovereign states, and that the Tenth Amendment of the Constitution states, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."

With that, Mr. Chairman, I yield back.

Chairman BIGGS. The Chair recognizes the Vice Chairman of the Subcommittee, the gentleman from Indiana, Mr. Banks.

Mr. BANKS. Thank you, Mr. Chairman.

Thanks to each of you for being here today. Just a couple of follow-up questions. Dr. Swackhamer, do you believe that there is a valuable level of diversity currently on the BOSC?

Dr. SWACKHAMER. So in—yes, I do believe that there is and that that diversity is expressed mostly in terms of the expertise that's on there, as well as the experience of the members of the BOSC. So we have members from—expertise in water, engineering, toxicology, atmospheric sciences, land sciences, children's health. So it's that breadth and diversity of expertise that is highly valued in any of these scientific committees but particularly on BOSC right now.

Mr. BANKS. And just so I'm clear, the nine members who were—whose terms recently expired, who—which Administration appointed those nine members?

Dr. SWACKHAMER. Because they were there for three years, they were appointed under the Obama Administration.

Mr. BANKS. Okay.

Dr. SWACKHAMER. However, I really want to say that we don't serve as if we're loyal to who appointed us. There's no loyalty to how we give science advice. It's not about who was appointed—

Mr. BANKS. Understood. Mr. Cabrera, in your experience of dealing—

Dr. SWACKHAMER. I served under three Presidents—

Mr. BANKS. —with the BOSC and you—

Dr. SWACKHAMER. —and four Administrators—

Mr. BANKS. Excuse me.

Dr. SWACKHAMER. —over my time. There is no—it doesn't matter—

Mr. BANKS. Excuse me.

Dr. SWACKHAMER. —whose Administration—

Mr. BANKS. Mr. Cabrera, in your experience of dealing with the BOSC, do you believe that there's been a healthy level of diversity

of thought, of ideology, of opinion on the BOSC from your point of view?

Mr. CABRERA. Mr. Chair, members of the committee, I have to admit that I have precious little experience dealing directly with the BOSC.

Mr. BANKS. Okay. What about you, Ms. Keogh?

Ms. KEOGH. I believe that we do need more diversity on that panel. In my 30-some-odd years working in environmental policy, I have seen that diversity aids the better decision-making. So we have actually offered our own Chief Technical Officer several times to be considered for that position, and I believe that as we broaden that audience of scientists, we get better input and better decision-making and better policy out of our agencies.

Mr. BANKS. Thank you. You just answered my follow-up question. I don't want to date either one of you, but you have 30-something years of experience in the field, Ms. Keogh?

Ms. KEOGH. That's correct.

Mr. BANKS. Mr. Cabrera, how many years of experience do you have in your field?

Mr. CABRERA. Over 20.

Mr. BANKS. Okay. As a former state lawmaker—many of my colleagues on the committee also served in State Legislatures as well—I'm intrigued by much of your testimony already, Mr. Cabrera, about the change over the 47 years since the inception of the EPA and the relationship between the states and the federal government.

But in your 20-something years, Ms. Keogh, in your 30-something years of experience, was there a point—was there a period during that time that you watched a quick change, maybe a tipping point? Was there a point in time where you saw an ideological shift between the balance of the states and the federal government, Mr. Cabrera?

Mr. CABRERA. In my experience, the attitude of collaborative federalism never really took hold the way it should have. I believe that there has always been a parent-child kind of relationship with EPA. Now, let me say that I believe that EPA has a role, and doing science for the nation is one of them. However, I do not think that the idea of collaborative federalism has ever been fully developed, and I'm excited about what I hear Administrator Pruitt talking about because I think he can actually get us there.

Mr. BANKS. So never a sharp decline in that relationship, more of a slippery slope over time of—or do you believe it goes back to the inception, that cooperative federalism wasn't fully implemented in the beginning of the birth of the EPA?

Mr. CABRERA. I think the approach has been consistent. The velocity at which decisions got made certainly accelerated during the last eight years. So the approach has always been parent-child, but the velocity at which decisions got made and imposed on the states certainly increased over the last eight years.

Mr. BANKS. Ms. Keogh, in your 30-something years of experience, would you—did the last eight years stand out as something that was different, more conflict perhaps over the past 8 years?

Ms. KEOGH. Absolutely. I believe, as Congressman mentioned and I previously testified to the Senate about the fact that we saw

10 times over the actions of federal plans over state plans in this last Administration was telling and that we were being second-guessed by this Administration more than ever. And so I look forward to the opportunity to be not a pawn but a partner, again. And I do believe that previous Administrations did work to—with the states where—and to build a competency so that there could be a strong cooperative federalism, and I think we're ready for that, as others have mentioned, and we're—we stand ready to support environmental progress in a new day. Thank you.

Mr. BANKS. Thank you. I yield back.

Chairman BIGGS. Thank you.

And the Chair recognizes the long-patient gentleman from New York, Mr. Tonko.

Mr. TONKO. Thank you, Mr. Chair.

I just want to address a couple of comments that I've heard here in exchanges. The membership balance plan of the EPA acknowledges in its own document that it's about 8 months' worth of vetting and review that's required. And I heard earlier that perhaps we could do that in 3 months, but they indicate 8.

And with the Constitution, I just want to cite that article 1, section 8, the commerce clause, provides for a great opportunity, provides the given responsibility of broad powers to Congress in areas of environment and public health.

So, again, thank you, Mr. Chair, and thank you, Dr. Swackhamer, for sharing your critical perspective today and for continuing to deliver the resounding message that rigorous, credible science matters. I find your testimony to be refreshing.

Like you, I am alarmed by the recent dismissal of Science Advisory Board members at the EPA and especially with the stated intention of packing the board with industry experts. In a panel whose most significant responsibility is to evaluate science and public policy, independent scientists literally will not have a seat at that table. This dismissal of scientists and of science signals a dramatic shift toward federal policies that would put well-funded political and special interests ahead of the facts. The science that informs our national defense, health, economic, and other public policies that impact millions of Americans is under threat, and by troubling action, officially on notice.

A few weeks ago, I spoke before a crowd of thousands in my district at the March for Science in Albany. I mentioned H.R. 1358, the Scientific Integrity Act. This bill would require science watchdogs in every federal agency involved in scientific research. As threats to independent federally funded scientific research continue to grow, so must our ability to protect against them.

The issue of scientific independence is not partisan. We have seen Presidents and political leaders from both major parties attempt to influence government-backed scientific findings. The result is often the same: public policy that may not reflect to the best interests of the American people. If we want our publicly funded science to be free, independent, and reliable, federal science must be able to protect itself from political and industry pressures.

World leaders have started to appeal to America's scientists and engineers by arguing that other nations value their work more than the United States does. This is a sign that America's global

leadership in science and innovation may be weakening. This is not the first time science has been marginalized in America, but each time it finds a way to return and flourish as conditions improve, and it is not too late, nor too hard for us to stand up now and safeguard our public science.

So, Dr. Swackhamer, you are not just a former Professor of Environmental Health Sciences but are a Professor Emerita of Science, Technology, and Public Policy. It seems that the recent actions taken against the EPA's Board of Scientific Counselors to reduce the number of scientists on the board are not the only efforts taken by this Administration to diminish the role of expert scientific advice that may interfere with their policy objectives. The Department of Interior has suspended its Science Advisory Committees. The Secretary of Energy's senior-most Scientific Advisory Board has not been reconstituted since President Trump's inauguration, and the President's Council of Advisors on Science and Technology, or PCAST, can no longer be found on the White House's webpage.

Our country has been built on a foundation of innovative science and technology so, Doctor, do these actions concern you, and should they concern us?

Dr. SWACKHAMER. Well, I do think that there is a pattern here that certainly, as an individual, it causes me some—I'm troubled by the pattern that I see, the marginalization of science both within the top of the Administration, as well as within other agencies across the federal government, but I'm more familiar with EPA. I'm troubled by the fact that there is a—there's kind of a—there's an intent to politicize and marginalize the science.

And, you know, policy is by nature political. It is the culmination of—if it's good policy, it starts with science and it gets influenced by many other things and often can end up being a political-motivated policy. I understand that. But the science should never be politicized. And the science should never be marginalized. And my fear—my personal fear is that the actions taken at the federal government are in fact diminishing the role of science. Certainly, they're not celebrating the role of science.

All of the science offices in every major agency are unfilled. The folks that have been put forward or floated, the names that have been floated for—for instance, the Chief Science Officer at the U.S. Department of Agriculture has never—he has no degree or training in science, and yet he would be the Chief Scientist for USDA. These are the kinds of things that are part of a pattern that appear to be consistent with marginalizing the role of science in policy. Again, policy is—it's a mixture of things and it's influenced by many factors, but it should start with the bedrock of science. And I am a little fearful of that.

Chairman BIGGS. The gentleman's time is expired.

The Chair recognizes the gentleman from Georgia, Mr. Loudermilk.

Mr. LOUDERMILK. Well, thank you, Mr. Chairman, and I appreciate the opportunity.

And everyone that's here today—and as I was listening to the previous testimony, I can tell you that from my experience, science is pretty absolute. The problem is it's our interpretation of that

science to meet political ends, which has been happening since the dawn of man, and I believe it's going to happen.

Our concern is are we using the science as fact or are we using that science to achieve a goal? As someone who grew up during the Apollo space race, I remember many scientists saying it was impossible with the data that we have to get to the moon. It wasn't the science that was wrong; it was our interpretation of that science. And we need to keep that in mind as we go forward and we deal with a lot of these issues because I would agree; we have politicized especially the environmental aspect of science a lot of times to our own detriment.

Mr. Cabrera, I'm a little—still amazed a little bit or trying to get my hands wrapped around the regional haze rule, which seems to be a major topic that we hear about from the states. And why would EPA impose billions of dollars in environmental controls to achieve improvements that you can't even recognize with the naked eye?

Mr. CABRERA. Mr. Chair, members of the committee, many would speculate that regional haze, along with clean power, along with several other rules, were a bureaucratic approach to deal with climate change. So many would speculate that while unable to pass any type of climate legislation through Congress that the previous Administration set out to use whatever tools were available and used them in such a way that would alleviate climate change.

Mr. LOUDERMILK. So what's the effect been—your State is Arizona, correct? What has been the effect? Have you seen any improvements? What's the impact it's had on you as a State and you as an official?

Mr. CABRERA. Mr. Chairman, members of the committee, after 20 years, two commission reports, four lawsuits, two state plans, a federal plan, and an estimated cost of \$500 million, we will not see a perceivable improvement in visibility in the Grand Canyon State.

Mr. LOUDERMILK. Five hundred million dollars? That's State funds?

Mr. CABRERA. That's private industry installing controls on their facilities to eliminate pollutants that then create haze.

Mr. LOUDERMILK. So who ultimately pays for these controls? Is it the industry?

Mr. CABRERA. Mr. Chair, members of the committee, it's likely going to be ratepayers.

Mr. LOUDERMILK. Okay. Which really is the most vulnerable of us when you look at those that are on fixed income—and this is one of the issues I've had with politicizing the environment is ultimately, it is the ratepayer that pays, and the ones that hurt the most are the ones that already are trying to balance their checkbooks at the end of the month. And they cannot afford another increase in their rates.

And what ultimately happens—in Georgia we do have some cold months, and what will happen is people will shut their heat off to save electricity and they'll burn their fireplace, which everyone knows is—creates more pollution than the footprint of the coal-fired plant that's in our community.

Dealing with ozone—now, we kind of segued into ozone—what—I understand there are exceptional events that the EPA considers

with states. How would you—could you explain briefly exceptional events and what is—how do you—how would you rate EPA's ability to identify exceptional events?

Mr. CABRERA. EPA has done some work associated with the exceptional events for dust, and that work is solid. In fact, the State of Arizona was a leader in that arena. For ozone, the problem is much more difficult. You are now dealing with some very complex photochemical models, and EPA has not established clear guidelines on how exceptional events for ozone would be demonstrated. An exceptional event by definition is something that is not created by industry or the lack of controls; it is created by something that is exceptional in nature.

Mr. LOUDERMILK. A volcano or, in the case of Arizona, a dust storm?

Mr. CABRERA. An ozone inversion due to weather conditions, yes.

Mr. LOUDERMILK. Does—so if the EPA doesn't record—do they do a good job of recording the events or do they not record them and how—what's the effect it has on your State?

Mr. CABRERA. Mr. Chairman, members of the committee, it is up to the states to make the demonstration, and then EPA has the ability to approve or reject the demonstration.

Mr. LOUDERMILK. So basically, you have to go and prove that there was an exceptional event even if that exceptional event may have been a major incident that most Americans know about? Then you have to go present that—

Mr. CABRERA. That's correct.

Mr. LOUDERMILK. —your case?

Mr. CABRERA. That's correct.

Mr. LOUDERMILK. All right.

Chairman BIGGS. The gentleman's time has expired.

Mr. LOUDERMILK. Thank you, Mr. Chairman.

Chairman BIGGS. Thank you.

I thank each of the witnesses today for being here with us and taking your time to be with us and your very valuable and interesting testimony.

I'd also—this is the way it works. It's down to the Ranking Member, myself, and Mr. Loudermilk. This is consistent, so I appreciate all the Members and their questions as well.

The record will remain open for two weeks for additional comments and written questions from Members.

And this hearing is adjourned.

[Whereupon, at 11:40 a.m., the Subcommittee was adjourned.]

Appendix I

ANSWERS TO POST-HEARING QUESTIONS

ANSWERS TO POST-HEARING QUESTIONS

Responses by Dr. Deborah L. Swackhamer

**HOUSE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
SUBCOMMITTEE ON ENVIRONMENT**

“Expanding the Role of States in EPA Rulemaking”

Dr. Deborah L. Swackhamer, Professor Emerita, Hubert H. Humphrey School of Public Affairs
and Professor Emerita, Environmental Health Sciences University of Minnesota

Questions submitted by Environment Subcommittee Ranking Member Suzanne Bonamici

I. Federal Role of Providing Sound Environmental Science to the States

1. The states have wide discretion on how to implement federal environmental regulations, but they rely on the EPA to conduct the detailed scientific literature review and research to develop a robust scientific foundation on which to build strong regulatory policy. The EPA’s ability to convene leading technical experts and utilize key resources across the country to build minimum environmental safeguards prevents a duplication of efforts at the state level and provides uniform protections for all citizens.
 - Can you explain what you believe is the appropriate role of the EPA in providing scientific evidence, advice, and resources to the states and why this is important?

In my opinion, the role of EPA is to provide a nation-wide, consistent, science-based framework for how to provide for a clean environment and protect public health, and the role of the States is to implement the details of that framework. Federal environmental laws such as the Clean Air Act, Clean Water Act, and Safe Drinking Water Act establish the pollutants to be regulated across the country, and what the discharge, emission, or allowable ambient concentrations should be to protect public health. This is to provide consistency for environmental protections across state (political) boundaries, and larger regions that share air-sheds or watersheds. Also, the scientific evidence needed to set these standards can consist of dozens to hundreds of studies from many sources, and requires a dedicated group of scientists to review and synthesize the considerable body of evidence. The recommendations are often then reviewed by an independent group of scientists (i.e. a peer review). It is far more effective and efficient to do this with a single federal agency rather than do this in each of the fifty states. States do not have the scientific capacity or financial resources to do this work. Furthermore, EPA scientists in the Office of Research and Development (ORD) generate some of scientific evidence that is needed to support regulations. It is impractical for states to have the resources to fill these gaps, and if they did, there would be duplicative and wasteful efforts, as well as a confusing patchwork of regulations. Thus, it is more efficient for EPA to design a consistent architecture consisting of regulations and rules using the scientific capacity at the federal level, and for states to apply these rules to their communities.

For states to fully implement federal statutes and rules, they need technical assistance to keep up with changes and innovation in science and technology, and in computer-based tools. One example of such a tool is the Stormwater Calculator, which is a desktop application that estimates the annual amount of rainwater and frequency of runoff from a specific site anywhere in the United States. Estimates are based on local soil conditions, land cover, and historic rainfall records, and are critical to community planning. States also receive financial support

from EPA, which is needed to augment state funding to implement certain programs. One example is the Non Point Source program (known as the 319 program). This program transfers funds to the states to conduct regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects. Other EPA-supported state programs include funds and grants for Brownfields remediation and redevelopment, National Clean Diesel Campaign, Small Business Innovation Research grants, and Pollution Prevention grants among many others.

- As a scientist and researcher in academia, can you comment on the types of limitations states might face in having adequate scientific expertise and evidence to evaluate potential environmental hazards and risks to the public if the EPA's resources were drastically cut or if the EPA's interactions with states were dramatically reduced?

Most states do not have sufficient scientific research expertise in their environmental protection agencies. And even fewer have the depth and diversity of expertise needed to assess the complexity of hazards in our environment. With declining state environmental budgets, the efficient and highly professional assistance from EPA becomes even more important. However, the Trump administration has proposed more than a 30% cut in EPA's budget. These cuts include the pass-through funds mentioned above that support a number of programs, such as the 319 Non-Point Pollution program, Water Quality Research and Support Grants, Targeted Air Shed Grants, Underground Storage Tank state grants, and state Radon grants, to mention just a few. States rely on these federal pass-through funds to set up state-specific programs, technical transfer of knowledge from the federal agency to the state agencies, demonstration programs, etc.

2. The EPA has been a global leader in environmental protection by developing landmark environmental legislation that is underpinned by cutting-edge science. Recently, however the basis of these regulations, the science itself, has been called into question with researchers and methods being demonized by some Majority members of this committee. By second guessing the science, we put ourselves at a disadvantage when it comes to developing the most up-to-date and protective environmental policies.

- You stated in your testimony that "good" environmental policy must be based on "robust science". What is your definition of "good" environmental policy, and what is "robust" science?

Science truly is the bedrock of all that EPA does. It is to be first-rate, cutting edge science to withstand the review and scrutiny that scientific evidence undergoes to craft effective environmental policy. Environmental policy consists of a number of components, including a clear articulation of the problem that the policy is addressing, and what the projected outcomes of the policy will be. "Good" environmental policy must have high likelihood of solving the primary problem, with measurable objectives to demonstrate its success. The Clean Air Act is a classic "good" policy, with the objective to reduce the problem of air pollution using emissions controls. The reductions have been successful and measurable, with a 70% reduction in air pollution since the Act was passed.

Robust science is needed in regulatory policy, given the intense legal scrutiny and potential implementation costs. To draw conclusions that inform regulatory policy, usually a large collection of scientific evidence from a variety of sources (published literature from respected journals, studies from national or international government labs, research conducted within ORD, or research funded by ORD STAR grants) is evaluated and synthesized. These conclusions, and the scientific evidence that underpins them, are then reviewed by an independent third-party, i.e. a review by a group of outside scientists, to substantiate the findings and the reasoning that led to them. Thus “robust” science in this context consists of a significant body of scientific evidence from multiple sources that has been assessed and results in findings that inform policy, and which has undergone thorough peer-review.

- You stated in your testimony that marginalization of science in environmental policy-making would lead to our country’s “competitive disadvantage”. Can you expand on what you mean?

Right now, the United States is considered a world leader in environmental protection and regulation. We have strong laws that regulate air and water quality, and these laws have been shown to be highly effective at protecting public health. We have some of the safest drinking water and cleanest air of most developed countries in the world. We were leaders in enacting environmental legislation, and our regulations have served as a model for many other countries. The reason for this is that our regulations are based on rock-solid science, and a science-based risk reduction framework – they are not arbitrary. They were designed to be updated and improved as our scientific knowledge expands to further protect public health over time.

The statements and actions being taken by the EPA Administrator are marginalizing the role of science and crippling the ability for EPA to continue to produce needed research. This is evidenced by the proposal to reduce the ORD budget by nearly half, reduce the research staff by nearly half, eliminate the Science to Achieve Results (STAR) program that funds a competitive extramural grants program directed at specific needed knowledge gaps, and to reduce the Science Advisory Board budget by more than 80%. Without the ongoing science to update and improve regulations, combined with the move towards deregulation, our air and water quality will decrease. The additional pollution will result in less public health protections, and lead to greater premature deaths rates, more respiratory related hospital visits, more drinking water contamination issues, more lakes and rivers that cannot be safely used for swimming and fishing. Our country’s health, and environment, will degrade. With this degradation comes less desire to invest or reside in the United States, leading to declines in our global standing. We will lose our competitive edge to other countries who continue to offer a clean environment and produce healthy children.

Furthermore, we will lose our competitive edge in science and technology development. EPA scientists are currently world leaders in the study of human and animal toxicology, in drinking water treatments, and in risk assessment as well as other areas. They are leaders in innovation, and in public-private partnerships and interactions. With the drastic cuts to the EPA science programs we will lose this edge, and our place and perception in the world as environmental science leaders.

II. The Politicization of Science

3. Congressman Loudermilk stated during the hearing that “science is pretty absolute... Our concern is, are we using that science as fact or are we using that science to achieve a goal?” Chairman Smith said that EPA science is “cherry-picked” to support a political agenda, and then “rubber-stamped” by biased science advisors. How do you respond to these statements?

Representative Loudermilk’s statement suggests that he is confused about the role of science and policy. Chairman Smith’s claims are utterly false, not substantiated, and frankly offensive to me as a scientist who has served in several capacities as an outside science advisor to US EPA.

Science generates facts and findings that lead to an understanding of an issue, such as how toxic a chemical might be, how successful a water treatment might be, or the development of a computer program that can be used to improve a state’s ability to manage their air and water. Good science is objective and without bias, and yes, apolitical. Policy is designed to fix a problem, and to use all relevant science to construct policy options, which are evaluated for efficiency, effectiveness, technical feasibility, costs and benefits, etc. Regardless of the final policy alternative selected (which is based on all these other factors in addition to the science), it should be underpinned by science. Science informs policy, it does not dictate policy.

EPA does not systematically cherry-pick the science that it uses. As explained above, regulations and rules are crafted using all of the relevant, best science available to reach its findings. There can be hundreds of articles, papers, studies, and reports that are combed through, synthesized, and used to draw their conclusions. Exclusion of data or evidence is explained. Many staff experts are involved in this, and in then using these findings in updating or improving a rule, a standard, and the like. And following this thorough process, the resulting document and supporting scientific evidence is reviewed by an external, objective third party – often it is the SAB (that is why they were created by Congress, to provide such reviews) or in some cases by the National Academies of Science (NAS). These reviews are no rubber stamp – having chaired the SAB for 4 years, and sat on numerous NAS review committees, these kind of peer reviews are anything but a free ride for EPA. The scientists that sit on these review committees are highly independent, and proud of who they are and what they bring to the table. The reviews take several days of meetings, spread over several months, to review and digest the materials, and to discuss their assessment of the materials. The discussions are lively, spirited, with differing views brought to the discussion and reconciled. There is no pressure brought to bear from EPA staff to reach a certain finding. Often, the reviews end up being highly critical of the document under review. The review committee writes their review up in detail, and any recommendation or criticism must be addressed in writing by EPA staff and the Administrator. All of this, including the discussions of the SAB, are in the public record (SAB is a FACA committee and thus all deliberations are public; the National Research Council committees of the NAS are not governed by FACA and the discussions are private). Finally, the review of any subcommittee of the SAB is reviewed for consistency and completeness by the entire SAB (essentially a review of the review). Additional changes to the review are made at this time, and then it is finalized and sent to the Administrator. The NAS also has their reports reviewed by many individual reviewers, and the NAS must respond in writing to each comment. These review processes are earnest, intense, thorough processes that are of the highest integrity, and they result in reports and

recommendations from EPA that have been vetted to an extreme. The two step process ensures that there is not cherry picking, and there is no rubber stamping.

4. The President has submitted his proposed FY2018 Budget Request which seeks to reduce the EPA's overall budget by 30%. The Administration has provided minimal explanation of how these across-the-board cuts in every program office at the EPA will not negatively impact the Agency's ability to carry out its duties to safeguard the environment and public health.
 - How will these proposed budget cuts impact the science and technology research programs at the EPA?

The proposed budget for EPA includes a 31% overall cut to the Agency. However, this enormous cut is not equal to programs across the board – the Science and Technology (S&T) budget is targeted for approximately a 38% cut, and the research programs within the Office of Research and Development (part of the S&T budget) are targeted for approximately a 48% cut. Because much of the budget goes to compensation, this means a significant cut in the ORD scientific staff. The cuts are specifically heavy to the air research program (~66%), the water research program (~40%), and Safe and Sustainable Communities (~60%). I believe that this degree of reduction will cripple the ability of ORD to support the EPA mission, and will certainly lead to the erosion of our nation's leadership in environmental science. And because the EPA administrator will focus on retirements and buyouts of senior staff to reduce the workforce, it means that the collective brain trust of environmental research will be lost at EPA.

- How does the proposed budget impact scientific advisory committees at the EPA?

The proposed cuts to the Science Advisory Board have been reported to be 84%. Obviously this would decimate the SAB's ability to function. The financial implications of the proposed budget on other advisory committees at EPA are not clear at this time, but it is a safe assumption that reductions in ORD and science activity in general will lead to reduced support of science advisory committees.

- What impacts would reduced support for scientific advisory committees at EPA have on the agency's overall mission?

The overall mission of EPA is to protect public health, and protect the environment. This is accomplished by controlling emissions and concentrations of pollutants, and reducing risks from exposure to pollutants in our air, land, and water. Reduced external reviews by external science advisory committees leads to less rigorous science, which leads to weaker regulatory scientific evidence, which leads to compromised environmental policy, which leads to less protection of public health and the environment. Thus these huge cuts to the scientific advisory committees can lead to significant erosion of the progress we have made in protecting our environment, and to deteriorating public health over time. It would not happen immediately, it would be slow loss of scientific credibility and trust without scientific peer review as part of the regulatory process, and a slower lag on the impacts to our environment and nation's health.

III. Federal Advisory Committees

5. EPA Administrator Scott Pruitt has recently said that he wants to balance scientific advisory committees and panels at EPA by adding more members from the regulated community, particularly on the Board of Scientific Counselors (BOSC) where half the members' terms were not renewed. Industry representatives can provide an important and unique perspective on these boards, however, achieving a proper balance on these boards does not mean that they should be stocked with industry representatives from the very industries the EPA regulates.

- How in your mind should EPA or other federal science agencies balance the interests of industry vs. the interests of the public? How large a factor should scientific expertise be in determining membership federal advisory committees? Does balance require a 50/50 split between industry representatives and other experts?

The most important aspect of federal science advisory committees is to have a balanced mix of expertise appropriate to the issues coming before the committee. The committee must consist of independent, top-notch scientists. Given that most environmental issues are highly complex, scientific advice must be reached from consultation and synthesis across many perspectives from many different disciplines. The different perspectives of scientists from industry, the public sector, or from academia are all needed – the key issue is to ensure that there is no conflict of interest presented by members of the committee, and that individuals can give scientific advice without restriction or censure by their employer. That is the reason that there are fewer industry scientists on committees than academics or public sector scientists – scientists working for EPA-regulated industries often have a conflict of interest. Putting quotas on membership categories will lead to an imbalance and ineffective committee, as the pool of qualified scientists is not equal across all sectors, and the wide variety of experts needed is not found across all sectors.

- What qualities and credentials are used to determine a good fit for an advisory committee position? Are applicants for these committee positions automatically disqualified by not being academics? In what ways do industry representatives bring a unique perspective to the table in these advisory committees?

The US EPA conducts the selection process for external science advisors internally. However, in my experience, there is always a mix of perspectives as well as expertise on the committees I have served on, including private industry, private business, academia, state and federal government, and non-government organizations. Industry scientists bring knowledge of specific industrial processes (such as plastics manufacture), of such processes being done at a production scale (compared to the laboratory scale), and of goal driven research (such as synthesizing a new pesticide to perform a certain function).

- How do committee members ensure they do not function as political appointments who simply 'rubber stamp' the Administrator or the current Administration's policies?

Individual committee members who feel that the integrity of the process is threatened can bring their concerns to the Designated Federal Officer (DFO) of the committee. The DFO is required

by the Federal Advisory Committee Act (FACA) and is a federal employee who manages the day-to-day operations of the committee. The DFO would raise concerns with their supervisor, and the committee's designated ethics officer – also a federal employee, and who makes determinations of conflicts of interest, compliance with the Hatch Act, and the like. Members of EPA FACA committees are required to undergo ethics training on a yearly basis, and to maintain frequent contact with the DFO so as to avoid any conflicts of interest on a given matter before the committee. Alternatively, a member could resign if they feel that their advice is not being considered adequately and in the spirit of the independence of the advisory committee.

6. Congressman Babin stated at the hearing that EPA Administrator Pruitt had asked for nominations regarding potential new members of the BOSC, and Mr. Babin suggested that the EPA had already received hundreds of proposed nominations for new BOSC members. This does not appear to be an accurate reflection of what actually transpired in regard to Administrator Pruitt's actions regarding new BOSC members.

- Can you respond to Congressman Babin's comments and detail what you know about when a decision was made to not renew the membership of the nine BOSC members?

Congressman Babin is misinformed, and likely due to the misleading statements made by the Administrator's office to the media. In response to questions as to why 9 members of BOSC were not renewed for a second term, Administrator Pruitt's office stated "EPA received hundreds of nominations to serve on the board, and instead of reappointing nine people who have already served their three-year term, we want to ensure fair consideration of the other nominees and a carry-out a competitive nomination process." This is very misleading, as it sounds as if hundreds of people are lined up, hoping to get on this board. In fact, nominations are only received when there is a call for nominations made in the Federal Register, and the "hundreds of nominations" referred to in this statement in fact were from an FRN notice in 2013 (so nominations on this list are more than 4 years old). It is unclear if this older list of nominees will be considered at all, given that the Administration has just issued a new FRN notice soliciting nominations for BOSC.

The BOSC members who were not renewed were informed in an email sent by the Acting Assistant Administrator of ORD on May 5, 2017. Their terms had expired on April 28, 2017. I do not know when the decision was made, but based on conversations with the BOSC DFO, it is my understanding that the decision was communicated to the Acting Assistant Administrator of ORD from the Administrator's Office in the first week of May.

- How many members remain on the BOSC at this time? What is the current status of naming new members?

There are currently 4 members remaining on the BOSC Executive Committee, which had 18 members until April 30. Four members rotated off the BOSC as they had served 2 terms of 3 years each. Nine members completed their first term of 3 years, and were not renewed for a second term by the Administrator's office. One additional member resigned after this, fearing that the BOSC was now politicized and could no longer be effective.

The full BOSC consists of an Executive Committee, and 5 subcommittees (Air, Climate and Energy; Safe and Sustainable Water Resources; Safe and Healthy Communities; Homeland Security; Chemical Safety for Sustainability). The Subcommittee chairs and vice chairs sit on the Executive Committee. As of a memo from EPA on June 19th, 38 of the 49 subcommittee members will not be renewed at the end of August. So as of September 1, 2017, there will be a total of 11 remaining subcommittee members; the subcommittees now have only 1-2 remaining members (except Chemical Safety for Sustainability subcommittee that still has 5); none have a chair or a vice chair. The Executive Committee will have only 3 remaining members – the Chair (me) and two others, who are also members of the subcommittees. So the total BOSC membership, including its subcommittees, will be only 12 (usually about 70) effective September 1st.

- When did the EPA first seek nominations for new BOSC members to replace the open positions? At the time of the hearing, Congressman Babin mentioned that there were hundreds of applications waiting to be considered for the open positions on the BOSC. Is that typical for this process?

The notice to solicit new nominations for BOSC was published in the Federal Register on May 25, 2017. This was two days after this hearing, so at the time of the hearing there were not “hundreds of applicants waiting to be considered”. As stated above, the list of applicants being referred to was more than 4 years old. When openings occur on FACA advisory committees, an FRN is issued, and nominations are open for a specified period of time. Then the internal vetting process takes place. It is not unusual to have many more applicants than openings for a given committee. This ensures a wide pool of expertise from which to construct the most effective committee.

EPA has since notified the members of the BOSC Subcommittees that anyone with a term ending in August of 2017 will not be renewed (the previous action taken to not renew BOSC members applied to the Executive Committee). This affects 37 of the 49 Subcommittee members, thus stripping BOSC of nearly all previous members effective September 1. They have been given 10 days to reapply through the nomination process, should they wish to do so.

Appendix II

ADDITIONAL MATERIAL FOR THE RECORD

DOCUMENTS SUBMITTED BY SUBCOMMITTEE CHAIRMAN ANDY BIGGS

		Department of Environmental Quality	
		200 West 17 th Street Cheyenne, WY 82002	
FAX		Date: 5/22/17	
		Number of Pages (including cover sheet)	4
To:	Julija Grigoryan		
Fax #:	Julija.Grigoryan@mail.house.gov		
Re:	Todd Partitt's letter		
Julija, attached is the letter we spoke about this morning regarding hearing tomorrow. Thanks, Connie Osborne WY DEQ 307-777-5593 connie.osborne@wyo.gov			



Matthew H. Mead, Governor

Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's
environment for the benefit of current and future generations.*



Todd Parfitt, Director

May 22, 2017

Congressman Lamar Smith, Chairman
Science, Space and Technology Committee
2409 Rayburn House Office Building
Washington, D.C. 20515

Congressman Andy Biggs, Chairman
Environment Subcommittee
1626 Longworth House Office Building
Washington, D.C. 20515

Dear Chairman Smith and Chairman Biggs:

Thank you for the opportunity to provide input to the Science, Space and Technology, Environment Subcommittee Hearing "Expanding the Role of States in EPA Rulemaking" as you deliberate the process of recalibrating state and federal roles in environmental protection and enhancement.

Initiating rulemaking reforms focused on the importance of cooperation and recognizing states as a key partner will result in more effective, efficient environmental management. We have been very encouraged by the direction of and discussions with Secretary Zinke and Administrator Pruitt and look forward to working in a true partnership with the federal government to ensure effective public health and environmental protections.

One of the original foundational concepts established to ensure effective public health and environmental outcomes is cooperative federalism. Under this arrangement, congress establishes the law, federal agencies implement the law by establishing national minimum standards, and the states obtain the authority, develop, and implement the programs necessary to achieve or surpass these standards.

State environmental agencies play a crucial role in the application and enforcement of environmental protection laws. We interact frequently with the regulated community through permitting, compliance and outreach actions. It is this "on the ground" local knowledge that allows states to build upon the baseline federal requirements and effectively and efficiently achieve additional environmental benefits. Wyoming has achieved and looks forward to achieving additional public health and environmental outcomes under a balanced cooperative federalism arrangement.

Congressman Lamar Smith, Chairman
 Congressman Andy Biggs, Chairman
 May 22, 2017
 RE: Expanding the Role of States in EPA Rulemaking
 Page 2 of 3

Notwithstanding Congress' original intent, the cooperative relationship shifted over time towards the federal government and away from the states. This shift resulted in the development of one-size-fits-all laws, regulations, policies, and guidance that overrode legitimate state authority and failed to consider the unique geophysical, ecological, social, and economic conditions of each state. Mandates, directives, and increasingly prescriptive regulations limited state flexibility in identifying priorities, implementing innovative solutions tailored to local conditions, and achieving operational efficiencies. This meant that states were left to enforce national policies developed without the benefit of any local understanding.

Wyoming DEQ appreciates the opportunity to share a few examples of failed outcomes resulting from the absence of cooperative federalism. These examples highlight the costly and resource intensive results when a federal agency fails to engage early or meaningfully with the states.

Wyoming's Regional Haze State Implementation Plan (State Plan)

The Federal Regional Haze Implementation Plan (Federal Plan) will cause utility rate increases. Wyoming developed a sensible plan that fully complies with the Clean Air Act's Regional Haze requirements. Instead of approving the state's plan, the EPA disapproved and replaced part of it with a Federal Plan requiring new and different emission controls. The cost of the Federal Plan is several hundreds of millions of dollars more than the cost of Wyoming's plan, but will not result in any perceptible visibility improvement. These more restrictive and costly controls will cost ratepayers millions of dollars, for no good or justifiable reason.

Stream Protection Rule

The Office of Surface Mining Control and Reclamation Enforcement (OSMRE) decided to develop a new stream protection rule. In 2010, OSMRE and Wyoming DEQ entered into a MOU establishing DEQ's relationship as a cooperating agency in that rulemaking effort. OSMRE limited the ability of cooperating agencies to provide meaningful input by failing to provide sufficient time to review preliminary draft documents, and by failing to engage or specifically excluding states from the process, directly in conflict with a written commitment to Western Governors by then Secretary of Interior, Ken Salazar. The outcome of this process was a one-size fits all rule that failed to recognize regional and local differences and consequently was unworkable in Wyoming.

Office of Inspector General Evaluation of OSMRE and Certified AML States Programs

The OIG initiated an evaluation of OSMRE's oversight of the certified state AML programs, including Wyoming's Program. As part of OIG's evaluation, Wyoming provided information about its program to OIG. OIG's evaluation culminated in the release of a March 2017 report. OIG failed to provide Wyoming with any opportunity to review a draft report to correct factual errors. Because of OIG's failure, the Report was released with inaccurate data. Further compounding the matter, OSMRE released the Report to the press before it released the report to Wyoming. Under the principles of effective cooperative federalism, it would seem appropriate for OSMRE to have provided Wyoming with an opportunity to review and comment on the draft and to notify the state before it notified the press that the report was complete and available.

Congressman Lamar Smith, Chairman
Congressman Andy Biggs, Chairman
May 22, 2017
RE: Expanding the Role of States in EPA Rulemaking
Page 3 of 3

All of the above federal actions would have had much different outcomes if effective cooperative federalism principles had been utilized. Wyoming believes that effective cooperative federalism starts with federal engagement of the State as a key partner. Wyoming has experience with identifying and understanding emerging environmental challenges. A recent example of one such challenge is wintertime ozone in the Upper Green River Basin of Wyoming. Wyoming devoted time and resources to advance the scientific understanding of this phenomena and develop and implemented effective strategies to address that environmental challenge. As a result, ozone levels have decreased. Where a federal agency provides a state with the flexibility to take into account the unique local geophysical, ecological, social, and economic conditions, the state will determine the best approach for it to achieve federal standards. That is how we view effective cooperative federalism.

Wyoming is committed to a strong federal-state relationship and looks forward to working with its federal partners in an effective and balanced cooperative federalism approach that provides effective environmental and public health outcomes.

Thank you again for the opportunity to provide input on this important topic. I would welcome the opportunity to provide further input on and support for recalibrating the implementation of cooperative federalism principles.

Sincerely,



Todd Parfitt
Director

cc: Governor Matt Mead
Senator John Barrasso
Senator Mike Enzi
Congressman Liz Cheney

DOCUMENTS SUBMITTED BY SUBCOMMITTEE RANKING MEMBER SUZANNE BONAMICI

Congress of the United States
Washington, DC 20515

May 18, 2017

Scott Pruitt, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Pruitt,

We write to express our concerns over recent reports that several members of the Board of Scientific Counselors at the Environmental Protection Agency (EPA) have been dismissed. We are alarmed at the signal this sends about both the priorities of the EPA and about its willingness to protect the environment.

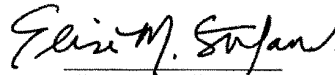
As the body tasked with advising on the technical issues of the EPA's research programs, the Board of Scientific Counselors should be comprised of highly qualified, knowledgeable experts whose views are grounded in scientific research. Removing qualified, respected members of the board to make room for more input from the industries being regulated would not only create conflicts of interest, it is also unnecessary as the EPA's larger Scientific Advisory Board already includes credible scientists from industry.

We urge you to maintain the rigorous standards and technical expertise of the Board of Scientific Counselors. It is in our country's best interest to ensure that the EPA's regulations have a sound scientific basis which requires scientific advisors who are committed to rigorous scientific review for its own sake.

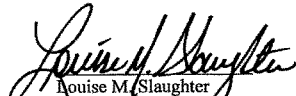
Sincerely,



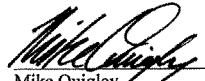
Bill Foster
Member of Congress



Elise M. Stefanik
Member of Congress


Louise M. Slaughter
Member of Congress

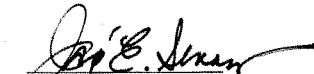

Jackie Speier
Member of Congress

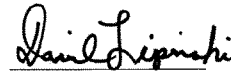

Mike Quigley
Member of Congress


Suzan DelBene
Member of Congress

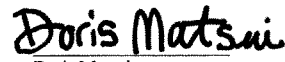

Wm. Lacy Clay
Member of Congress

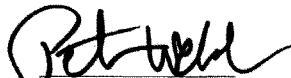

John Conyers, Jr.
Member of Congress


José E. Serrano
Member of Congress


Daniel W. Lipinski
Member of Congress

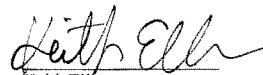

Emanuel Claver, II
Member of Congress


Doris Matsui
Member of Congress

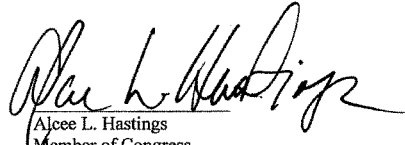

Peter Welch
Member of Congress

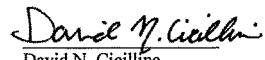

Nydia M. Velázquez
Member of Congress

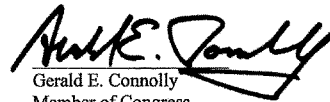

Jerry McNerney
Member of Congress

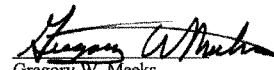

Keith Ellison
Member of Congress

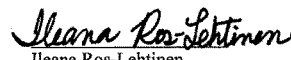

Gwen Moore
Member of Congress

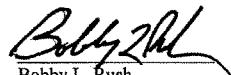

Alcee L. Hastings
Member of Congress

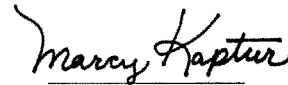

David N. Cicilline
Member of Congress

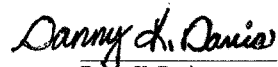

Gerald E. Connolly
Member of Congress


Gregory W. Meeks
Member of Congress

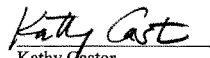

Ilana Ros-Lehtinen
Member of Congress

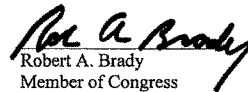

Bobby L. Rush
Member of Congress

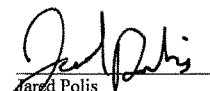

Marcy Kaptur
Member of Congress

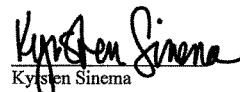

Danny K. Davis
Member of Congress

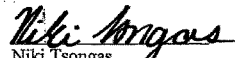

Eleanor Holmes Norton
Member of Congress

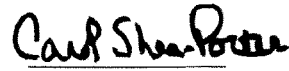

Kathy Castor
Member of Congress

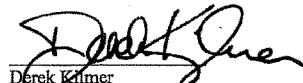

Robert A. Brady
Member of Congress


Jared Polis
Member of Congress

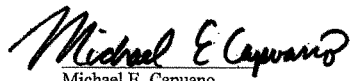

Kyrsten Sinema
Member of Congress

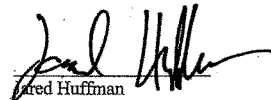

Niki Tsongas
Member of Congress

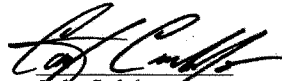

Carol Shea-Porter
Member of Congress


Derek Khimer
Member of Congress


Mark Pocan
Member of Congress

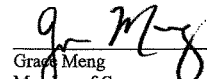

Michael E. Capuano
Member of Congress

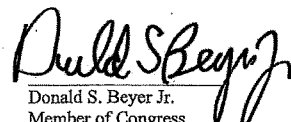

Jared Huffman
Member of Congress

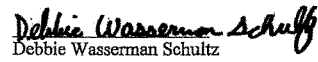

Carlos Curbelo
Member of Congress


Zoe Lofgren
Member of Congress

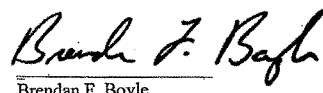

Nanette Diaz Bañagán
Member of Congress

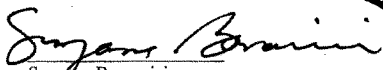

Grace Meng
Member of Congress

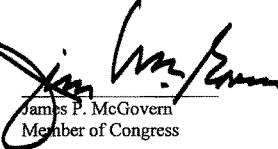

Donald S. Beyer Jr.
Member of Congress


Debbie Wasserman Schultz
Member of Congress


Earl Blumenauer
Member of Congress

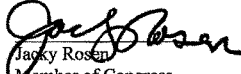

Brendan F. Boyle
Member of Congress

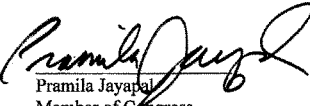

Suzanne Bonamici
Member of Congress


James P. McGovern
Member of Congress

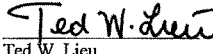

Jamie Raskin
Member of Congress

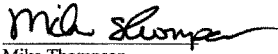

Charlie Crist
Member of Congress


Jacky Rosen
Member of Congress

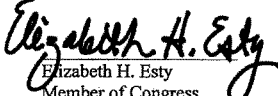

Pramila Jayapal
Member of Congress

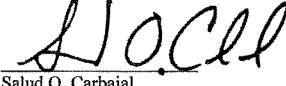

A. Donald McEachin
Member of Congress

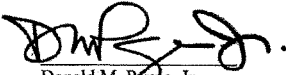

Ted W. Lieu
Member of Congress

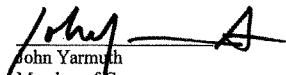

Mike Thompson
Member of Congress

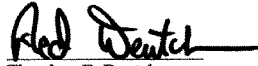

Daniel T. Klidde
Member of Congress


Elizabeth H. Esty
Member of Congress


Salud O. Carbajal
Member of Congress


Donald M. Rypke, Jr.
Member of Congress

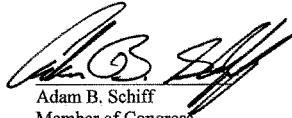

John Yarmuth
Member of Congress



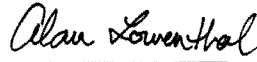
Theodore E. Deutch
Member of Congress



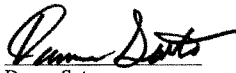
Debbie Dingell
Member of Congress



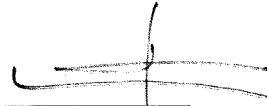
Adam B. Schiff
Member of Congress



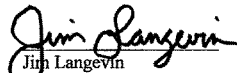
Alan Lowenthal
Member of Congress



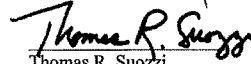
Darren Soto
Member of Congress



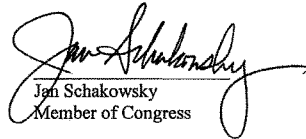
Colleen Hanabusa
Member of Congress



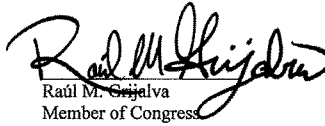
Jim Langevin
Member of Congress



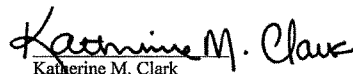
Thomas R. Suozzi
Member of Congress



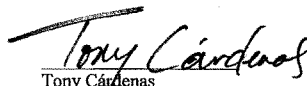
Jan Schakowsky
Member of Congress



Raúl M. Grijalva
Member of Congress



Katherine M. Clark
Member of Congress



Tony Cárdenas
Member of Congress

Congress of the United States
House of Representatives
Washington, D.C. 20515
 May 18, 2017

The Honorable Scott Pruitt
 Administrator
 U.S. Environmental Protection Agency
 1200 Pennsylvania Avenue, NW
 Washington, D.C. 20460

Dear Administrator Pruitt:

We write regarding your decision to dismiss nine members of the U.S. Environmental Protection Agency (EPA) Board of Scientific Counselors ("Board"). We have serious concerns about this action that has prematurely removed qualified experts from EPA's Board and deprives EPA of critical scientific and technical expertise needed to support the Agency's mission to protect human health and the environment. We are also seriously concerned that you now intend to fill these newly opened positions with members who will serve as advocates for specific policies rather than as unbiased experts.

These members were eligible to have their appointments renewed for a second term as indicated in EPA's own documents.¹ The decision not to renew their membership, which appears to have come directly from your office, was reportedly a complete surprise to the terminated Board members² and contradicts information EPA officials provided to these Board members just one week prior to this decision.³ This policy reversal very likely means the Board's activities will be curtailed for a substantial period of time. EPA's own documents indicate it takes approximately eight months to identify, vet and appoint new Board members.⁴

This action already is having a chilling effect on the Board and on the broader scientific community. The May 12, 2017, resignation of two scientists from the Sustainable and Healthy Communities Subcommittee of the Board in protest over the removal of Board members underscores this concern. In their resignation letter, the scientists explained "the effective

¹ U.S. Environmental Protection Agency, Board of Scientific Counselors, *Membership Balance Plan* ([www.facadatabase.gov/download.aspx?fn=Charters/5132_2016.05.18_EPA%20BOSC%202016%20Membership%20Balance%20Plan](http://www.facadatabase.gov/download.aspx?fn=Charters/5132_2016.05.18_EPA%20BOSC%202016%20Membership%20Balance%20Plan%20(2016-05-18-01-38-57).pdf) (2016-05-18-01-38-57).pdf).

² Email from Robert J. Kavlock, Acting Assistant Administrator, Office of Research and Development, U.S. Environmental Protection Agency, to nine Board of Scientific Counselors members whose first terms expired on April 27, 2017 (May 5, 2017).

³ Email from Thomas Tracy, Designated Federal Officer for the Board of Scientific Counselors, U.S. Environmental Protection Agency, to nine Board of Scientific Counselors members whose first terms expired on April 27, 2017 (April 28, 2017).

⁴ See note 1.

The Honorable Scott Pruitt
May 18, 2017
Page 2

removal of our subcommittee's co-chairs suggests that our collective knowledge is not valued by the current EPA administrator" and "we cannot in good conscience be complicit in our co-chairs removal, or in the watering down of credible science, engineering, and methodological rigor that is at the heart of that decision."⁵

On Friday, April 28, 2017, EPA staff sent nine Board members whose first term expired on April 27, 2017 an e-mail stating their names had been submitted to EPA management with a recommendation that they be appointed for a second term.⁶ However, one week later, on Friday, May 5, 2017, Robert Kavlock, the Acting Assistant Administrator of the Office of Research and Development (ORD), said that he had been informed, apparently by your office, that none of the appointments would be renewed.⁷ According to a report in the *Washington Post*, members anticipated that their terms would be renewed in accordance with long-standing Agency practice, and because they had been told a renewal was expected.⁸

According to the *Post*, an EPA spokesperson stated the Agency is "making a clean break with the last administration's approach" and may consider industry scientific experts for some of the board positions.⁹ In addition, the *New York Times* reported that an EPA spokesman said the EPA Administrator wanted more people on the Board from the regulated community.¹⁰ However, industry representatives have always been considered for Board membership. Our concern is that the balance on the Board will now be tilted in favor of industry, to the detriment of unbiased scientific expertise.

The Board was established in 1996 at ORD's request to provide the Assistant Administrator with expert advice on EPA's research and development enterprise, including work at EPA's laboratories.¹¹ While the research and technology efforts of ORD are undertaken to support the work of EPA's program offices, this Board operates consistent with the Federal Advisory Committee Act (FACA), and has limited input into specific EPA regulations. In addition, the Board has routinely commented on EPA's strategic research plans, laboratory management, budget, and staffing issues. For instance, at its recent April 2017 meeting, the

⁵ Letter from Carlos Martin, PhD, Board of Scientific Counselors, U.S. Environmental Protection Agency and Peter B. Meyer, PhD, Board of Scientific Counselors, U.S. Environmental Protection Agency, to Deborah Swackhamer, Chair of the Board of Scientific Counselors, U.S. Environmental Protection Agency (May 12, 2017).

⁶ See note 3.

⁷ See note 2.

⁸ *EPA Dismisses Half of Its Scientific Advisers on Key Board, Citing 'Clean Break' with Obama Administration*, Washington Post (May 8, 2017).

⁹ *Id.*

¹⁰ *E.P.A. Dismisses Members of Major Scientific Review Board*, New York Times (May 7, 2017).

¹¹ U.S. Environmental Protection Agency, *EPA Board of Scientific Counselors Charter* (May 9, 2016) (www.epa.gov/sites/production/files/2017-02/documents/bosc_2016_renewal_charter.pdf).

The Honorable Scott Pruitt
May 18, 2017
Page 3

Board discussed reports on homeland security, nitrogen, children's environmental health, and climate change.¹²

The experts serving on the Board all serve as Special Government Employees (SGEs) and are subject to conflict of interest screening and regulations.¹³ This is to ensure the Board provides expert and unbiased scientific advice to the Assistant Administrator of ORD. FACA requires, for example, that the EPA select Board members that will represent a balanced set of views, expertise, and other relevant factors.¹⁴ Accordingly, experts from industry cannot be excluded as Board members solely because their perspectives and experience align with regulated industries. Further, the Membership Balance Plan for the Board indicates that EPA considers candidates from a variety of scientific and technical organizations, including public and private research institutes and industry.¹⁵

To maintain the scientific integrity of the Board's work, we expect you to adhere to the requirements of FACA for transparency and balance in making new appointments to the Board. We further expect you will appoint new members as SGEs who are bound by conflicts of interest regulations.

To assist us in our oversight responsibilities, and to ensure the Agency is moving forward to fill the many new vacancies on the Board in accordance with applicable FACA requirements and related regulations,¹⁶ we request the records identified below and responses to the following:

1. Please provide all communications, records, and analysis related to EPA's determination not to renew the appointments of Board members whose first terms ended on April 27, 2017. This should include, but not be limited to, any drafts of the email sent by the EPA's Designated Federal Officer (DFO) to the Board to members on April 28, 2017 and the emails or drafts of the emails sent by Robert Kavlock, Acting Assistant Administrator of ORD to (current or former) Board members on May 5, 2017. It should also include, but not be limited to, any communications between officials in ORD and the EPA Administrator's office regarding the decision not to renew the terms of the Board members.
2. Pursuant to the current Board Membership Balance Plan,¹⁷ approximately eight months before the expiration of Committee members' terms, a plan for conducting outreach to new members must be developed and approved. Please provide the Committees a copy

¹² U.S. Environmental Protection Agency, *Meeting materials for the BOSC Executive Committee April 11, 2017 Teleconference* (www.epa.gov/bosc/meeting-materials-bosc-executive-committee-april-11-2017-teleconference).

¹³ See note 1.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ 5 U.S.C. Appx. § 2.

¹⁷ See note 1.

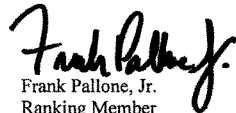
The Honorable Scott Pruitt
May 18, 2017
Page 4

of the outreach plan prepared by the EPA's DFO for the Board as well as the draft grid of potential nominees also prepared by the DFO. This should also include all communications between the DFO and the EPA's Federal Advisory Committee Management staff regarding the selection of Board members.

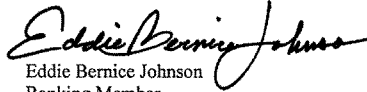
3. Members of the Board serve as SGEs as defined in 18 U.S.C. § 202¹⁸ and are, therefore, government employees for purposes of conflict of interest laws.¹⁹ Please explain what systems and processes EPA intends to implement in order to ensure that any new Board members are in compliance with all applicable ethics regulations and free of any conflicts of interest or appearances of being unable to provide impartial advice.

We appreciate your prompt attention to this issue and look forward to your response by no later than Wednesday, May 31, 2017. Should you have any questions, please contact Jon Monger with the Committee on Energy and Commerce, Democratic Staff at (202) 225-3641 or Doug Pasternak with the Committee on Science, Space and Technology, Democratic Staff at (202) 225-6375.

Sincerely,



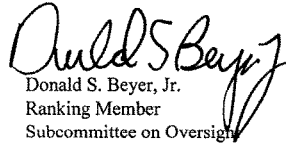
Frank Pallone, Jr.
Ranking Member
Committee on Energy and
Commerce



Eddie Bernice Johnson
Ranking Member
Committee on Science, Space, and
Technology



Diana DeGette
Ranking Member
Subcommittee on Oversight and
Investigations



Donald S. Beyer, Jr.
Ranking Member
Subcommittee on Oversight



Paul D. Tonko
Ranking Member
Subcommittee on Environment



Suzanne Bonamici
Ranking Member
Subcommittee on Environment

¹⁸ *Id.*

¹⁹ Office of Government Ethics, *Conflict of Interest and the Special Government Employee* (Feb. 2000) ([www.oge.gov/Web/OGESites/0/DDABAE34F0273E5F85257E96005FBDDDE/\\$FILE/00x1.pdf](http://www.oge.gov/Web/OGESites/0/DDABAE34F0273E5F85257E96005FBDDDE/$FILE/00x1.pdf)).

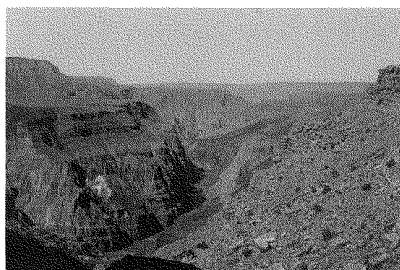
The Honorable Scott Pruitt
May 18, 2017
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Cc: The Honorable Greg Walden
Chairman, Committee on Energy and Commerce

The Honorable Lamar Smith
Chairman, Committee on Science, Space, and Technology

Regional Haze at the Grand Canyon: No visible benefits with EPA controls.

APS State Controls



EPA Controls

