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THE IMPACT OF FEDERAL ENVIRONMENTAL REGULATIONS AND POLICIES ON AMERICAN FARMING AND RANCHING COMMUNITIES

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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ONE HUNDRED FIFTEENTH CONGRESS
SECOND SESSION

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C O N T E N T S

THE IMPACT OF FEDERAL ENVIRONMENTAL REGULATIONS AND POLICIES ON AMERICAN FARMING AND RANCHING COMMUNITIES

WEDNESDAY, FEBRUARY 7, 2018

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The Committee met, pursuant to notice, at 10:03 a.m. in room 406, Dirksen Senate Office Building, Hon. John Barrasso (Chairman of the Committee) presiding.

Present: Senators Barrasso, Carper, Inhofe, Capito, Shelby, Cardin, Merkley, Gillibrand, Booker, Markey, Duckworth, and Van Hollen.

OPENING STATEMENT OF HON. JOHN BARRASSO, U.S. SENATOR FROM THE STATE OF WYOMING

Senator BARRASSO. Good morning. I call this hearing to order.

Today we will hold a hearing on the impact of Federal environmental regulations and policies on American farming and ranching communities.

The discussion here today is not about the value of environmental regulations, but about how some Federal regulations can be inflexible, antiquated, duplicative, and ultimately harmful to American agriculture, a critical part of our nation's economy.

Members of this Committee should work to ensure environmental laws are strong and effective, without being overly burdensome. This is often a difficult task.

The United States is blessed with diverse ecosystems that often require different kinds of stewardship to remain healthy. In Wyoming, we have an abundance of sagebrush prairie, coniferous forests, a variety of mountain habitats and wetlands. Wyoming ranchers and farmers are familiar with each ecosystem and its needs. This is where they work, live, and invest their energies.

Farmers and ranchers are the original stewards; they understand that landscapes and watersheds need to be healthy to support native plants, wildlife, crops, and livestock. They are living proof that interacting with nature can be done in an environmentally sound way, often leaving the resources in better condition than they found them.

Washington policies do not always translate well in rural America. When I am home in Wyoming I often hear how out of touch environmental regulations have become. For far too long the people

who feed, clothe, and house our nation have been burdened by policies that fail to reflect on the ground realities.

We can look no further than the Obama administration's failed Waters of the United States rule. Under that rule, farmers and ranchers across the country were told that irrigation ditches, ponds, and puddles were "navigable waters" and could be regulated by the Federal Government.

I am happy to say that, last week, the delay in implementation of the WOTUS rule became final, giving the EPA and the Army Corps of Engineers time to make sure that any new rule protects America's water resources, while not unnecessarily burdening farmers, ranchers, small businesses, and communities across America.

When writing legislation, Congress must take care to ensure policy actually achieves the desired objective. Agencies must do the same when developing regulations. I believe that we should prioritize updating and revising policies that, while well intentioned, were not designed to micromanage agriculture production.

One example is the new animal waste emission reporting requirements. Over the past several months farmers and ranchers struggled to comply with ambiguities and an ambiguous agency directive following an April 2017 decision in the D.C. Circuit Court. That decision fundamentally changed reporting requirements under the Comprehensive Environmental Response, Compensation, and Liability Act and the Emergency Planning and Community Right-to-Know Act, collectively known as CERCLA and EPCRA.

The ruling meant up to 100,000 farmers and ranchers, who have never been required to report under these laws, were suddenly required to comply. Even though they wanted to comply with the ruling, the process and the implications of compliance were unclear. Because both CERCLA and EPCRA were not written with the intent of regulating these farms and ranches, the requirement to report emissions from animal waste came without context and largely without any agency guidance.

Let me now turn to NEPA, the National Environmental Policy Act. We cannot discuss environmental regulations and their impact on agriculture operations without mentioning NEPA. NEPA is at the core of every decision in each land use plan, resource management proposal, trailing and crossing permit, and grazing allotment that farmers and ranchers need.

NEPA is not limited to agriculture. For years we have discussed the effect NEPA has had on delaying the construction of roads, bridges, parks, reservoirs, and other critical infrastructure.

While environmental analysis can be important in many cases, completing NEPA takes far too long. As NEPA delays stifle improvements around the farm or ranch areas, calves and lambs grow and are sold, ecosystems need change, and farmers, ranchers, and their families wait for an answer. As we will hear from today's witnesses, these are families whose lives, livelihoods, hopes, and dreams are inseparable from the lands and the waters that they work so hard to keep clean.

These are not the only examples of punishing regulations that farmers and ranchers and the communities they live in face. Today we will also hear about duplicative permitting requirements of the

application of pesticides already covered under the Federal Insecticide, Fungicide, and Rodenticide Act, or FIFRA; issues of privacy and the collection of data on farmers and ranchers; on how the Endangered Species Act has been implemented and the subsequent negative impact on farming and ranching operations.

These and other examples will be discussed so we, as a Committee, can better understand how we can help these hard working communities across our country.

Before we move on to our witnesses today, I would like to turn to the Ranking Member, Senator Carper, for his remarks.

OPENING STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM THE STATE OF DELAWARE

Senator CARPER. Thanks, Mr. Chairman. Thanks very much for bringing us all together today.

And a special thanks to our witnesses. I feel privileged to be able to introduce Michael Scuse, our Secretary of Agriculture for a second tour, in a moment.

But first let me give a brief statement, then I would like to introduce Michael.

No other sector of our nation's economy's success is more closely tied with the quality of our environment than is the agriculture sector. Farmers are our nation's original conservationists. They understand better than anyone else the need for clean air, for clean water, and high quality soil in order to produce the food that we need not just to feed ourselves, but really to feed the world.

In Delaware over 40 percent of our land is dedicated to farming, and our State's agriculture sector employs some 30,000 Delawareans, while contributing nearly $8 billion a year to our State's economy. I am proud to say that First State farmers are first in the nation for the value of product produced per acre, first in the number of lima beans harvested, and I think in Sussex County, which is the third largest county in America, first in production of broilers—chickens—by county. We do all this while practicing exceptional environmental stewardship while our farming community is working closely in partnership with USDA, with State agencies, and our universities.

Our nation's environmental laws have been instrumental in helping us deliver clean air, clean water, and productive lands for our farmers and our ranchers. I should add to that list our foresters, our fishing communities, because their success is also greatly dependent on a healthy environment and vital ecosystems.

For example, EPA has found that the 2005 Clean Air Act rules that protect our lungs from ground smog also protect our crops and animals, to the tune of $13 billion in estimated benefits by 2020. The Clean Air Act also protects crops from damaging ultraviolet radiation by protecting the planet's ozone layer and limiting the use of ozone depleting chemicals. In fact, it turns out that those Clean Air Act protections will prevent an estimated 7.5 percent drop in future crop yields in 2075.

There are other environmental issues where we need to act and do more to help our farmers. For example, climate change is already disrupting the livelihood of farmers and ranchers. The Federal Government's Third National Climate Assessment found that

"Climate disruptions to agricultural production have increased in the past 40 years and are projected to increase over the next 25 years. By mid-century and beyond, these impacts will be increasingly negative on most crops and livestock."

The Climate Science Special Report released in November 2017 confirmed these trends. I look forward to hearing the testimony of our witnesses on this topic.

Other environmental programs have created new income opportunities for farmers. The Renewable Fuel Standard has been a major economic driver in farm communities across our country. In addition, tens of thousands of farmers across our country are enrolled in USDA's conservation programs that pay farmers for the water quality and habitat conservation services they provide and protect.

I acknowledge, though, that sometimes environmental requirements can be complex. The Chairman has referred to this already. But those requirements can be confusing to those who farm. One such example is the air emissions reporting requirement for farms under two laws, the Comprehensive Environmental Response, Compensation, and Liability Act, known as CERCLA, and the Emergency Planning and Community Right-to-Know, known as EPCRA.

In 2008 the Bush administration promulgated a rule that exempted all but the largest farms from reporting under these laws. In 2017 the D.C. Circuit Court overturned the 2008 rule, putting farmers on notice that they would soon need to begin reporting. Unfortunately, EPA's reporting guidance to farmers for this reporting has been confusing, and it has been unhelpful.

Along with a number of other colleagues here in this room and outside this room, I have been pushing EPA for several months to do better. EPA agreed it had more work to do, and at our urging agreed to request more time from the court to continue developing a workable guidance and if necessary to give Congress the time to act on this issue. Thankfully, the court agreed, and last week, as we know, gave EPA until May 1st to get this right.

With the 2008 rule no longer in place, I am committed to working toward a solution that balances the burden of this reporting on our farmers with the legitimate needs of public health and emergency response officials, and the right of local community members to know about the pollution in their air. This is what the Bush administration sought to do in 2008, and it is how I believe we should proceed now.

If I could, Mr. Chairman, just do a quick word of introduction on Michael Scuse, who is joining us today. I am tempted just to read his bio; it is incredible. I won't do that, but really an incredible record of service and achievement.

The Scuse family is highly regarded in our State. We have three counties. Smyrna is in the middle of our State, just north of Dover. The Scuse family has farmed there forever and has enjoyed great success and really been a role model for a lot of folks in farming and outside of farming.

I mentioned in my statement that farmers were our first original conservationists. The Scuse family is a great example of that.

In addition to serving through the work that he has done with his own family business, he has served as our Secretary of Agriculture not once, for 8 years— almost 8 years—under Governor Ruth Ann Minner, but he also served as her chief of staff for a period of time, and in the current administration of Governor John Carney he is again our Secretary of Agriculture, and we are delighted that he is.

In addition to that, he was asked, in the Obama administration, to come down here and to serve in Washington in a number of senior leadership positions, including Undersecretary at the Department of Ag, Acting Deputy Secretary of Agriculture, Acting Secretary of Agriculture for our country. Just extraordinary, and I am just thrilled that he could be here today. He is a good friend, someone that we are just honored to say that he is a Delawarean.

We are honored that you are here today with us, Michael, and I salute you for all that you have done and continue to do. Thank you for joining us.

Senator BARRASSO. Thank you, Senator Carper.

Before we head to the panel, we have a number of introductions to be made. Senator Ernst and Senator Moran have introductions.

Senator Ernst.

Senator ERNST. Thank you, Mr. Chair.

Today I have the great honor of introducing a fellow Iowan, Dr. Howard Hill, a hog farmer from Cambridge, who serves as President of the National Pork Producers Council and is a veterinarian with Iowa Select Farms.

Previously Dr. Hill was Director of Veterinary Services and Multiplication for Murphy Family Farms in Rose Hill, North Carolina, and was head of Veterinary Microbiology in the Iowa State University Veterinary Diagnostic Laboratory.

Dr. Hill served as President of NPPC for the 2014–2015 term, and prior to that was a member of the NPPC Board of Directors, serving on a number of committees and co-chairing the Environmental Policy Committee. He also served on the Board of Directors of the Iowa Pork Producers, where he was the Chairman of the Research Committee and the Contract Growers Committee.

Dr. Hill owns a sow farrow to finish farm, which produces breeding stock for DanBred USA. He also partners with his son on the family farm, where they have a pure bred Angus herd and 2,500 acres of row crops.

Thank you for being here today, Dr. Hill. We look forward to hearing your testimony.

Thank you so much.

Senator BARRASSO. Thank you, Senator Ernst.

Senator Moran.

Senator MORAN. Mr. Chairman, thank you.

Thank you to you and the Ranking Member for having our hearing, and it is an honor for me to introduce to the Committee Donn Teske, a Kansas farmer from Wheaton, Kansas, in the north-central part of our State. Donn has been actively engaged in the National Farmers Union and the Kansas Farmers Union for a very long time. He is a leader in agriculture and rural America, and I hold Donn in high regard for his love for and passion for small towns across our State. He recognizes fully, as most of us do, that

if rural America is going to have a future, it is because farmers and ranchers are having success.

I appreciate him, and especially here on the conservation issue. He has a great love for the land and understands how important clear skies and good soil and clean water are to Kansans across our State.

So, Donn, I welcome you to the Committee, and I thank you for your testimony; I look forward to hearing it.

Senator BARRASSO. Thank you, Senator Moran.

We also have joining the panel Mr. Zippy Duvall, who is the President of the American Farm Bureau Federation, but first we are going to hear from Mr. Niels Hansen.

Niels joins us today from Rawlins, Wyoming. He is the immediate past President of the Wyoming Stock Growers Association, currently serves as the Secretary and Treasurer for the Public Lands Council. As a third generation rancher, Niels knows that raising cattle, sheep, and horses is full of challenges. Over the years Niels has worked with the University of Wyoming and the Bureau of Land Management to develop cooperative range land monitoring, which has allowed Niels to become intimately familiar with both the needs of his livestock and the needs of range land ecosystems.

His successful stewardship is evident in the longevity and success of his family ranch, which has also been recognized for many years in Wyoming and nationally. The Bureau of Land Management recognized Niels's ranch with the BLM Range Land Management Stewardship Award in 2000, and in 2001 the ranch was named the Little Snake River Conservation District Cooperator of the Year.

Niels has been recognized repeatedly for his leadership in the industry and in his community. He has served as a member of the Rawlins Search and Rescue, and was inducted into the Wyoming Agriculture Hall of Fame in 2011.

Niels, I am pleased to have you with us here today to lend your wealth of experience to the Committee. I ask that you please proceed.

STATEMENT OF NIELS HANSEN, SECRETARY-TREASURER, PUBLIC LANDS COUNCIL, AND MEMBER, NATIONAL CATTLEMEN'S ASSOCIATION

Mr. HANSEN. Thank you, Chairman Barrasso, Ranking Member Carper, members of the Committee. Thank you for having me here today to address how the Federal regulations affect my ranch and others across the country.

My name is Niels Hansen. My family has been ranching in our area for 120 years. Today, my son is home taking care of the ranch so that I can be with you today to discuss these issues.

As stated, I am the past President of the Wyoming Stock Growers Association, past Chairman of the Wyoming State Grazing Board, a member of the National Cattlemen's Association, and I currently serve as Secretary-Treasurer for the National Public Lands Council.

Our ranch covers 230,000 acres of ground in central Wyoming; consists of private and BLM in the checkerboard land pattern. We span over three watersheds.

Beyond ranching, I spent much of the last 30 years working on these issues that we are discussing today in Wyoming, in Washington, DC, and across the West. As recently as last week, at the National Cattlemen's Convention, I taught a class on working with Federal agencies and trying to educate people how to get along and work toward a goal.

In our interactions with the Federal agencies, our first priority is always to identify common ground and to work together. But we are constantly tangled in a web of Federal regulations. I am here today to talk about just a few of those regulations that impact my ranch and my family.

As long as it remains on the books, the Obama era WOTUS rule continues to be a serious threat to our operation. On our ranch, we wrestle with the management of three watersheds. None of them drain directly into adjacent Federal waters, but under the ambiguous and overreaching 2015 rule, it is impossible to know whether we are exempt or not. As a family rancher, I should not need to hire hydrologists, engineers, and attorneys to figure this out.

I am grateful the Administration has taken steps to roll back this rule and replace it with something more workable, but more work still needs to be done. The ranching community stands ready to help in any way we can.

Another regulation I shouldn't be wrestling with in our cow-calf operation is the reporting requirements under CERCLA and EPCRA. The simple fact is emissions from normal livestock operations should not be covered under this rule. In particular, it is absurd to require such reporting for a 3,000-head operation like mine spread across 60 square miles. Such an operation would never require a coordinated emergency response. Congress needs to fix this.

As we all know, you can't discuss ranching anywhere in the country without taking into account wildlife management. Two pieces of legislation that make it very difficult for me are the Endangered Species Act and the Migratory Bird Act. However well intended, ESA is 40 years old. It needs to be updated to reflect lessons learned and the issues of today. The path forward must work for all, not just environmental litigants that pay their bills with proceeds from legal settlements. Our best opportunity to modernize ESA is through last year's bipartisan Western Governors' recommendations to this Committee.

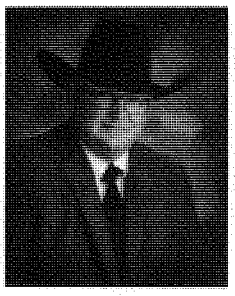
But only addressing ESA does not solve the whole problem. The Migratory Bird Act is working so well that populations of ravens are exploding on my ranch and around the West. This Act allows for proportionate response to growing populations that threaten both the sage grouse and our young livestock, but Federal agencies are slow to grant us necessary perdition authority and expanded baiting flexibility. For me, it is the ravens. In other parts of the country the cormorants, black vultures, and other predators are the issue.

In conclusion, please recognize that the ranchers are your eyes and ears on the land. We are your best tool to achieve any real conservation objectives on the ground. Turn us loose. No one is more

dedicated to the health of the land than those of us who are dependent on it. Let the ranchers do what we do best. Everyone will benefit—the species, the ecosystem, and the rural communities.

Thank you again for hearing my testimony. I look forward to answering any questions.

[The prepared statement of Mr. Hansen follows:]



Niels Hansen
Secretary/Treasurer, Public Lands Council
Member, National Cattlemen's Beef Association

Niels is a third generation rancher from Rawlins Wyoming. The family ranch was started in the 1890's as a sheep and remount horse ranch. Over the years the family has had to change from raising horses to raising cattle and in 1984 made the final change from a cow/calf, sheep operation to a cow/calf/ yearling operation but the ranch continues to be totally family owned and operated.

Working cooperatively with the University of Wyoming and the BLM, Niels has been a leader in developing and advocating for Cooperative Rangeland Monitoring. With over 20 years of monitoring data from the family ranch, he has shown the benefits of good land and livestock management for the land, the business, and the community.

Niels has served on a number of boards and committees at the state and local level including serving as an officer and member of the Christ Lutheran Church, the Rawlins/Carbon County Airport Board, and the Rawlins Search and Rescue where he uses his private pilot's license. He has served as the Chairman of the Rawlins and the Wyoming State Grazing Board. He was on the founding board and served 10 years on the Wyoming Animal Damage Management Board working to reduce conflicts with wild and domestic animals and the public. Niels served as the Chairman of the Wyoming Stock Growers Association (WSGA) Federal Lands committee through the Department of Interior Reform 94 effort and also Chaired the WSGA Wildlife committee. He has been a long time member of the WSGA Board of Directors and served one term as the Region 5 Vice-President. Niels will complete his term as President of the Wyoming Stock Growers in June.

In 2000 the ranch received the BLM Rangeland Management Stewardship Award. In 2001 they were named the Little Snake River Conservation District Cooperator of the Year award recipient and in 2004 was co-winner of the Wyoming Stock Growers Association Stewardship Award. Niels won the Wyoming Department of Agriculture – Excellence in Agriculture Award in 2007 and was inducted into the Wyoming Agriculture Hall of Fame in 2011.

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Testimony

on behalf of the

National Cattlemen's Beef Association, Public Lands Council

with regards to

"The Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities"

submitted to the

United States Senate
Committee on Environment and Public Works

John Barrasso, Chairman

submitted by

Niels Hansen
PH Livestock
Member
National Cattlemen's Beef Association, Public Lands Council

February 7, 2018
Washington, DC

National Cattlemen's
Beef Association

Good morning, my name is Niels Hansen. I'm a third generation rancher from Rawlins, Wyoming. The family ranch was started in the 1890s as a sheep and remount horse ranch. Over the years my family changed from raising horses to raising cattle and in 1984 made the final change from a cow/calf, sheep operation to a cow/calf/ yearling operation, and the ranch continues to be totally family owned and operated.

I am the immediate past president of the Wyoming Stock Growers Association, the current Secretary/Treasurer for the National Public Lands Council and a past Chairman of the Wyoming State Grazing Board. I'm testifying before you today representing family ranchers throughout the country operating on both private and public lands, all of whom have a stake in protecting the environment in which they live and work. Thank you Chairman Barrasso and Ranking Member Carper for allowing me to testify today on the impact of federal regulations and policies on American farming and ranching communities.

U.S. ranchers own and manage considerably more land than any other segment of agriculture— or any other industry for that matter. Ranchers graze cattle and sheep on approximately 666.4 million acres of the approximately 2 billion acres of the U.S. land mass. In addition, the acreage used to grow hay, feed grains, and food grains add millions more acres of land under cattlemen's stewardship. Some of the biggest challenges and threats to our industry come from urban encroachment, natural disasters, and government overreach. Since our livelihood is made on the land, through the utilization of our natural resources, protecting the land not only makes good environmental sense; it is fundamental for our industry to remain strong. Cattle producers pride themselves on being good stewards of our country's natural resources. We maintain open spaces, healthy rangelands, provide wildlife habitat and feed the world. Despite these critical contributions, our ability to effectively steward these resources is all too often hampered by excessive federal regulations like the ones we are discussing today.

When we talk of overly-burdensome regulations, we always need to talk about the Environmental Protection Agency (EPA). The 2015 Waters of the United States (or "WOTUS") Rule continues to be a top concern for cattle producers as long as it remains on the books. I am extremely concerned about the devastating impact this rule could have – not only on my own ranch, but on cattle operations across the United States. As a livestock producer, the 2015 WOTUS Rule has the potential to negatively affect every aspect of my operation by placing the regulation of every tributary, stream, pond, and dry streambed in the hands of the federal government, rather the states and localities that understand Wyoming's unique water issues. The overly broad standards of the 2015 WOTUS definition, combined with its seriously ambiguous language create more questions than answers. I look forward to the rescission and replacement of the 2015 WOTUS Rule under Administrator Scott Pruitt. Just last week, the EPA under Mr. Pruitt's leadership issued the WOTUS "delay rule" which gives the Agencies breathing room to repeal and replace without concern for the 2015 Rule becoming effective law for two years. Any definition of "waters of the United States" should allow me to determine, without spending thousands of dollars on consultants, engineers, and attorneys, whether I have a federally regulated waterbody on my land.

While WOTUS is a significant concern for American cattle producers, it is just the tip of the iceberg for environmental regulations that impact our industry. Another pending requirement is CERCLA and EPCRA reporting, which will require farmers and ranchers to report manure odors

to the government for emergency response coordination. Let me say that again because the absurd bears repeating– the CERCLA and EPCRA reporting requirements force farmers and ranchers to report manure odors to the government so the government can coordinate an emergency response to the manure odors.

It shouldn't need to be said, but Congress never intended these laws to govern everyday farm and ranch activity. In 2008, the EPA exempted most livestock operations from these reporting requirements. This exemption was put in place by the Bush W. Administration and defended in court by the Obama Administration for eight years. However, in April 2017, environmental activist groups won their lawsuit, eliminating these exemptions for agriculture. When the mandate issues, nearly 200,000 farmers and ranchers will be on the hook to report low-level livestock manure odors to the government. To clarify that Congress never intended for livestock producers to report their low-level manure smells to the National Response Center, a change in the law is necessary.

Importantly, emergency responders see no value in receiving continuous release reports from livestock operations. Obtaining this information provides no benefit, and does not allow responders to be more prepared or safer in an emergency situation. In fact, these reports have the opposite effect - inhibiting responders' ability to do their job effectively and limiting vital resources. The sudden influx of agricultural reports will significantly hinder emergency response coordination and response capability. The National Association of SARA Title III Program Officials, which represents state and local emergency response commissions, notes that continuous release reports "are of no value to [Local Emergency Planning Committees] and first responders" and that the reports "are generally ignored because they do not relate to any particular event." The U.S. Coast Guard stated that early calls from farmers have "increased [initial notifications] from approximately 100-150 calls per day (not associated with air releases from farms) to over 1,000 phone calls per day." This influx has negatively impacted the Coast Guard's ability to coordinate responses for *true* emergencies. The Coast Guard further indicated the abundance of farm calls meant that "wait times have been up to two hours for calls, many of which require immediate attention". CERCLA and EPCRA were intended to focus on significant events like spills and explosions, not routine emissions from farms and ranches. As you can see, these reporting requirements have already begun to hurt responders' ability to do their job to protect the public health and environment. When the reporting mandate issues, the floodgates will open, crippling America's first line of hazardous emergency defense.

Information related to farm and residence location information must be protected. Unfortunately, the federal agencies handling it have an established record of misuse and blatant disregard for privacy laws. Many of the families who manage livestock operations live on their farms, so any data required by the government, like the data required for CERCLA and EPCRA reporting, creates a situation ripe for abuse. In addition to general information availability concerns, cattle producers also face significant risk of trespass and property damage. The widespread collection and dissemination of farm information by the government will put the privacy of producers and safety of our food system at risk, as individuals will have unfettered access to farm location data. Additionally, government agencies should not use aerial surveillance, by manned or unmanned aircraft, to conduct environmental enforcement actions. These type of governmental activities, simply put, further engender distrust between farmers and the federal government and put our farmers and ranchers at risk. Technological progress necessitates the

progression of the law, to ensure that farmers and ranchers' privacy is protected from drone use by both public and private parties.

Another regulation is the Spill Prevention, Control, and Countermeasure (or "SPCC") rule for farms, which requires farmers to develop and certify a control plan and install secondary containment structures for oil storage. This is a regulation that originally applied to oil refineries that now applies to farms and ranches. While the original scope of the law is well-intended, these requirements create an undue burden on farmers and ranchers, who are located in the most remote parts of the country and need oil storage to power our farm equipment. Senator Fischer was instrumental in providing much-needed regulatory relief for farmers by championing language in the 2016 WIIN Act. But more can be done to reduce this unnecessary burden for our nation's farmers and ranchers.

Cattle producers throughout the country continue to suffer the brunt of regulatory and economic uncertainty due to the abuse of the Endangered Species Act. Simply put, the Endangered Species Act is broken. Years of abusive litigation by radical environmental groups have taken a toll, and the result is a system badly in need of modernization. Today more than two thousand species throughout the world are listed as either Threatened or Endangered, with new petitions stacking up by the hundreds due to groups that have set up "petition assembly lines" to churn out new filings by the dozen. When the Fish and Wildlife Service fails to respond to this avalanche of procedural paperwork, the groups sue, tying up the court system and sapping the agency of money that should be used for species recovery and delisting efforts. Similar legal challenges hamper the process at every turn, particularly regarding the delisting process. In the current environment, it's almost a foregone conclusion that even the most scientifically sound delisting proposal – for a species that has far surpassed recovery goals - will immediately draw legal challenges drawing the process out needlessly.

Despite the crippling impacts to our industry, it is our position that modernization of the Endangered Species Act must be addressed in a bipartisan manner. It is in this spirit of bipartisan problem-solving that PLC and NCBA participated heavily in the Western Governor's ESA Initiative led by Wyoming Governor Matt Mead. This multi-year effort included stakeholders from across the spectrum and resulted in a set of commonsense recommendations to this body last year that were approved by all but one of the sitting western governors. These recommendations truly represent a path forward on ESA and I sincerely hope this body incorporates them into their efforts on this critical issue.

Another equally important aspect to restoring science and sound policy-making to the forefront in environmental regulation are the Equal Access to Justice Act (EAJA) and the ESA Judgement Fund. These tools were created to give Americans the ability to pursue litigation against their government without fear of financial ruin. They were not created to serve as bank accounts for activist groups, yet that's how they are being used. Every time the FWS settles a lawsuit or enters a settlement agreement like the infamous 2011 "mega-settlement" with the Center for Biological Diversity and WildEarth Guardians, these "factory litigants" receive a windfall profit, which only reinforces their action and encourages more abuse. Recently, an activist law group in Idaho called "Advocates for the West" claimed that a full third of their 2016 annual budget came from legal awards and judgments. Taxpayer funded judicial activism was not what the

creators of these tools intended. Congress must act to end this perverse incentive-based system and ensure that these funds are available to our veterans, social security recipients, and others in real need.

A big point I'd like you to take away from this hearing is that voluntary conservation really works for ranchers and the environment. A one-size fits all approach that accompanies top-down regulation does not work in my industry. Mandatory rules and requirements make it harder for ranchers to utilize the unique conservation practices that help their individual operations thrive. I believe that economic activity and conservation go hand in hand and we are always looking for new, innovative ways to provide tangible benefits to the environment, and help to improve our ranching lands.

Ranchers represent the single greatest opportunity for real conservation benefit in the country and I conclude today with a plea on behalf of cattle and sheep producers across the country. Turn us loose. By freeing our industry from overly burdensome federal regulations and allowing us to provide the kind of stewardship and ecosystem services only we can, you will do more for healthy ecosystems and environments than top down restrictions from Washington ever can.

Thank you, I look forward to responding to any questions the committee may have.

Senator BARRASSO. Well, thank you so much for traveling here from Wyoming, and thanks for that excellent testimony. We appreciate it.

Mr. Duvall.

STATEMENT OF ZIPPY DUVALL, PRESIDENT, AMERICAN FARM BUREAU FEDERATION

Mr. DUVALL. Good morning, Chairman Barrasso, Ranking Member Carper, and members of the Committee. I appreciate the opportunity to come talk to you about real world impact on overregulation of farmers and ranchers.

My name is Zippy Duvall, and I am a beef and poultry farmer in Georgia. My son is at home right now; he is fourth generation, and also providing large animal veterinary medicine in our community.

I was elected President of the American Farm Bureau 2 years ago, and I visited farms in all 50 States since I have become President, and I talked to them about the things that keep them awake at night. The two issues that have come up at almost every farm that I have visited were the lack of adequate legal supply of labor and the burden of overregulation on their farms.

Regulatory process today is a product of decades of administrative and judicial decisions without much effort to integrate these decisions into a system that makes sense to all of us. Farmers and ranchers have shared their stories about the impact of regulations on their lives and their farms as I visit them.

In West Virginia, a poultry farmer who operates one of the cleanest farms that we have ever seen is spending tens of thousands of dollars on legal bills to defend their farm in court against EPA's misinterpretation of the Clean Water Act.

Federal officers, without any authority from Congress and without public notice, have used what amounts to extortion against ranchers in Utah to force them to hand over their private water rights as a condition of getting Federal grazing permits.

The Endangered Species Act has not been successful in recovering listed species; only 50 species have been recovered out of 1,661 species listed in the past 45 years. That is a 3 percent success rate. Eleven species have gone extinct while under this Federal protection. Meanwhile, the ESA has made it harder for farmers and ranchers to use their land and protect their livestock.

And last, but not least, the EPA, under provisions of the previous Administration, finalized the Waters of the U.S. rule that epitomizes the failure of our current regulatory system. The law that governs this process, the Administrative Procedure Act, is more than 70 years old and is way overdue for reform, especially when you consider how social media can shape public input.

Finally, Mr. Chairman, I have met farmers and ranchers who are not sure that they want to encourage their children to remain on the farm. And I remind you the average age of the American farmer is 58 years old. A generation of farmers and ranchers will be hanging up their hats within a few years, and we need to ask ourselves who is going to be willing to step up and take the place to grow the food for our tables in America and around the world.

As committed as young people are, like my son, Zeb, who are farming and ranching, they cannot continue if the over-regulatory burdens continue to grow. Farm income is down about 50 percent compared to 5 years ago, but I assure you the regulatory costs have not gone down any. These facts would give pause to even the most dedicated farmer and rancher around this country.

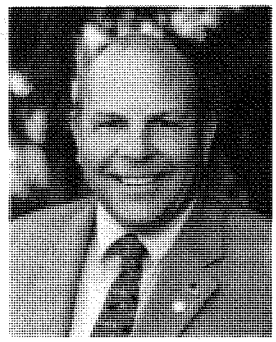
I would like to close with a quote from a statesman from my home State, President Jimmy Carter. He signed an executive order in March 1978 that states, "Regulations should not impose unnecessary burdens on the economy, on individuals, on public and private organizations, or on State and local governments. Regulations should be developed through a process which ensures that compliance costs, paperwork, and other burdens on the public are minimized."

And then there is President Trump's executive order of a year ago that requires agencies to repeal two rules for every one rule that they issue. And in signing that executive order, the President said, "Every regulation should have to pass a simple test: Does this make life better or safer for American workers and consumers?"

This is not a partisan issue. This is about allowing our farmers and businesses to be productive. It is about a goal that I believe we all share, a regulatory process that is credible, one that we can get behind, instead of having to fight against.

Thank you, Mr. Chairman, and I am glad to answer any questions that you and your colleagues have.

[The prepared statement of Mr. Duvall follows:]



Bio – President Zippy Duvall

President of the American Farm Bureau Federation since January 2016, Zippy Duvall is a third-generation farmer from Georgia. In addition to a 400-head beef cow herd for which he grows his own hay, Duvall and his wife, Bonnie, also grow more than 750,000 broilers per year.

Prior to being elected AFBF president, Duvall served for nine years as president of the Georgia Farm Bureau. Duvall's long leadership history in his home state includes service on the Georgia Farm Bureau Young Farmers Committee and Georgia Farm Bureau board of directors.

He was also recognized with several state appointments, including then-Georgia Gov. Sonny Perdue's Agricultural Advisory Committee and the Georgia Development Authority. His many state honors include Georgia Dairy Family of the Year.

As GFB president, Duvall's service on the AFBF board of directors included roles on the Trade Advisory Committee, including several international trade missions, and on the Finance Committee.

In 2017, Duvall was honored by National 4-H Council as a founding luminary, an exclusive group of accomplished and influential 4-H alumni.

Duvall and his wife, Bonnie, have been married for more than 38 years, raised four children and now enjoy spending time with their five grandchildren. They attend New Hope Baptist Church in Greshamville, Georgia, where he serves as a deacon.

Statement of the American Farm Bureau Federation

TO THE UNITED STATES SENATE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

The Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities

February 7, 2018

Presented By:

Zippy Duvall
President
American Farm Bureau Federation

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Chairman Barrasso, Ranking Member Carper, and Members of the Committee, my name is Zippy Duvall and I am the President of the American Farm Bureau Federation. I am pleased to be here today to offer testimony on several issues of importance to farmers and ranchers across the country.

On behalf of the nearly 6 million Farm Bureau member families across the United States, I commend you for your leadership in providing oversight of federal environmental regulations and policies and appreciate the Committee's desire to understand the "real-world effects" of Federal regulations. Such a review is timely and, in our judgment, will permit policymakers to gain a greater appreciation for the very real effects Federal regulations have on farmers and ranchers, how farmers and ranchers respond to the demands of regulations and how those regulations affect agricultural producers in their efforts to produce food, fiber and fuel.

Since I was first elected as president of the American Farm Bureau Federation two years ago, I have visited with farmers and ranchers in all 50 states to hear firsthand "what keeps them up at night" and what their national Voice of Agriculture, Farm Bureau, can do to help them be more productive and profitable—to sustain their farms for the next generation and sustain our nation's food supply. Two concerns have come up on almost every farm I have visited: 1) the lack of an adequate, legal supply of farm workers, and 2) the burden of complying with a web of often overlapping and conflicting federal regulations.

I have met farmers and ranchers who are not sure if they should encourage their children to remain on the farm, because they are not sure the farm will sustain another generation if these problems continue to get worse. I would remind the members of the Committee that the average age of the American farmer is 58. A generation of farmers and ranchers will be hanging up their hats within the next few years. Who will take their place and work to keep food on our tables? I maintain hope that the next generation of farmers and ranchers will step up to the challenge. Technological innovations and long-term growth in food demand make this an exciting time to be involved in agriculture. Many young people are excited to carry on a tradition of farming and ranching that has been in their family for decades if not centuries. My own son, Zeb, is taking on more and more of the daily tasks of running our family farm in Greshamville, Georgia, the same as I took over from my dad many years ago. But as committed as these young people are to the farming and ranching life, they cannot continue if the regulatory burden continues to grow. Already, farm income is reduced about 50 percent compared to five years ago, but I assure you that regulatory costs have not gone down. These facts would give pause to even the most dedicated young farmer or rancher.

So I commend you for holding today's hearing. The Committee could not have chosen a more appropriate time to review the impact of regulations on agriculture.

Farmers and ranchers today are faced with an increasing array of regulatory demands and requirements that appear to be unprecedented in scope.

This topic could generate a response that could run to thousands of words. While we have attempted to cover a range of regulations that create real costs and substantive burdens to our members, the examples we cite should in no way be considered an exhaustive list. Federal regulations – and the state and local regulations that often flow from them – permeate virtually every phase of agricultural production. It probably would be the work of a lifetime to compile all of the implications of Federal rules.

AFBF policy speaks to both the regulatory process and specific regulations. As a general observation, our members believe that Federal regulations should respect property rights; be based on sound scientific data; be flexible enough to recognize varying local conditions; be transparent; and include an estimate of the costs and benefits associated with public and private sector compliance prior to being promulgated.

CERCLA / EPCRA

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted to provide for cleanup of the worst industrial chemical and toxic waste dumps and spills, such as oil spills and chemical tank explosions. CERCLA has two primary purposes: to give the federal government tools necessary for prompt response to problems resulting from hazardous waste disposal into water and soil, and to hold polluters financially responsible for cleanup. The Emergency Planning and Community Right-to-Know Act (EPCRA) requires parties that emit hazardous chemicals to submit reports to their local emergency planning offices, thus allowing local communities to better plan for chemical emergencies.

In 2008, the EPA finalized a rule to exempt all agricultural operations from CERCLA reporting and small operations from EPCRA reporting requirements, recognizing that low-level continuous emissions of ammonia and hydrogen sulfide from livestock are not "releases" that Congress intended to regulate. When the rule was challenged in 2009, the Obama administration spent eight years defending this Bush-era regulation. In defending the lawsuit, the Obama EPA argued that CERCLA and EPCRA language does not explicitly exempt farms because Congress never believed that the continuous emissions of agricultural operations would fall into the realm of regulation. However, in April 2017, the D.C. Circuit Court of Appeals issued a decision vacating EPA's 2008 exemption, concluding that the exemption violated the statutes.

Not only does this court decision have the potential to require nearly 200,000 farms and ranches to report their low-level emissions, but will also likely put our nation's environmental and public health at risk. Currently, Hazardous Substance release reports are taken by the National Response Center (NRC), run by the Coast Guard. This department has averaged 28,351 reports per year over the last eight years. When farms from across the nation must suddenly report their low-level emissions, these reports from over 200,000 agricultural operations will inundate the

NRC. This increase of over four times the average annual amount, in the weeks after the court's decision goes into effect, could prevent the Coast Guard from responding to actual hazardous waste emergencies, entirely defeating the primary purposes of CERCLA.

Importantly, emergency responders do not see value in the reporting from farms, and the influx of agricultural reports will hurt emergency response coordination. The National Association of SARA Title III Program Officials, which represents state and local emergency response commissions, notes the continuous reports "are of no value to [Local Emergency Planning Committees] and first responders" and that the reports "are generally ignored because they do not relate to any particular event." In addition, the Coast Guard and EPA have stated that these emission reports will serve no useful purpose in terms of the crisis and emergency response function of CERCLA and EPCRA. The massive volume of reports will impede the efforts of the Coast Guard, EPA, and state and local emergency responders. CERCLA and EPCRA were intended to focus on significant events like spills or explosions, not routine emissions from farms and ranches.

Following the D.C. Circuit Court of Appeals decision, the EPA's options are limited. EPA has provided reporting guidance to farmers and ranchers, but there is no scientific consensus on how to measure air emissions on individual farms, requiring many farmers to spend resources on consultants. These requirements not only require reporting by larger farms, but also small pastured cow-calf farms, ranchers grazing on federal lands and horse farms.

The court recently granted a stay for three months, providing additional time for the agency to further develop administrative guidance and streamlined reporting forms, but buying time does not change the ultimate outcome: thousands of farms and ranches across the nation will be forced to report their daily emissions to the EPA or face liability of up to nearly $54,000 per day.

Now, it is up to Congress to ensure that the EPA is not required to implement this overly burdensome court decision and open up hundreds of thousands of farms and ranches to activist lawsuits while potentially creating a database of sensitive private farmer information. The whole point of activists' dogged effort to require reporting is to create a federal database that makes it easier to harass farmers and ranchers.

Farmers and ranchers are looking to Congress to act swiftly to protect their privacy and their businesses from the financial strain and burden of these unnecessary reporting requirements on ordinary activities on their land.

Regulatory Reform

All Americans have a vested interest in a regulatory process that is open, transparent, grounded on facts and respectful of our system of federalism, and a process that faithfully reflects and implements the will of Congress and adheres to the separation of powers in the Constitution. Particularly in the field of environmental law, all affected stakeholders – businessmen and

women, farmers, environmentalists, agribusinesses small and large, university researchers, scientists, economists, taxpayers, lawmakers and state and Federal regulators – benefit from a process that is fair, generates support and respect from diverse viewpoints, and achieves policymakers' goals.

Most people would be surprised if they knew the extent to which farms and ranches of all sizes and types are affected by Federal laws and the regulations based on those laws. Rural agribusinesses, which provide much-needed economic activity and jobs in rural America, also are challenged on the regulatory front.

While farm bill programs such as crop insurance and conservation programs are most readily recognizable as affecting agriculture, producers confront numerous other regulatory challenges. A list that is by no means exhaustive includes lending and credit requirements, interpretations of the tax code, health care provisions, energy policy, labor and immigration laws, and environmental statutes ranging from air and water quality concerns to designations of critical habitat and other land uses. For farmers and ranchers, regulations don't just impact their livelihood. Unlike nearly any other economic enterprise, a farm is not simply a business; it's often a family's home.

When a government regulation affects the ability of a farmer to use his or her land, that regulatory impact "hits home" – not just figuratively but literally. That happens because the farm often *is* home and may have been passed down in the family for generations. If the regulatory demand is unreasonable or inscrutable, it can be frustrating. If it takes away an important crop protection tool for speculative or even arguable reasons, it can harm productivity or yield. If it costs the farmer money, he or she will face an abiding truth – farmers, far more often than not, are price takers, not price makers: with little ability to pass costs on to consumers, farmers often are forced to absorb increased regulatory costs. And when, under the rubric of "environmental compliance," the regulation actually conflicts with sound environmental methods the farmer is already practicing, regulations can be met with resistance and ultimately a lack of respect for the process itself.

We believe a fair, transparent, open and updated regulatory process will benefit not just farmers and ranchers: it will reinvigorate public respect for the important and critical role regulations must and do play while benefiting taxpayers, the environment, small businesses and people in all walks of life.

The regulatory process today is the product of decisions made over decades, often done without any effort to integrate those decisions into a coherent system. Such a system should assure stakeholders a fair outcome, further congressional intent, safeguard our environment, take into account modern social media, respect the role of the states, and reinforce public confidence in the integrity of the system. That is not the case today. Regulatory agencies, with judicial

approval, increasingly exercise legislative functions – and they are encroaching on judicial functions as well, creating an imbalance that needs correction.

Attached to today's testimony are two documents that outline in greater detail specific examples of regulatory burdens to American farmers and ranchers, and recommendations on how Congress and the Administration can improve the regulatory framework and strengthen the existing system to protect our environment and agricultural landscape, and to reinvigorate the American economy.[1] [2]

I would also like to encourage members of the Committee to lend their support to S. 951, the Regulatory Accountability Act, a bipartisan bill introduced by Senators Rob Portman of Ohio and Heidi Heitkamp of North Dakota. When this issue was before the Homeland Security and Government Affairs Committee last year, I met with both Senator Portman and Senator Heitkamp. Senator Portman adopted a number of changes brought forward by Senator Heitkamp, and Farm Bureau was pleased that the Committee approved this legislation last May.

Unfortunately, since then the bill has been awaiting broader bipartisan support. AFBF believes strongly that everyone – farmers, regulators, environmentalists, academics, scientists, consumers and the public in general – has a vested interest in a fair, transparent, open and accountable system. We believe S. 951 makes important improvements to the existing regulatory scheme and we hope members of the Committee will work with Senators Portman and Heitkamp to move this bill to the Senate floor.

Duplicative Regulatory Burdens

For nearly three decades, the application of pesticides to water was regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), not the Clean Water Act (CWA). A series of lawsuits, however, yielded a trio of 9th Circuit Court of Appeals decisions holding that pesticide applications also needed CWA National Pollutant Discharge Elimination System (NPDES) permits. To clear up the confusion, EPA promulgated a final regulation to clearly exempt certain applications of aquatic pesticides from the CWA's NPDES program. EPA's final rule was challenged and overturned in *National Cotton Council v. EPA*. This decision exposed farmers, ranchers, pesticide applicators and states to CWA liability by subjecting them to the CWA's NPDES permitting program.

The general permits are now in place for over 360,000 new permittees brought within the purview of EPA's NPDES program. This program carries significant regulatory and administrative burdens for states and the regulated community beyond merely developing and then issuing permits. It goes without saying that a meaningful environmental regulatory program is more than a paper exercise. It is not just a permit. EPA and states must provide technical and

[1] Regulatory Improvement and Reform: A priority for American Agriculture
[2] AFBF Letter to U.S. Environmental Protection Agency, May 15, 2017

compliance assistance, monitoring and, as needed, enforcement. These new permittees do not bring with them additional federal or state funding.

There are three fundamental questions each member should ask. First, are FIFRA and CWA regulations duplicative? Second, in light of FIFRA's rigorous scientific process for labeling and permitting the sale of pesticides, are duplicative permits the appropriate way to manage pesticide applications in or near water? And third, is this costly duplication necessary or does it provide any additional environmental benefit ? Your answer to all three questions should be NO. Never, in more than 40 years of FIFRA or the CWA, has the federal government required a permit to apply pesticides for control of pests such as mosquitoes, forest canopy insects, algae, or invasive aquatic weeds and animals, such as Zebra mussels, when pesticides are properly applied "to, over or near" waters of the U.S.

Lastly, state water quality agencies repeatedly have testified that these permits provide no additional environmental benefits, that they simply duplicate other regulations and impose an unwarranted resource burden on their budgets.

Waters of the United States (WOTUS)

The 2015 WOTUS rule is a disaster and is even broader than EPA's expansive proposed rule. There is no doubt that the final rule creates even more risk and uncertainty for farmers, ranchers and others who depend on their ability to work the land.

For example, the definition of "tributary" was broadened significantly to include landscape features that may not even be visible to the human eye, or that existed historically but are no longer present. The 2015 rule even gave the federal agencies the power to conclusively identify WOTUS remotely using "desktop tools." There are many other significant problems including outright ambiguity and confusion with the exclusions.

While we acknowledge that the 2015 rule provides a list of exclusions, many of the exclusions are extremely narrow, or are so vague that they lend themselves to narrow agency interpretation. As an example – both puddles and dry land are excluded from the definition of WOTUS.

Puddles

One of the most fundamental problems with the 2015 rule is that it simply does not define the term "water." In an attempt to mock concerns over the ambiguity of the definition of puddle "the final rule adds an exclusion for puddles. A puddle is commonly considered a very small, shallow, and highly transitory pool of water that forms on pavement or uplands during or immediately after a rainstorm or similar precipitation event." Clean Water Rule: Definition of "Waters of the United States", 80 Fed. Reg. 37054, 37099 (Jun. 29, 2015). It may be comforting to some to know that bureaucrats will not be regulating small pools of water on pavement. But for farmers and ranchers, such a narrow exclusion is clear evidence of just how expansive the

2015 rule really is. Farm fields are not made of pavement, they are made of soil, and in many low areas that soil stays wet long enough to look like a puddle in the middle of a field. We learned after the rule was final that the Corps was concerned about the lack of definition for "water" and how difficult it would be to distinguish between non-wetland areas and puddles.(USACE Implementation Challenges Pre-Rule Documents, CWA "Waters of the U.S." Implementation Concerns, HQUSACE April 24)

Dry Land

The agencies declined to provide a definition of "dry land" in the regulation because they:

"determined that there was no agreed upon definition given geographic and regional variability." (Final Rule at 173)

However, the preamble claims that the term is "well understood based on the more than 30 years of practice and implementation" and further states that "dry land" "refers to areas of the geographic landscape that are not water features such as streams, rivers, wetlands, lakes, ponds, *and the like*." (Final Rule at 173)

Based on the broad and confusing preamble explanation of what are "waters," there will be an equal amount of confusion over the definition of "puddle" and "dry land."

Farm Bureau is looking forward to working with EPA to either revise or repeal the 2015 rule and replace it with a common sense definition that protects clean water but provides clear understandable rules.

The Endangered Species Act

The Endangered Species Act (ESA) provides a set of protections for species that have been listed as endangered or threatened and is administered by the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS). Originally enacted in 1973, Congress envisioned a law that would protect species believed to be on the brink of extinction. When the law was enacted, there were 109 species listed for protection. Today, there are 1,661 domestic species on the list, with 29 species considered as "candidates" for listing. Unfortunately, the ESA has failed at recovering and delisting species since its inception. Less than 2 percent of all listed species have been removed from ESA protection since 1973, and many of those are due to extinction or "data error."

The Endangered Species Act (ESA) is one of the most far-reaching environmental statutes ever passed. It has been interpreted to put the interests of species above those of people, and through its prohibitions against "taking" of species it can restrict a wide range of human activity in areas where species exist or may possibly exist. The ESA can be devastating for a landowner – and the extent of the problem can be large when it is noted that 70% of all listed species occur on private lands.

The ESA is a litigation-driven model that rewards those who use the courtroom at the expense of those who practice positive conservation efforts. Sue-and-settle tactics employed by some environmental groups have required the government to make listing decisions on hundreds of new species. These plaintiffs have been rewarded for their efforts by taxpayer-funded reimbursements for their legal bills.

While the ESA has had devastating impacts on many segments of our society, its impacts fall more unfairly on farmers and ranchers. One reason for this is that farmers and ranchers own most of the land where plant and animal species are found. Most farmland and ranchland is open, unpaved and relatively undeveloped, so that it provides actual or potential habitat for listed plants and animals. Often farm or ranch practices enhance habitat, thereby attracting endangered or threatened species.

Unlike in other industries, farmers' and ranchers' land is the principal asset they use in their business. ESA regulatory restrictions are especially harsh for farmers and ranchers because they prevent them from making productive use of their primary business asset. Also unlike in most other industries, farm and ranch families typically live on the land that they work. Regulations imposed by the ESA adversely impact farm and ranch quality of life.

Despite the fact that the ESA was enacted to promote the public good, farmers and ranchers bear the brunt of providing food and habitat for listed species through restrictions imposed by the ESA. Society expects that listed species be saved and their habitats protected, but the costs for doing this fall to the landowner upon whose property a species is found.

The scope and reach of the ESA are far more expansive today and cover situations not contemplated when the law was enacted. Both statutory and regulatory improvements would help to serve the people most affected by implementation of the law's provisions. The ESA should provide a carrot instead of the regulatory stick it currently wields.

For example, the Obama Administration promulgated two regulations by the Fish and Wildlife Service governing the process for designating critical habitat under the ESA and the definition of "adverse modification" as applied in ESA, Section 7 consultations. The proposed rules depart from the limited scope and purpose intended by Congress by 1) allowing the agency to designate critical habitat based on speculative conditions, including designation of areas that do not have physical and biological features needed by the species;
2) allowing for broader designation of unoccupied areas as critical habitat; and 3) providing unfettered discretion to establish the scale of critical habitat—extending to landscape or watershed-based designations that do not look to whether all areas within the designation actually meet the criteria for designation as critical habitat. These regulatory changes grossly expanded the scope of the ESA and provide the Service greater reach in critical habitat land designations that can have a significant negative impact on farmers' and ranchers' ability to maintain active farm and ranch operations on both private and Federal lands.

Privacy & Use of Unmanned Aircraft Systems

Farm Bureau supports the use of unmanned aircraft systems (UAS) as another tool for farmers and ranchers to use in managing their crops and livestock and making important business decisions. A farmer faces daily challenges that can affect the farmer's yield, environmental conditions on the farmer's property and, ultimately, the economic viability of the farm. Farmers rely on accurate data to make these decisions, and the use of UAS adds a valuable and accurate tool for the farmer in making optimal decisions to maximize productivity.

America's farmers and ranchers embrace technology that allows their farming businesses to be more efficient, economical and environmentally friendly. American agriculture continues to evolve. Farmers and ranchers use precision-agriculture techniques to determine the amount of fertilizer they need to purchase and apply to the field, the amount of water needed to sustain the crop, and the amount and type of herbicides or pesticides they may need to apply. These are only a few examples of the business decisions a farmer makes on a daily basis to achieve optimal yield, lower environmental impact and maximize profits.

UAS provides detailed scouting information on weed emergence, insect infestations and potential nutrient shortages. This valuable information allows the farmer to catch threats before they develop into significant and catastrophic problems.

The imagery from UAS also allows the farmer to spot-treat sections of fields as opposed to watering or spraying the entire field. Images from UAS allow the farmer to identify the specific location where a specific treatment – be it fertilizer, water, pesticides or herbicides – is necessary. By spot-treating threats to the crop, the farmer not only lowers the cost of treatment but also has the potential of lowering the environmental impact by minimizing application.

While Farm Bureau supports this new technology and the potential opportunities it offers for farmers and ranchers, Farm Bureau is also concerned about the data collected from UAS and the privacy and security of that data.

Even if an individual operator follows all the applicable rules, regulations, and best management practices in his or her farming operation, there is still concern that regulatory agencies or one of the numerous environmental organizations that unnecessarily target agriculture might gain access to individual farm data through subpoenas. While a farmer's pesticide or biotech seed usage may be a necessary, appropriate and accepted practice, it also may be politically unpopular with certain groups.

The biggest fear that farmers face in data collection is government accessing their data and using it against them for regulatory action.

Questions abound within the agricultural community about "who owns and controls the data." If a farmer contracts with a company authorized to fly UAS, does the farmer own all the data from that UAS or is it shared by both the contractor and the farmer? In the case of a farm on rented ground, does the tenant or the landlord own the data?

Farm Bureau supports the use of UAS and believes it will be an important addition to farmers' management toolbox, but it is critical that the data remain under the ownership and control of the farmer and is not available to government agencies or others without permission.

Conclusion

We at the American Farm Bureau Federation appreciate the Committee's willingness to listen to our concerns. The need for continued oversight and reform of the nation's environmental regulatory framework cannot be overstated. Farmers, ranchers, and small businesses rely on regulatory certainty and the constitutional protection of private property rights to make sound business decisions. We look forward to continuing to work with you and the Senate Environment and Public Works Committee in pursuing solutions to these important challenges.

ADDENDUM

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April 16, 2015

The Honorable Ron Johnson
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The Honorable Thomas R. Carper
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The Honorable James Lankford
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The Honorable Heidi Heitkamp
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Dear Chairman Johnson, Chairman Lankford, and Senators Carper and Heitkamp:

Thank you for your letter on March 18 in connection with your review of the impact of Federal regulations. American Farm Bureau Federation (AFBF) applauds your bipartisan effort. In particular, we commend your desire to understand the "real-world effects" of Federal regulations. Such a review is timely and, in our judgment, will permit policymakers to gain a greater appreciation for the very real effects Federal regulations have on farmers and ranchers, how farmers and ranchers respond to the demands of regulations and how those regulations affect agricultural producers in their efforts to produce food, fiber and fuel.

By way of assistance to your effort, I am including as an attachment with this letter a copy of material AFBF supplied to the House Committee on Government Reform and Oversight in 2011; at that time, the House Committee was engaged in a similar effort to your own and we were pleased to participate in that process as well. Federal regulations have an undeniable, long-lasting impact on farmers and ranchers and we support efforts to bring greater sense, flexibility and balance to develop a more rational approach to the Federal rulemaking process.

In our view, the Committee could not have chosen a more appropriate time to initiate such a review. Farmers and ranchers today are faced with an increasing array of regulatory demands and requirements that appear to be unprecedented in scope. We note that your letter asks us to "identify concerns with the regulatory process" as well as providing "a description of how specific rules affect" farmers and ranchers, as well as "rules that...merit attention by the Committee, along with a description of how the rules affect" our members. You also invite scrutiny of "older regulations that may warrant modification or even revocation." We are pleased to respond to this inquiry, and stand ready to elaborate on any of the topics raised in this response with staff of the Committees. It appears that the request falls largely into two areas: process-related matters and substantive requirements of regulatory rules. We have attempted to organize our response along those lines.

Clearly this is a topic that could generate a response that could run to thousands of words. While we have attempted to cover a range of regulations that create real costs and substantive burdens to our members, the examples we cite should in no way be considered an exhaustive list. Federal regulations – as well as the state and local regulations that often flow from them – permeate virtually every phase of agricultural production. It would probably be the work of a lifetime to annotate all of the implications of Federal rules.

AFBF policy speaks to specific issues related to the regulatory process, as well as to specific regulations. As a general observation, our members believe that Federal regulations should respect property rights; be based on sound scientific data; be flexible enough to recognize varying local conditions; be transparent; and include an estimate of the costs and benefits associated with public and private sector compliance prior to being promulgated.

Concerns with the Regulatory Process

Recent proposals have underscored how critical it is to reform and improve the rulemaking process. Above all, it is paramount that agencies

- be transparent in their proceedings;
- rely upon science that can be replicated and that is peer-reviewed;
- not assume authority not granted by Congress;
- provide ample opportunity for public and stakeholder input;
- not abuse the regulatory process; and
- adhere to judicial rulings that put clear limits on an agency's authority.

We cite below several instances where we believe Federal agencies have either abused the regulatory process or ignored Congressional intent in imposing regulatory obligations on farmers and ranchers. This list is illustrative, not exhaustive.

A. Water rights[1]

The U.S. Forest Service is engaged in an ongoing effort to encroach upon long-standing state water rights and expand its authority over water rights that – by tradition, law and court rulings – come under state authority. Beginning with an effort that was declared illegal and invalidated by a U.S. District Court – the USFS has sought to revise portions of the USFS Handbook, by which it would require permittees to surrender to the Federal government lawfully acquired state water rights in order to maintain access to Federal special use permits. While this effort has so far been targeted primarily at ski resorts, it has also been used to compromise the rights of cattlemen who graze on public lands in the West. Perhaps of most concern is that the agency has attempted to do this through directives and modifications to its handbook – not through the formal notice-and-comment procedure, which would provide affected stakeholders the opportunity to review, evaluate and comment on any changes that

[1] Legislation addressing this issue passed the House of Representatives in the 113th Congress but was not taken up by the Senate. We understand this legislation will soon be reintroduced by Rep. Tipton in the House and by Senator Barrasso in the Senate.

could affect their rights.

B. Agricultural exemptions under the Clean Water Act

Last year, the EPA and the Army Corps of Engineers promulgated – effective immediately – an 'interpretive rule' whereby the agencies sought to limit rights of farmers and ranchers that were granted by Congress for normal agricultural activities. This "interpretive rule" (which, in the eyes of many legal experts, was in fact a regulatory rule that should have been subject to notice and comment) was so controversial that it was repealed by Congress last December.

C. Wetland delineations

Wetlands occur frequently on farmland and ranchland. Traditionally, wetlands have been determined by the presence of three criteria: hydrology (inundation or near-surface water for a set amount of time); hydric soils; and hydric vegetation. While disputes over the Army Corps of Engineers wetland manual are literally decades old, we have witnessed occasions in which Federal bureaucrats have sought, on their own, to modify the wetland characteristics, going from the traditional three-criteria evaluation to two or even one. Such a regulatory step has the effect of immediately imposing upon the landowner more restrictive requirements; potentially implicating Federal programs such as Sodbuster or Swampbuster; and potentially undermining the value of the land.

D. National Environmental Policy Act (NEPA)

As more than 40 years of experience with implementing NEPA have demonstrated, overly broad NEPA reviews can add significant and unreasonable costs and lengthy delays to projects and can, in turn, challenge the viability of projects that grow the economy, promote favorable environmental outcomes and further energy development at home. It is imperative that government programs impacting economic development in the U.S. – including NEPA - are implemented in a manner that supports and does not hinder growth.

The Council on Environmental Quality (CEQ) proposed Revised Draft Guidance for Federal Departments and Agencies Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews in December 2014. In group comments filed[2], concerns were raised that the guidance goes beyond the scope of NEPA and would impose additional burdens on permitting agencies and significant delays on project applicants.

E. Endangered Species Act (ESA)

The Endangered Species Act (ESA) is one of the most far-reaching environmental statutes ever passed. It has been interpreted to put the interests of species above those of people, and through its prohibitions against "taking" of species it can restrict a wide range of human activity in areas where species exist or may possibly exist. The ESA can be potentially devastating for a landowner – and the extent of the problem can be large when it is noted that 70% of all listed species occur on private lands.

[2] Please see attached NEPA comments

One of the most recent procedural problems occurred with the listing of the Northern Long-eared Bat. In publishing its species-specific 4(d) rule, the Fish and Wildlife Service has potentially called into question the legal activities of many farmers and ranchers. In its proposal last year, the agency was quite clear in noting that the bat's problems stem almost entirely from the prevalence of white-nose syndrome. But the FWS also mentioned pesticides as affecting the bat; yet when the Service published its 4(d) rule and exempted certain forestry and other activities, it made no mention whatsoever that normal, lawful pesticide applications would be covered by the provisions of the 4(d) rule. We are greatly concerned that the process the agency followed may subject farmers to potential legal liability – even when the activities in which they engage fully conform with the law.

A. Waters of the United States

The EPA and the Army Corps of Engineers are now engaged in a sweeping regulatory proposal that would redefine what constitutes a "water of the United States" (WOTUS), bringing with any such designation legal obligations and legal exposure to citizen lawsuits. While we deal with the substance of the proposed rule below, it is worth noting that the agency has received nearly 1 million comments on the proposal; of those, an estimated 20,000 or more of the filed comments were viewed as substantive – and of those substantive comments, over half opposed to the agencies' proposal. Yet the agency appears to be little concerned with those substantive concerns and has just sent its final proposal to OMB for final inter-agency review. This is all the more bewildering because the Office of Advocacy with the Small Business Administration (SBA) filed formal comments with the agencies stating that "Advocacy believes that EPA and the Corps have improperly certified the proposed rule under the Regulatory Flexibility Act (RFA) because it would have direct, significant effects on small businesses. Advocacy recommends that the agencies withdraw the rule and that the EPA conduct a Small Business Advocacy Review panel before proceeding any further with this rulemaking."[3] We find it astonishing that the agencies intend to move forward on a rule that has raised bipartisan concerns in Congress and among other Federal agencies, and which has met with opposition from over half the states. Perhaps more than any other proposal, this entire proceeding amply demonstrates how agencies can ignore stakeholder input and even simple fairness when they have set their sights on expanding their regulatory reach.

In our judgment, a thorough Congressional oversight review of EPA's conduct of this rulemaking is amply justified. We believe that, in many important respects, the agency has failed in its duty to conduct an impartial, fair rulemaking.

Substantive Regulatory Concerns

A. H-2A Regulations

The H-2A program permits agricultural producers who are unable to obtain domestic workers

[3] See the Office of Advocacy's letter at https://www.sba.gov/advocacy/1012014-definition-waters-united-states-under-clean-water-act.

the opportunity, under certain conditions, to obtain visas for foreign workers to come and perform work in the U.S. for a limited period of time. The genesis of the program dates to the 1950s, but its current statutory authorization stems from the Immigration Reform and Control Act of 1986. The statutory language is brief; the Department of Labor, however, has done everything in its power to make the program unusable by growers (see the attachment to the House Government Reform and Oversight Committee for one example). The program is inefficient, expensive, time-consuming and a hindrance to growers. DOL's abuse of its authority to administer the H-2A program alone would merit an investigation by your Committee.

B. EPA's Waters of the U.S. proposal

We discussed above procedural problems that have infected the EPA/Army Corps of Engineers proposal. Yet the substantive problems of the rule are even greater. Attached is a copy of an economic analysis of the WOTUS proposal prepared by David Sunding, Ph.D. It provides a detailed description of the impact this regulation will have on the regulated community.

C. EPA's proposal on ozone

EPA's proposal to tighten the National Ambient Air Quality Standards (NAAQS) for ozone has the potential to cause real and significant costs to farmers and ranchers and rural America while providing uncertain and unverified benefits. In comments filed both individually[4] and with a broader industry group[5], AFBF identified significant concerns about the impact lower ozone standards will have on agriculture, rural communities, and the overall economy. Despite over three decades of cleaner air, EPA is now proposing a new stringent standard that would bring vast swaths of the country into nonattainment. These new stringent standards have the potential for damaging economic consequences across the entire economy and would place serious restrictions on farmers, increasing input costs for items like electricity, fuel, fertilizer and equipment. Further, as ozone standards are ratcheted down closer to levels that exist naturally, more farmers will be forced to abide by restrictions on equipment use and land management, making it harder to stay in business. EPA's own estimates show that a new ozone rule could cost tens of billions of dollars per year and has the potential to be the most costly regulation in our nation's history.

D. EPA's proposal on greenhouse gases

EPA's Clean Power Plan and regulations for new power plants create important questions about the reliability and affordability of electricity across the country. Farming and ranching are energy-intensive businesses. Farmers and ranchers depend on reliable, affordable sources of energy to run their daily operations, including using tractors and operating dairy barns, poultry houses and irrigation pumps. For many farmers that compete in a global economy, energy represents a major input cost that can ultimately determine viability and prosperity. In

[4] Attach AFBF Comments
[5] Attach group Ozone Comments

comments[6] filed regarding EPA's GHG regulations, we raised serious concerns about the billions of dollars in cost on the U.S. economy that these regulations would impose while failing to meaningfully reduce CO_2 emissions on a global scale.

E. ESA

The Office of Management and Budget is currently reviewing two proposed regulations by the Fish and Wildlife Service governing the process for designating critical habitat under the ESA and the definition of "adverse modification" as applied in ESA, Section 7 consultations. The proposed rules depart from the limited scope and purpose intended by Congress by 1) allowing the agency to designate critical habitat based on speculative conditions, including designation of areas that do not have physical and biological features needed by the species; 2) allowing for broader designation of unoccupied areas as critical habitat; and (3) providing unfettered discretion to establish the scale of critical habitat—extending to landscape or watershed-based designations that do not look to whether all areas within the designation actually meet the criteria for designation as critical habitat. If finalized, these regulatory changes would grossly expand the scope of the ESA and provide the Service greater reach in critical habitat land designations that could have a significant negative impact on farmers' and ranchers' ability to maintain active farm and ranch operations on both private and Federal lands.

We would also urge the Committee to incorporate in its review consideration of legislative proposals that could address some of the above concerns. Such a review should include consideration of H.R. 185, the *Regulatory Accountability Act*; this legislation passed the House of Representatives on January 13 and is now pending before your Committee.

In closing, we commend the Committee for its work in this important area. We stand ready to work with you on substantive and procedural remedies that will alleviate the regulatory burden for farmers and ranchers.

Sincerely,

Dale W. Moore

Dale Moore
Executive Director
Public Policy

[6] Attach AFBF ESPS EGU Comments

Regulatory Improvement and Reform:
A priority for American Agriculture

RECOMMENDATION:

The undersigned agricultural organizations recommend that the new Administration and Congress make reform of the regulatory development process a top priority. The Administration should pledge to work with Congress in a bipartisan, bi-cameral fashion to craft a package of reforms that can be signed into law by the summer of 2018. The President should designate the Director of OMB and the Attorney General as the principal Administration officials charged with interfacing with Congress.

The bipartisan leadership of Congress should establish a working group to join with the Administration in crafting a bipartisan package of reforms that update, improve, strengthen and reform the existing regulatory process.

Agribusiness Council of Indiana Agricultural Retailers Association Agri-Mark, Inc.
American Farm Bureau Federation AmericanHort American Seed Trade Association
American Soybean Association American Sugar Alliance
American Sugar Cane League American Sugarbeet Growers Association
California Association of Winegrape Growers
California Specialty Crops Council CropLife America
Dairy Producers of New Mexico Dairy Producers of Utah Delta Council
Exotic Wildlife Association Federal Forest Resource Coalition The Fertilizer Institute
Idaho Dairymen's Association Michigan Agri-business Association Michigan Bean Shippers
Milk Producers Council Missouri Dairy Association National Agricultural Aviation Association
National Alliance of Forest Owners National Aquaculture Association
National Association of State Departments of Agriculture
National Association of Wheat Growers National Corn Growers Association
National Cotton Council National Council of Agricultural Employers
National Council of Farmer Cooperatives
National Grain and Feed Association National Milk Producers Federation
National Pork Producers Council National Potato Council National Sorghum Producers
Northeast Dairy Farmers Cooperatives Ohio AgriBusiness Association
Oregon Dairy Farmers Association
Society of American Florists South East Dairy Farmers Association
Southwest Council of Agribusiness St. Albans Cooperative Creamery, Inc.
United Fresh Produce Association U.S. Apple Association
USA Rice U.S. Cattlemen's Association
U.S. Rice Producers Association Upstate Niagara Cooperative, Inc
Western Peanut Growers Association Western United Dairymen

I. Overview

All Americans have a vested interest in a regulatory process that is open, transparent, grounded on facts, respectful of our system of Federalism, that faithfully reflects and implements the will of Congress and adheres to the separation of powers in the Constitution. Particularly in the field of environmental law, all affected stakeholders – businessmen and women, farmers, environmentalists, agribusinesses small and large, university researchers, scientists, economists, taxpayers, lawmakers and state and Federal regulators – benefit from a process that is fair, generates support and respect from diverse viewpoints, and achieves policymakers' goals.

Farmers and ranchers across the country are uniquely affected by Federal laws and the regulations based on those laws; rural agribusinesses also are challenged on the regulatory front. While farm bill programs such as crop insurance and conservation programs are most readily recognizable as affecting agriculture, producers confront numerous other regulatory challenges. A list that is by no means exclusive includes lending and credit requirements; interpretations of the tax code; health care provisions; energy policy; labor and immigration laws; environmental statutes ranging from air and water quality concerns to designations of critical habitat and other land uses. For farmers and ranchers, regulations don't just impact their livelihood. Unlike nearly any other economic enterprise, a farm is not simply a business: it's often a family's home. When a government regulation affects the ability of a farmer to use his or her land, that regulatory impact 'hits home' – not just figuratively but literally. That happens because the farm often *is* home and may have been passed down in the family for generations. If the regulatory demand is unreasonable or inscrutable, it can be frustrating. If it takes away an important crop protection tool for speculative or even arguable reasons, it can harm productivity or yield. If it costs the farmer money, he or she will face an abiding truth – farmers, far more often than not, are price takers, not price makers: with little ability to pass costs on to consumers, farmers are often forced to absorb increased regulatory costs. And when, under the rubric of 'environmental compliance,' the regulation actually conflicts with sound environmental methods the farmer is already practicing, the result can be met with resistance and ultimately a lack of respect for the process itself. We believe a fair, transparent, open and updated regulatory process will benefit not just farmers and ranchers: it will reinvigorate public respect for the important and critical role regulations must and do play while benefiting taxpayers, environmentalists, small businessmen and women and people in all walks of life.

II. The Current Situation

The regulatory process today is the product of decisions made over decades, often done without any effort to integrate those decisions into a coherent system. Such a system should

assure stakeholders a fair outcome, further congressional intent, safeguard our environment, take into account modern social media, respect the role of the states, and reinforce public confidence in the integrity of the system. That is not the case today. Regulatory agencies, with judicial approval, increasingly exercise legislative functions – and they are encroaching on judicial functions as well, creating an imbalance that needs correction. Consider that:

- The primary statutory authority governing the rulemaking process, the *Administrative Procedure Act* (APA), is over 70 years old and was enacted before many Federal regulatory agencies were even in existence. Although the law is little changed from what it was seven decades ago, statutes and programs that utilize the APA process have proliferated: the Clean Air Act; Superfund; the Energy Independence and Security Act of 2007; Highway bills; the Consumer Product Safety Act; the Clean Water Act; Swampbuster and Sodbuster; the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); the Endangered Species Act (ESA); the Food Quality Protection Act; the Food Safety Modernization Act, and many, many more. Consider:

  - EPA, under the new Clean Power Plan, is literally restructuring the nation's energy sector – and along with it much of our economy – through an APA rulemaking. The agency has done this even though Congress in 2009 failed to enact legislation to approve such profound changes. Thus, one agency has embarked on a sweeping program using a framework established nearly three-quarters of a century ago that was simply not designed to manage such profound policy changes. (This initiative of the agency, in fact, would likely not have occurred but for a 5-4 decision by the Supreme Court in 2007.)

- In the 1970's, Congress increasingly authorized the use of citizen lawsuits, particularly in environmental statutes. Nearly concurrently (i.e., *United States v. Students Challenging Regulatory Agency Procedures*, 412 U.S. 669 (1973)), the Supreme Court broadened the ability of parties to sue in Federal court. Those two steps significantly increased the number and range of policy decisions decided by the courts. Given the relatively few cases that are ultimately decided by the Supreme Court, many policies now are decided by a handful of judges on appellate courts or even single judges in federal district courts. Consider:

  - Perhaps the most litigated provision in the Clean Water Act is how to determine the scope of the term 'waters of the US.' Over the past 44 years, that single provision has been the subject of numerous lawsuits and ever-changing regulations and guidance documents (as well changes to the Army Corps of Engineers' wetlands manuals) – even though Congress itself has not altered the language it wrote in 1972. Indeed, in response to the U.S. Supreme Court decision in *Rapanos* (2006), environmental activists advocated for legislation to overturn the court's ruling and broaden the scope of the Clean Water Act; legislation was introduced in both the Senate and House to accomplish that goal. Those bills, however, met resistance from Democrats and Republicans alike and no proposal was even scheduled for debate on the floor of

either the House or Senate. Nevertheless, EPA proposed and finalized the new "WOTUS" rule that effectively ignored Congress and expanded Federal jurisdiction even though Congress had not done so. Within the last year, bipartisan majorities in both the House of Representatives and the Senate voted to reject EPA's interpretation of the law. Once again, however, the courts, not the people's elected representatives, will decide the outcome.

- Coupled with the expansion of litigation, the U.S. Supreme Court has expanded agencies' powers by entrenching the principle that when interpreting what laws and regulations mean, judges must give deference to agencies:

  - In *Chevron U.S.A. v. Natural Resources Defense Council* (1984), the Supreme Court required federal judges to defer to an agency's reasonable interpretation of a statute – even if the regulation differs from what the judge believes to be the best interpretation. This principle applies if the statute in question is within the agency's jurisdiction to administer; the statute is ambiguous on the point in question; and the agency's construction is reasonable.

  - In *Auer v. Robins* (1997), the Court again expanded agencies' authority. In that case, the Court held that it would give deference not only to an agency's interpretation of a statute but to an agency's interpretation of its own regulations as well.

  At another layer of regulation, agencies may often use handbooks and field manuals in guiding decisions that affect landowners; yet these guidance documents are not subject to public notice-and-comment, and they can even vary from region to region and often change on a whim. Yet, courts are increasingly deferring to those guidance documents and even to individual agency employee interpretations of those guidance documents. Given the breadth of deference afforded to agencies, they have a strong incentive to issue ambiguous rules and then ask courts for deference when the rules are challenged in court. Our nation's judges no longer play the role assigned them by the Constitution – to decide what the law actually means.

- With the expansion of citizen lawsuits, disbursements of public funds from the Judgment Fund have taken on increased significance. Additionally, in 1980 Congress enacted the *Equal Access to Justice Act*. The statute has the laudable goal of seeking to assure that no stakeholder is foreclosed from access to the court system; but its implementation has been unequal, even arguably unfair (see example below). Moreover, particularly for western states, there are increasing complaints that the EAJA has been used to pursue an activist agenda through the courts when such policies fail to win approval on Capitol Hill. This has often occurred in disputes over logging on public lands.

- Over the last several decades, economic and scientific models have played an increasingly important role in how regulatory agencies decide policy questions. Use of models *per se* is not wrong; they can be valuable tools. But models should not be relied upon exclusively, nor should model results be a substitute for hard facts and data when

the two conflict . President Obama noted the critical role science plays at the start of his Administration when he issued his Memorandum for the Heads of Executive Departments and Agencies on March 3, 2009. That memorandum, enunciating many aspects of the importance science plays in the rulemaking process, has generated bipartisan support. But some question how faithful agencies are to the policy; and in any event, if agencies depart from these science guidelines in rulemaking, aggrieved parties have little recourse and none in the courts.

- Some statutes, like the Clean Air Act, significantly limit whether or how agencies can consider costs when reaching policy decisions; other statutes, such as the Clean Water Act and FIFRA, allow either some weighing of costs-and-benefits or grant greater flexibility to agencies in making determinations. Yet even the Clean Air Act requires the agency to take into account the impact its regulations will have on jobs. Other statutes, like the Regulatory Flexibility Act and the Small Business Regulatory Fairness Act, are designed to assist small businesses in the regulatory process yet agencies too often find ways to circumvent their requirements. For example, the 'social cost of carbon' template is being used to 'quantify' certain economic benefits; there may be cases where such an approach is useful. But rulemakings with significant, extensive economic implications should rely if at all possible on quantifiable, real world data whenever it is available. Rulemakings should not devolve into a game of manipulated statistics or theoretic qualifications to justify preferred policy outcomes.

- Internal agency guidance is being developed to make fundamental changes in how regulations are implemented even when explicit authority from Congress is absent. In November 2015, the President issued a memorandum to EPA, the Department of Interior and other select agencies that it shall be their policy "to avoid and then minimize harmful effects to land, water, wildlife, and other ecological resources caused by land- or water-disturbing activities..." The agriculture community is attempting to learn how such a sweeping directive may affect the issuance of permits under the Clean Water Act, grazing permits under the Taylor Act, injurious wildlife listings under the Lacey Act and other programs where any activity requires Federal assent or permission. This memorandum raises fundamental legal, even constitutional, questions; foremost among them is to what extent, if any, agencies in the Executive Branch have the authority to direct, limit or even prohibit conduct in the absence of Congress granting them such authority.

III. The Current System Poses Challenges for Agriculture

Regulations have a direct impact on America's farms and ranches. But agricultural producers are affected uniquely: for the overwhelming majority, as stated earlier, their businesses are their homes. Thus, when a new or revised Federal regulation takes effect, more than likely it will affect how a grower can manage his or her land – what crops to grow, or where or how to grow them; how to manage them before or after harvest; how to house, feed or care for the livestock under their care; and – most significantly – how to make sure

that farming and ranching operations are sustainable and productive for their children, the extended family, and future generations. When the Constitution was ratified over two centuries ago, more than 90 percent of Americans lived on family farms. Today, fewer than 2 percent of Americans live on the farm. But American agriculture today – as it was 240 years ago – remains, at heart, a family enterprise.

Farmers and ranchers across the country have shared stories about the impact regulations have on their lives and businesses. Additionally, agricultural facilities like grain elevators and commodity processing facilities have been subjected to unreasonable, costly and lengthy battles over Federal rules. One of the realities of life in rural America is the 'mission creep' that increasingly brings farmers, ranchers and related agricultural businesses face-to-face with Federal regulators. Consider the following real-life examples:

(a) A West Virginia farmer was told by EPA that dust and feathers blown to the ground from her chicken growing operation constituted a violation of the Clean Water Act. It required tens of thousands of dollars for her to defend her farm in court (as well as intervention in the suit by the American Farm Bureau Federation). The court sided with her and rejected EPA's allegations and the agency's interpretation of the Clean Water Act. EPA subsequently ignored the decision and publicly stated its intent to go after more farmers for the same activity.

(b) A Washington state grower was told by the Department of Homeland Security that the farmer had to dismiss certain workers because the workers supplied improper documentation under the Immigration Act. Subsequently, the Department of Labor told the same farmer he had to *hire* the same workers because it was required by Federal law.

(c) A California farmer faces an enforcement action from the Army Corps of Engineers for violating the Clean Water Act. The agency alleges that the farmer created "mini mountain ranges" by plowing 4-7 inches deep in a wetland – even though Clean Water Act regulations explicitly state that plowing in a wetland is permitted.

(d) Idaho ranchers were forced to go to court to fight the Bureau of Land Management in an effort to protect their state water rights from takings by the federal government. The BLM had threatened the ranchers to sign over their water rights to the government or face a drawn out (and costly) legal battle. The ranchers won on every point of the lawsuit all the way to the Idaho Supreme Court, but only after incurring considerable expenses during the litigation. In the end, the court ruled that it did not have authority under EAJA to require the federal government to pay attorney fees – even though a court in another state reached the opposite conclusion. The rancher now faces litigation expenses of over $1 million because one court has ruled he cannot recover costs that other courts have said are reimbursable."

(e) Ranchers grazing livestock on public lands in Utah and other states are required to have Federal grazing permits for their activities. Frequently, they have separately acquired

water rights they hold that have been adjudicated under state law. Federal law and Supreme Court precedents reaffirm those rights. Yet Federal officials, without any authority from Congress and without public notice, have attempted to require those ranchers to share or hand over their private water rights to the Federal government as a condition of their permit.

(f) The US Department of Labor proposed an agricultural child labor regulation in 2012. The department subsequently withdrew the proposal after it was found that the Department's characterization of the family farm exemption in the proposal differed from its own statements in its Field Manual.

(g) Many specialty crops benefit from chlorpyrifos as an insecticide. EPA has proposed revoking tolerances for the product (effectively eliminating its use in agriculture). In doing so, EPA is relying in part on an epidemiological study. Although the agency has requested raw data from the study those requests have been rejected by the researchers. Yet EPA continues to employ the study despite the fact that the agency's own Science Advisory Panel has expressed concern with how EPA is using the study.

(h) EPA has published a controversial draft ecological assessment of atrazine. Atrazine has been used for decades and currently is employed on over 44 million acres of corn; millions of more acres in sorghum and sugar cane also use the product. Despite its widespread use and decades of data demonstrating its safety and efficacy, EPA appears to be relying on methodological errors and disputed scientific studies in this draft assessment in order to eliminate use of the chemical.

(i) The U.S. Fish and Wildlife Service recently added native salamanders under an interim rule as 'injurious wildlife' to prevent the importation or interstate movement of a foreign animal disease. The Lacey Act does not authorize animal disease regulation, Congress did not intend native species listings and a recent court ruling has found the Act does not authorize the Service to regulate interstate trade (*U.S. Association of Reptile Keepers, Inc. v. Sally Jewell et al., Memorandum of Opinion, May 12, 2016*)

(j) The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) revised its hazard communication standard and classified whole grain (i.e. corn, soybean and wheat) as a "chemical hazard," basing this on the view that when the grain is processed, it produces dust which can be combustible under certain conditions. As a result, commercial grain facilities now are classified as "chemical manufacturing facilities." OSHA made this change unilaterally in the final rule, without proposing it in the proposed rule.

IV. Regulatory Missteps

Reform of the rulemaking process is critically needed. Listed below are examples of how the system has failed to deliver for stakeholders.

(a) Waters of the US (WOTUS) rule

Perhaps no regulatory proceeding in recent memory more graphically underscores where the system is failing:

(1) EPA violated the prohibition on lobbying

The Government Accountability Office (GAO) found that EPA violated the Anti-Deficiency Act by essentially generating comments in support of its own proposal.

(2) Use/misuse of science

EPA and the Army Corps of Engineers undertook a compilation of scientific research on the subject of connectivity of waters as a means of validating the agency's proposal to expand Federal jurisdiction. The agency, however, unveiled its regulatory proposal *before* the study was even complete and available for comment; in fact, before the 'study' itself was final, EPA was defending its rule, attempting to garner public support for it and then finalized the rule itself before finalizing the 'study.' Not surprisingly, the study appeared to ratify the agency's pre-existing view that nearly all waters are somehow connected and therefore almost all "waters" – including "waters" that are actually dry land – should be regulated under the Clean Water Act. EPA has based its legal and scientific underpinning of this rule based on a misreading of the concurring opinion of a single Supreme Court Justice in *Rapanos*: that the agency could only regulate waters that had a 'significant nexus' to navigable waters. The agency took the view that virtually any connection was significant.

(3) Use/misuse of economics

EPA publicly stated and re-stated claims that were almost contradictory. In some forums, the agency claimed its proposed regulation had a negligible impact on its jurisdiction, extending it only by 3% or 4%. Such a claim allowed the agency to elide its obligations under the Regulatory Flexibility Act. Yet in other forums, the agency made the assertion that its 'clean water' rule would extend protection to 60% of the nation's flowing streams and millions of acres of wetland.

(4) Subversion of the APA notice-and-comment procedure

The APA required the agency to receive, evaluate and respond to comments received during the comment period on the proposed rule. Yet the agency manifestly used the comment period not only to defend its rule – it also used the period to attack and reject comments made by those who had criticized the rule and to generate comments in support of its own point of view. The agency went on to

claim that it received over a million favorable comments (some being nothing more than signatures on petitions generated on the agency's behalf through social media efforts undertaken by the agency and paid for by U.S. taxpayers).

(5) Lack of State-Federal consultation

The Clean Water Act (§1251) states that "It is the policy of the Congress to recognize, preserve, and protect the primarily responsibility and rights of States to prevent, reduce, and eliminate pollution…" Yet dozens of states have sued the agency over its proposal, demonstrating that the agency is not following congressional intent to work with states in implementing the law.

(6) Refusal to respect the intent of Congress

Both houses of Congress, by bipartisan votes contemporaneous with EPA's proposal, voted for legislation overturning the agency's regulation. Yet the agency has refused to acknowledge that its judgment is secondary to the Congress.

(b) U.S. Forest Service Groundwater Directive (federal taking of private property water rights)

A U.S. Court rejected an effort by the U.S. Forest Service (USFS) to coerce Federal permit holders to relinquish or share water rights permit holders had lawfully gained through state adjudication proceedings; the USFS was attempting to do this by conditioning permits on the transfer or sharing of such rights. Many western ranchers also hold water rights and have been pressured by the Bureau of Land Management (BLM) to concede their rightful ownership. Similarly, BLM appears to be increasingly moving away from the multiple-use concept authorized by Congress; rather, the agency is injecting its own preferred policy approaches to the management of public lands, often for the single use of environmental and species protections.

(c) EPA draft ecological assessment of atrazine

Atrazine is an important herbicide for corn farmers and others; it is used today on more than half of all corn acres and has a long history of use and study (by some estimates, nearly 7,000 studies). Yet EPA has published a draft ecological assessment of atrazine that, if left unchallenged, could eliminate its use by farmers. In its assessment, the agency has adopted an approach that has raised significant scientific questions and apparently disregarded the advice of multiple SAPs over the years.

(d) Worker Protection Standards rule

EPA in the last year has finalized changes to its worker protection standards (WPS) rule.

The new regulation imposes new recordkeeping, training and other requirements on farmers that will cost millions of dollars. EPA claimed that the rule was justified because it would confer safety benefits to workers – even though in numerous instances in the proposal it admitted it could not quantify or justify its assertion of increased benefits.

(e) The traditional definition of wetlands uses three criteria – hydrology, vegetation and the presence of hydric soils. Yet Federal regulators increasingly try to reduce or eliminate one or more of the criteria as a means of expanding Federal regulations; those policy choices are made largely without the benefit of APA procedures.

(f) Planning Rule for National Forest Management

In 2012, the USDA Forest Service adopted new planning rules that radically restructured the purposes of the National Forest System. These planning rules advance 'ecological integrity' over congressionally authorized outputs, such as timber, water, forage, and recreation. The forest industry, ranchers, and recreation groups filed suit, arguing that the rules represented a fundamental departure from legislative mandates but courts dismissed the suit on the grounds that there was no concrete injury from a rule that simply guides planning. Yet the exact outcomes alleged by the plaintiffs are coming to pass: reduced timber outputs, less grazing, and more complex rules that promise to stymie needed forest management projects.

V. A Bipartisan Approach

Given this set of facts – an administrative statute that is 70 years old; an explosion of Federal laws and requirements; greater Federal demands on state governments with fewer resources to accomplish them; an increase in the amount and scope of litigation; expanded ability of parties to sue; the development and use of computer models to simulate or sometimes substitute for real-world conditions; the broadening scope of environmental statutes to affect and sometimes override economic considerations and property rights; the judicial principle that courts must defer to agencies rather than interpret the law themselves – it is no surprise that the impacts of regulations on agriculture have increased. Coupled with this set of facts is another critical component: the increasing difficulty of Congress in finding agreement on bipartisan solutions. In truth, over the past few decades we have seen executive/regulatory and judicial activities increase to the point that those branches are deciding policy questions at the expense of Congress – where the Constitution explicitly vested policy decisions. At the heart of regulatory reform should be a bipartisan effort to rectify this imbalance.

In recent years, Congress has sought to address shortcomings in the existing system, considering legislative proposals to make improvements in the *Administrative Procedure Act*. Unfortunately, to date such efforts have failed to gain sufficient bipartisan support. We do believe, however, that there are common principles on which both parties agree.

Regulatory Improvement and Reform:
A priority for American Agriculture

The striking feature on regulatory reform that gives us cause for optimism is that, for years, even decades, we have seen both Democratic and Republican presidents enunciate a set of principles that are strikingly similar. While clearly there are different emphases and priorities, we believe Republican and Democratic Presidents alike have reiterated the desirability and need for an honest, transparent, open and credible regulatory process. Note the statements below taken from Executive Orders and other presidential documents, some nearly four decades old, that speak to these questions:

Regulations ... shall not impose unnecessary burdens on the economy, on individuals, on public or private organizations, or on State and local governments. ...Regulations shall be developed through a process which ensures that ... the need for and purposes of the regulations are clearly established; meaningful alternatives are considered and analyzed before the regulations is issued; and compliance costs, paperwork and other burdens on the public are minimized.

President Jimmy Carter, Executive Order 12044 (March 23, 1978)

Regulatory action shall not be undertaken unless the potential benefits to society for the regulation outweigh the potential costs to society; regulatory objectives shall be chosen to maximize the net benefits to society; among alternative approaches to any given regulatory objective, the alternative involving the least net cost to society shall be chosen.

President Ronald Reagan, Executive Order 12291 (February 17, 1981)

Federal regulatory agencies should promulgate only such regulations as are required by law, are necessary to interpret the law, or are made necessary by compelling public need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well-being of the American people. ... In choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity) unless a statute requires another regulatory approach.

President Bill Clinton, Executive Order 12866 (September 30, 1993)

National action limiting the policymaking discretion of the States shall be taken only where there is constitutional and statutory authority for the action and the national activity is appropriate in light of the presence of a problem of national significance.

President Bill Clinton, Executive Order 13132 (August 4, 1999)

Regulatory Improvement and Reform:
A priority for American Agriculture

> *The public must be able to trust the science and scientific process informing public policy decisions. Political officials should not suppress or alter scientific or technological findings and conclusions. If scientific and technological information is developed and used by the Federal Government it should ordinarily be made available to the public. To the extent permitted by law, there should be transparency in the preparation, identification and use of scientific and technological information policymaking*
>
> President Barack Obama, Memorandum for the Heads of Executive Departments and Agencies (March 3, 2009)

> *Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. ... This order...reaffirms the principles, structures, and definitions governing contemporary regulatory review that were established in Executive Order 12866 of September 30, 1993. As stated in that Executive Order and to the extent permitted by law, each agency must, among other things: (1) propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and cost are difficult to quantify; (2) tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations ...*
>
> President Barack Obama, Executive Order 13563 (January 18, 2011)

In the 2016 presidential election campaign, Donald Trump has spoken to the need to address over-regulation. In response to questions from the American Farm Bureau Federation, Mr. Trump said:

> *As President, I will work with Congress to reform our regulatory system. ... We will increase transparency and accountability in the regulatory process. Rational cost-benefit tests will be used to ensure that any regulation is justified before it is adopted. Unjustified regulations that are bad for American farmers and consumers will be changed or repealed.*

Similarly, in response to the same question, Hillary Clinton's campaign responded:

> *As president, she will always engage a wide range of stakeholders, including farmers and ranchers, to hear their concerns and ideas for how we can ensure our agriculture sector remains vibrant. If there are implementation challenges with a particular regulation, Hillary will work with all stakeholders to address them."*

VI. Proposals to Consider

Members of America's farm and ranch community call on the new Administration and Congress to initiate a process that will draw upon the best of ideas from a broad range of stakeholders. Republicans and Democrats should invite comments from the broadest range of perspectives. As stated earlier, we firmly believe that *all* affected parties have a fundamental interest in a process that commands respect; that is transparent; that reflects congressional intent; and that seeks to fairly and evenly balance the interests of all affected parties. We do not believe the system that exists today exhibits those characteristics.

Listed below are some provisions that in our view deserve consideration. There are undoubtedly others; they should all be up for discussion, consideration and debate. We pledge our readiness to work with the new Administration and all members, on both sides of the aisle, in an effort to strengthen the existing system to protect our environment, the agricultural landscape, and to reinvigorate the American economy.

1. Review *Chevon* and *Auer* deference policies. Congress should consider:
    a. To what extent deference should apply
    b. What is the appropriate way to acknowledge agency expertise
    c. Whether the existing system fairly treats the regulated community
    d. How best to re-establish equilibrium among Congress, agencies and the courts

2. Review agency use of science. Congress should consider:
    a. How to assure the President's memorandum on science is implemented
    b. How the Information Quality Act is implemented
    c. How agencies can assure transparency in the science they use

3. Review agency use of economic data. Congress should consider
    a. How agencies utilize economic data and economic models
    b. How agencies implement executive orders on least-cost alternatives
    c. How well agencies implement SBRFA

4. Review agency transparency in rulemaking. Congress should consider
    a. How well the APA promotes transparency
    b. What further steps can promote agency openness
    c. How well the APA respects Federalism and the role of the states

5. Review Federal-state cooperation. Congress should review
    a. How well agencies implement the Clinton EO on federalism
    b. How well agencies respect state authority
    c. Whether agencies are unduly burdening state governments with regulatory costs

6. Review the *Administrative Procedure Act*. Congress should
    a. Undertake a comprehensive review of the APA
    b. Mandate a minimum 60-day comment period for major rules

c. Establish special procedures for rules that have significant impact on the economy or certain sectors
d. Examine ways to promote advance notice to states and regulated parties about upcoming regulatory initiatives
e. Explore ways to assure the APA reflects Presidential Executive Orders on rulemaking
f. Explore the appropriateness of cost-benefit considerations in rulemaking

7. Re-affirm the public's right to know. Congress should
   a. Mandate greater transparency of disbursements from the Judgment Fund
   b. Assure the *Equal Access to Justice Act* is fairly and impartially implemented
   c. Assure that settlement decrees that affect the regulated community are disclosed in advance

8. Review the impact of judicially-driven policy and regulation. Congress should
   a. Review the issue of standing and how it impacts regulations
   b. Review the scope of matters subject to judicial review
   c. Review need for narrowing scope of judicial interpretation

9. Review Congress' role in rulemaking. Congress should
   a. Examine the need or appropriateness for congressional approval of major rules
   b. Examine the need for greater congressional oversight of agency rulemaking

Senator BARRASSO. Thank you very much, Mr. Duvall, for your testimony.

Dr. Hill.

STATEMENT OF HOWARD HILL, DIRECTOR OF VETERINARY SERVICES AND MULTIPLICATION IOWA, AND PAST PRESIDENT, NATIONAL PORK PRODUCERS COUNCIL

Mr. HILL. Good morning, Chairman Barrasso, Ranking Member Carper, and members of the Committee. I would also like to give a special thanks to my home State Senator, Joni Ernst, who has done a tremendous amount of work for Iowa farmers.

My name is Dr. Howard Hill. I am a veterinarian and pork producer from Cambridge, Iowa, and past President of the National Pork Producers Council, on whose behalf I am testifying today.

Pork producers are deeply committed to responsibly managing their animals and the manure they produce to protect water and air quality, and to maximize the manure's benefit and value as a vital source of nutrients for crops we grow. NPPC and pork producers have a long and proud history of working cooperatively with environmental regulators at the State and Federal levels, and are supportive of Federal environmental policies and programs if they are grounded in three primary principles: one, the environmental performance expectations for producers have a high probability of resulting in meaningful environmental improvements; two, the measures involved are practical and affordable; and three, producers are given a realistic amount of time to adopt the measures and associated systems to their operations so they can continue to be profitable and successful.

NPPC has worked with EPA on numerous occasions to ensure the Agency's rules meet those principles and that they ultimately protect the environment. One of the best examples of our cooperative effort was the National Air Emissions Monitoring Study of the emissions of swine operations. Pork producers used about $6 million of their own funds to support that EPA-supervised third-party study and approximately 5,000 swine facilities enrolled with EPA in air consent agreements that made the work possible.

But when necessary, NPPC will fight bad environmental policies and programs. Pork producers do not oppose environmental regulations, but they will oppose rules that are not sound, effective, and practical. An example of the latter is the requirement to report air emission releases under CERCLA and EPCRA. Almost all livestock farmers are now required to report ammonia emissions that result from natural breakdown of animal waste.

When EPA first issued the rules on those reports in 2008, all the livestock farmers were exempt from CERCLA reporting, and all but the largest operations were exempt from EPCRA because producers and EPA never believed that routine agriculture emissions from manure constituted the type of emergency or crisis that CERCLA or EPCRA were intended to address. Animal agriculture also never understood how the reporting of farm emissions to the U.S. Coast Guard under CERCLA would have supported the legitimate emergency response purpose of those regulations.

The reports that were required under EPCRA had to be made to State and local emergency response authorities in January 2009.

At the time, EPA completely dropped the ball. The Agency failed to provide any guidance to farmers on how to report emissions, and it failed to provide guidance to the State and local agencies that were going to receive those reports, and as a result, chaos ensued.

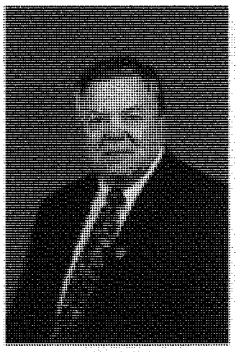
Almost all producers trying to report emissions had difficulty reaching State and local emergency response authorities either because phone lines were overwhelmed or fax machines just ran out of paper. Those who did manage to get through and submit reports were met with disbelief and confusion. Statements such as "Why are you submitting this to us?" and "What are we supposed to do with this information?" were common. In Illinois, for example, farmers were told there was no rule requiring reporting and that this was merely an Internet hoax. In the southeast, EPA told local authorities that their reports were supposed to be submitted to EPA's Water Office.

In the wake of that chaos, NPPC and other agriculture groups, in early 2009, filed lawsuits challenging EPA's 2008 rule. Last April the D.C. Circuit finally ruled in this case, throwing out the agricultural exemption from the two reporting rules and forcing tens of thousands of livestock farmers to figure out how to estimate and report their emissions. The latest industry estimate of the number of animal producers now subject to reporting requirements is over 200,000.

While the pork industry is certainly prepared to comply with CERCLA and EPCRA once the appeals court mandates take effect, it should be noted that EPA, the U.S. Coast Guard, and State and local emergency response authorities have all gone on record saying not only is there no need for this information, but that its volume will create a major management challenge for them and that it will interfere with their other legitimate emergency functions. It is for this reason that NPPC is supporting a legislative fix to address the requirements in CERCLA, and if possible, EPCRA, and we urge members of this Committee to do likewise.

To conclude, pork producers are proud of their environmental efforts over the past 50 years, a period that has seen the amount of pork produced double, while the use of feed, water, and land has been reduced significantly, and our carbon footprint has decreased by 35 percent. NPPC and the U.S. pork industry stand ready to work with Congress, Federal and State agencies, and anyone who is willing to work with us to help producers improve our environmental stewardship efforts and to address new challenges. Thank you.

[The prepared statement of Mr. Hill follows:]



Howard Hill, DVM
President
National Pork Producers Council

Dr. Howard Hill, a pork producer and veterinarian from Cambridge, Iowa. His farming business includes hogs and cattle, and Hill and his son farm 2,600 acres of corn, soybeans and alfalfa.

Hill retired as the director of Animal Well-being for Iowa Select Farms, an Iowa-based pork production company, at the end of 2012 but has been retained as an advisor with focus on animal well-being.

Hill began his career with Iowa Select Farms in 2000, when he joined the company as director of production. In 2001, he was promoted to chief operating officer and continued in that role until 2009.

Previously, Hill served as director of Veterinary Services and Multiplication for Murphy Family Farms in Rose Hill, NC. Prior to joining Murphy Family Farms, Hill served for 20 years as the Head of the Veterinary Microbiology of the Iowa State University Veterinary Diagnostic Laboratory.

A native of southern California, Hill earned his bachelor's and doctorate of veterinary medicine (DVM) degrees from the University of California-Davis. Hill received his master's degree and Ph.D. in veterinary microbiology from Iowa State University.

Hill is a past president of the National Pork Producers Council Board of Directors, serving on the board from 2009-2016, as well as currently serving on a number of committees.

Hill was one of nine veterinarians appointed to serve on the U.S. Department of Agriculture's Advisory Committee on Animal Health. He is a member of the Story County Pork Producers, serves on the board of directors of the Iowa Pork Producers Association, and is past president of the American Association of Swine Veterinarians. Hill also is involved with the Iowa Veterinary Medical Association and the American Veterinary Medical Association.

Written Testimony of the National Pork Producers Council

On

Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities

Before the Senate Environment and Public Works Committee

February 7, 2018

Introduction

In the mid-1990s, hog producers and the entire sector were at a crossroads. Many economic and market forces were at work that made it essential for the average hog operation to grow and become more specialized. This growth and specialization created tremendous business opportunities for young producers willing to take on these challenges, and the outlook for these producers and the sector were bright, with an important exception. The growth in the average size of the economically viable and sustainable hog operation and the construction of new facilities to take advantage of the new management strategies, technologies and benefits of specialization were creating new challenges for how hog producers were going to manage their manure to protect water quality. The industry was on a learning curve, and it faced serious resistance from those who were opposed to these changes for various reasons, including the mistakes that the industry made at that time in the operation of some of its facilities. The hog sector wasn't perfect, and producers knew it, and the industry needed to work on this if producers were to be responsible and good neighbors.

In 1997, NPPC President and Iowa hog farmer Glen Keppy summed this situation up as follows:

> Agriculture is changing in ways my father and grandfather could not imagine. I am trying to adopt the new technologies and be proactive. Regulation is also increasing. I am required to go to manure management classes. I need a permit to haul a load of manure out to the field. My hog farm has undergone an odor audit. I am required to have an insecticide/pesticide license so that I can farm grain for my hog operation. I go to yearly classes for pork quality assurance. I am also on the planning and zoning commission of my county. Farmers today are facing many challenges. Urban sprawl is creeping out into agricultural areas. The public is watching farmers much more closely. Through state agencies and the Environmental Protection Agency (EPA), citizens are demanding cleaner and safer water, reduced soil erosion, pathogen-free

> and residue-free foods. The goal of my farm is to meet these requirements and provide a wholesome and economical food product. [1]

These sentiments and the challenges Mr. Keppy needed to address led the pork industry to undertake a concerted effort to identify and establish the best production and management systems that were practical, economical and able to successfully and responsibly manage manure. The industry engaged in a detailed and organized process, working with non-governmental organizations, state agencies, U.S. EPA, USDA and others to study the best practices available to pork producers and to offer that as guidance to the industry for how producers should be operating. While there were many reasons that U.S. EPA decided to update the Clean Water Act (CWA) rule applicable to concentrated animal feeding operations (CAFOs), it is clear to NPPC that the work the industry did in the 1990s helped inform the agency's efforts and guided NPPC's work on that rule through the rulemaking process.

The upshot of all this is now a model for successful and responsible pork production and manure management that is also profitable and economically sound. This model includes housing animals in buildings to separate them from the elements and allow producers to prevent rainfall from contacting animals and their manure in the area where the animals are housed, sound manure storage facilities that provide considerable and reasonable protections from the elements, and have sufficient storage capacity to allow producers to make correct judgments about where, when and how much manure to be land applied to support crop production following sound agronomic principles, and the use of these principles when producers apply manure for crop production purposes.

This model is now reflected in the CAFO rule, which has served as a durable and sound regulatory foundation, reflecting and respecting the roles of state and federal agencies, on which the pork industry has been able to grow and thrive.

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[1] "Emerging Issues in Public Policy: Highlights of the 1999 National Public Policy Education Conference"; St. Paul, Minnesota, September 19-21, 1999; Page 25; Farm Foundation, (http://www.farmfoundation.org/pubs/emerging/99emergingissues.pdf).

There is more, of course, to environmentally responsible hog farming than just manure management to protect water quality. But the industry's environmental systems start there, and where things go in the future must meet the same needs and imperatives that producers faced in the 1990s and have successfully addressed. These and other related matters are discussed in the testimony that follows.

Importance of U.S. Pork Production

The National Pork Producers Council (NPPC) is an association of 43 state pork producer organizations that serves as the global voice for the nation's pork producers. The U.S. pork industry represents a significant value-added activity in the agricultural economy and the overall U.S. economy. Nationwide, more than 60,000 pork producers marketed more than 118 million hogs in 2016, and those animals provided total cash receipts of nearly $240 billion. Overall, an estimated $23 billion of personal income and $39 billion of gross national product are supported by the U.S. pork industry.

Iowa State University economists Daniel Otto, Lee Schulz and Mark Imerman estimate that the U.S. pork industry is directly responsible for the creation of more than 37,000 full-time equivalent pork producing jobs and generates about 128,000 jobs in the rest of agriculture. It is responsible for approximately 102,000 jobs in the manufacturing sector, mostly in the packing industry, and 65,000 jobs in professional services such as veterinarians, real estate agents and bankers. All told, the U.S. pork industry is responsible for nearly 550,000 mostly rural jobs in the United States.

U.S. pork producers today provide 25 billion pounds of safe, wholesome, and nutritious meat protein to consumers worldwide. U.S. exports of pork and pork products totaled 2.3 million metric tons – a record – valued at $5.94 billion in 2016. That represented almost 26 percent of U.S. production, and those exports added more than $50 to the value of each hog marketed. Each year, exports directly and significantly add to the bottom line of each U.S. pork producer. Exports also support approximately 110,000 jobs in the U.S. pork and allied industries.

Hog Farming and the Environment

Pork producers are deeply committed to responsibly managing their animals and the manure they produce to protect water and air quality. They are similarly committed to reducing the size of their environmental and natural resources footprint through the pursuit of efficiency and the goals of sustainable intensification, whereby producers are able to meet a growing world population's demand for more agricultural products with the smallest footprint possible. The evidence of this commitment is visibly tangible, in the engineering and physical design and operation of their swine housing and manure management systems. The performance of these systems has been documented and corroborated through an authoritative lifecycle assessment of the swine sector. Pork producers' swine housing and manure management systems are designed and operated for environmental success, and the public has substantial assurances that this is the case in the form of multiple state and federal environmental permitting and regulatory programs applicable to pork producers. Pork producers are understandably proud of their industry and believe it is a sound model for how they meet the continual and rapidly growing worldwide demand for animal proteins with the smallest footprint possible. These matters are discussed in additional detail below.

Our Production Systems are Engineered, Built and Operated for Environmental Success

There are several, sound animal husbandry reasons for why pork producers house their animals in buildings, protected from the elements, but one of the most important is the fact that it makes it much easier to economically manage manure to protect water quality.

The animal housing ensures that rain and storm water do not come in contact with the animals or the manure in the animal living areas, preventing polluted runoff from entering surface water. Similar engineering considerations govern how the manure is stored, for six or more months, to either prevent contact with rainfall or to contain all added rainfall. The six or more months of manure storage in these systems gives pork producers the ability to choose optimal times for the use of the manure as fertilizer in crop production, taking into account anticipated rainfall, soil moisture conditions, timing of crop production and other considerations.

While it might be possible for extraordinary weather events to overwhelm one of these systems, these storm events are exceedingly rare, and pork producers have options for managing the animals and the manure to prevent or minimize losses. The bottom line is that these pork produetion systems are explicitly designed, operated and maintained so that the manure can be used responsibly in crop production while ensuring that rainfall and storm water do not lead to polluted runoff containing manure.

Federal/State Environmental Regulatory Oversight of the Pork Sector

Many people presume that animal agriculture and pork production are not subject to substantial federal and state regulatory oversight. This is simply not the case; there is an interconnected system of federal and state regulatory oversight programs in place in every significant pork producing region in the country.

Undergirding this system is the explicit set of standards, guidelines and performance requirements for animal agriculture set in the federal Clean Water Act (CWA) rulemaking applicable to Concentrated Animal Feeding Operations (the CAFO Rule).

The federal CAFO Rule creates the expectation that:

1. Animal feeding operations are to be designed and operated to prevent manure, where it is being produced by animals and then stored for subsequent use, from fouling surface water quality.
2. When an animal producer uses their animals' manure as fertilizer in crop production, this use will be conducted according to sound agronomic and crop nutrient science, that appropriate conservation practices will be in use on the fields receiving the manure, and that the producer will keep records documenting all of this.

Failure to meet these expectations, when it leads to the release of manure, can result in substantial federal fines and other penalties. Producers are subject to these requirements with or without a formal CWA CAFO permit; those without such a permit are expected under the CAFO Rule to meet these standards no matter the amount of rainfall that may occur. Those with a permit are expected to meet the standards except in the event of a large rainfall event.

The regulatory oversight of pork production is not limited to the federal CAFO Rule. Hog farmers also are subject to extensive state permitting and oversight programs. [2] For example, each of the top 10 states in pork production in the United States has its own state permitting programs governing the siting, construction and operations of pork farms and the use of their manure in crop production. These state programs often require public notices of the applications for these permits. They also often involve regular inspections of operations and have active compliance and enforcement components.

Measurements of the Environmental Performance of the Modern Swine Sector

The pork sector, along with all of U.S. agriculture, was transformed after World War II through the adoption of equipment, technology, better genetics, better disease and pest control and a host of related developments. This transformation accelerated through the 1990s, when todays modern pork production systems came into use, with the attendant efficiencies and environmental benefits discussed above.

Pork producers have long thought, based on aneedotal observations, that the substantial gains made in efficiency and productivity by modern swine farming systems were leading to major improvements in the sector's environmental performance. Wanting more than anecdotal confirmation of the benefits of these systems, pork producers worked with third-party researches to conduct a study of the changes in the pork sector between 1959 and 2009. The researchers looked at the 50-year changes in pork production's footprint at the farm level and how feed, water, energy and land use changed as the sector changed to produce pork more efficiently. The researchers found that, per pound of animal produced, feed use efficiency improved by 33 percent, water use was reduced by 41 percent, total land use was reduced by 59 percent and the carbon footprint was reduced by 35 percent. Over this 50-year period, while pork production had nearly doubled to help meet the growing demand for animal proteins in the United States and worldwide, pork producers had stabilized the sector's overall demand for resources.[3]

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[2] A state-by-state compilation of environmental regulatory programs applicable to pork producers can be found here: https://www.pork.org/environment/compliance-information-state/.

[3] See "A 50-Year Comparison of the Carbon Footprint and Resource Use of the US Swine Herd: 1959 – 2009", https://www.pork.org/research/a-50-year-comparison-of-the-carbon-footprint-and-resource-use-of-the-us-swine-herd-1959-2009/

To meet the demand for animal proteins over the next 30 years, animal and agricultural productivity must grow by 70 percent or more, according to the U.N.'s Food and Agriculture Organization. This intensification of production must be achieved sustainably to keep to a minimum the resource effects of meeting the unavoidable worldwide need for high-quality food for people. The 50-year study of the footprint of the pork sector points the way to achieving sustainable intensification of food production. These pork sector accomplishments have had the dual benefits of protecting the environment while improving the economics and profitability of U.S. pork operations. These are the key foundations of the modern understanding of environmental sustainability, and pork producers are proud of their operations' and the industry's performance in this area.

Federal Policy and Pork Production

NPPC and pork producers have a long history of working cooperatively with environmental regulators at the state and federal levels and are committed to federal environmental policies and programs if they are grounded in three primary principles:

1. That the environmental performance expectations for producers have a high probability of resulting in meaningful environmental improvements.
2. That the measures involved be practical and affordable.
3. That producers be given a realistic amount of time to adapt the measures and associated systems to their operations so they can continue to be profitable and successful.

NPPC believes these principles have served pork producers well and that the sector's record of adopting new and better animal housing and manure management and use systems is direct and ample evidence of the industry's past and ongoing commitment. So, too, is the investment pork producers made of approximately $6 million of their own funds to support a U.S. EPA-supervised third-party National Air Emissions Monitoring Study (NAEMS) of the air emissions from swine operations and the enrollment of approximately 5,000 swine facilities in the Air Consent Agreements with U.S. EPA that made the work under NAEMS possible.

These principles also have led NPPC to oppose and fight environmental policies and programs that were based on unrealistic expectations or spurious outcomes or that were detrimental to modern pork production and had little or no relationship to environmental performance. NPPC continues to hold these principles, and with this perspective in mind, the organization offers the following observations on some of the major federal policy matters before the swine sector today.

CAFO Rule Implementation

As discussed in the introduction and reflected throughout this testimony, NPPC believes the CAFO Rule is generally a solid, tough-but-fair set of regulations. Its implementation, coupled with the corresponding state regulatory and permitting programs, can help the pork sector continue to responsibly manage the manure produced by its animals. NPPC welcomes the opportunity to work with U.S. EPA to jointly pursue this objective.

CERCLA-EPCRA Reporting: a Bad Policy Implemented for the Wrong Purpose

Federal requirements for the emergency reporting of ammonia and hydrogen sulfide emissions under the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) have been the subject of much confusion and controversy for the animal agriculture community since the late 1990s. The aforementioned NAEMS and the related Air Consent Agreements, discussed below in more detail, were part of the industry's response to this confusion and controversy, working with U.S. EPA.

Animal agriculture never has agreed that the relatively continuous and stable emissions of these substances from manure constituted the type of acute emergency or crisis that CERCLA or EPCRA were intended to address. Indeed, EPCRA includes an explicit exclusion from reporting emissions from substances that are part of a routine agricultural operation. Livestock agriculture never has understood why this would not include manure production and its emissions, which have been a routine part of agricultural operations since the dawn of civilization when humans first domesticated animals and started to cultivate grain. In the United States, the modern manure management collection and storage systems in place today are direct descendants of the "dung repository" that George Washington built

next to his home and that were the centerpiece of his successful agricultural operations at Mount Vernon.

When some producers first attempted to report ammonia emissions under EPCRA following a 2008 rulemaking on this matter, if their submissions to state and local emergency response authorities were able to get through (many were not because of busy phone lines, unanswered phone lines or fax machines running out of paper), they were met with disbelief and confusion and statements such as "Why are you submitting this to us? What are we to do with this information?" by the local authorities receiving them. Many refused to accept the reports. In some states, emergency responders were dispatched to farms thinking there was a chemical explosion. In Illinois, farmers were told that there was no rule requiring reporting and that it was merely an Internet hoax. EPA Region 4, in response to these local authorities' inquiries, told local officials not to accept the reports and that the farmers were instead required to submit them directly to the EPA Office of Water. NPPC's experience was that the 2008 EPCRA reporting rule was essentially requiring producers to make "crank" phone calls and faxes to emergency response authorities, who had far more important things to be working on. To say this experience led to a high degree of cynicism in farmers and a further loss in the credibility of environmental policy-makers is an understatement.

Similarly, agriculture never has understood how the reporting of these emissions to the U.S. Coast Guard under CERCLA would do anything to support the legitimate emergency response purposes of CERCLA. If there is a legitimate need to understand animal agriculture's emissions for future possible air-quality policy development, the accurate, effective and efficient way to generate that body of knowledge is not through CERCLA reporting. While, as discussed below, there are some important limitations to the data submitted to U.S. EPA under NAEMS – as there is for the related body of knowledge developed through Land Grant University research – those data and that knowledge about animal agriculture's emissions are certainly sufficient to establish a general understanding of these emissions and to point the way for further, targeted study.

The decision by the U.S. Court of Appeals for the District of Columbia Circuit last April, despite the objections of the Department of Justice under President Obama, to strike the

agricultural exemption from this reporting rule has brought all of this confusion and controversy back to the forefront. The latest industry estimates of the number of animal producers who could be subject to the reporting requirements is now on the order of 200,000 or more. While the pork industry is certainly prepared to comply with CERCLA and EPCRA reporting requirements once the appeals court's mandate takes effect, all should take note that the U.S. EPA, the U.S. Coast Guard and the state and local emergency response authorities have gone on record citing there is not only no need for this information but that its volume will create a major management challenge for these authorities and that it will interfere with their other, legitimate emergency functions.

It is for this reason that the NPPC is fully supportive of a legislative effort to address this requirement in CERCLA and, if possible, in EPCRA.

National Air Emissions Monitoring Study

As noted before, confusion and controversy followed the emergence in the late 1990s of potential CERCLA and EPCRA reporting requirements for animal agriculture. In addition to the fundamental questions animal agriculture raised about the lawfulness and correctness of such requirements for emissions from manure, at that time there was no consensus method for how animal producers could accurately and meaningfully estimate their emissions, there was no U.S. EPA guidance to animal agriculture about reporting and there was no history of the agency working with the sector on this. There also were a host of questions about who should report, what type of facilities and what activities would be covered. Recognizing this confusion, the U.S. EPA under the Clinton and Bush administrations essentially called for a timeout while these matters were addressed. The timeout took the form of Air Consent Agreements, involving thousands of animal producers and their facilities. It also took the form of an industry-funded (approximately $16 million from pork, dairy, egg and broiler producers; $6 million of that from swine producers), U.S. EPA-supervised, university researcher-led air emissions monitoring study (NAEMS). The NAEMS data has been submitted to U.S. EPA for processing and developing species-specific emissions estimation methodologies (EEMs). U.S. EPA's efforts to generate these EEMs has been, in NPPC's estimation, stalled by ill-advised criticisms that, while of a scientific nature, were unrelated to

the purposes and uses for which the data were collected. They also showed the limitations of the data and the design of the study.

NPPC has serious concerns that the EEMs from the NAEMS data, even if augmented by other more-recent research on animal air emissions, may never be sufficiently robust to allow their universal use in a regulatory program. But NPPC believes there is no question that these data and the emissions factors from them will be sufficient to support a greater, more general understanding of the air emissions from animal agriculture. NPPC fully support U.S. EPA moving forward with the development of emissions estimation methodologies from the NAEMS data, provided these limitations and considerations are taken fully into account.

Conclusion

Pork producers are proud of the way they and their industry dealt with the economic and market forces that required the industry to rapidly adapt to new realities. As part of this adaptation, producers successfully committed themselves to a hog production model that allows them to responsibly manage their manure. Producers are similarly proud of the great increases in productive and resource use efficiency that this model has made possible, and they see no reason that further gains in efficiency and the resulting resource are not possible.

Pork producers do not oppose environmental regulation; what they do oppose is regulations that are not sound, effective and practical. Producers reject any notion that modern hog farming cannot be conducted in a manner that is responsible and suitable for today's call for better environmental performance.

NPPC and the U.S. pork industry stand ready to work with Congress, the federal and state agencies and anyone who is willing to work with them to take on and address these challenges.

Senate Committee on Environment and Public Works
Hearing entitled, *"The Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities"*

February 7, 2018

Questions for the Record for Dr. Howard Hill

Senator Booker:

Q: Local residents living near lagoon and spray field systems complain of suffering from serious health problems including asthma and other respiratory ailments.

a. Mr. Hill, can you please outline what steps your industry is taking to reduce the harmful impacts that CAFOs are having on their neighbors and local communities?

A: Being a good neighbor means caring about your neighbors when they face difficulties or need help. Pork producers are committed as individuals and as part of the agricultural sector to being such neighbors. This means taking concrete steps to address concerns that our neighbors have about water and air quality and the quality of life in the communities in which our pork farms operate. Even though we think the available evidence makes it clear that our operations do **not** contribute to the health concerns you cite, we can't help but be moved by the concerns raised by our neighbors. I assure you that our industry is deeply committed to responsibly managing our manure and doing what we can to address our neighbors' and communities' needs. Pork producers' commitment on such matters, the practical actions we take, and our understanding of the available respiratory health information are discussed below.

Our Commitment

As a practical matter, we focus our efforts in this arena in many ways, but two sector-wide programs are directly relevant here; "*Pork Quality Assurance (PQA) Plus*" and "*We Care.*" These are but two excellent examples of the research-based, practical, and successful work supported by the Pork Checkoff program and conducted by the National Pork Board. We are very proud of our producer-led checkoff program and the good work it does.

PQA Plus is an education and certification program designed specifically to improve how we farm and do so in an accountable manner. Introduced in 1989, the program helps pig farmers and their employees use best practices in multiple areas of a swine operation, including:

1. Herd health

2. Storing and administering animal health products
3. Ensuring safe, wholesome pork products
4. Following proper feed processing and feed biosecurity protocols
5. Providing proper animal care
6. Protecting the health of our animals and the public
7. Maintaining proper workplace safety
8. Practicing good environmental stewardship
9. Participating constructively in our communities

Managing odors and dust and ensuring that our manure is properly stored, handled and used are explicitly addressed in this program. *PQA Plus* relies on experts in agriculture and veterinary medicine to fulfill its mission. Farmer training and on-farm assessments are performed by certified *PQA Plus* advisers. Certified *PQA Plus* advisers are veterinarians, university Extension specialists, or agricultural educators. More than 71,000 farmers and farm personnel have embraced the program and site assessments have been conducted on more than 18,000 farms.

The *We Care* program addresses many elements of responsible pork production, including environmental stewardship and being good neighbors and members in good standing in our communities. We take seriously our obligation to respect and support our communities. We know we must work hard to earn their respect in return, and that our practices can affect the trust our communities have in our operations. We are committed to operating in a manner that protects the environment and public health. We also want to play an active role in helping to build strong communities. And one of our core values as an industry under *We Care* is to acknowledge community concerns and address them in an honest and sincere manner.

Pig farmers work hard to be transparent about how pigs are raised and demonstrate that they operate their farms responsibly. Research funded by the pork checkoff and other farmer organizations has led to greatly improved noise, odor and dust control through adoption of cutting-edge technology and equipment. Novel ventilation strategies that mitigate dust exhaust from production barns, manure storage systems that reduce odor, and clean water initiatives are just some examples of these achievements. Pork producers and their families drink the same water and breathe the same air as our neighbors.

I offer to you the following website links for complete discussions of these programs:

- *We Care* - www.porkcares.org
- *PQA Plus* -- www.pork.org/certifications/pork-quality-assurance-plus

Manure Management and Odor Measures

Our manure storage systems vary depending on location, farm type and climate. All of these systems are designed to treat or store the effluent and reduce odors. Other measures include reducing dust and feed wastage inside buildings, increasing air exchange, modifying diets, and utilizing additives where necessary, effective and appropriate.

We remove manure from our treatment or storage facilities and apply (recycle) it to the land as natural, high quality fertilizer to support crop production. There are several practical steps we can and do take during these activities to reduce the odors and minimize their effects during the short periods of time when our manure is recycled.

As in the case of *PQA Plus,* and *We Care*, the Pork Checkoff program has funded a tremendous amount of practical research and science on this topic to help us understand manure and odor and the best practices available for us to use to minimize this. The National Pork Board is the sponsor of this research, using producer checkoff funds. A search of the National Pork Board's research database using the terms manure and odor will yield over 200 studies that producers have helped fund just over the last 10 years.

The results of these and other studies are incorporated directly into our national and state pork organizations' efforts to help producers properly manage their systems to reduce odors. Across the entire US pork sector, *PQA Plus* is the most common platform we have developed to incorporate the findings of this research to improve the performance of our operations. There are other resources that have been developed. See for example the following:

- National Pork Board -- https://lms.pork.org/EnvironmentalSustainability#toolkit-53bb8b2f-346e-4d0f-ab02-ffd2d8c59bf5
- Iowa Pork Producers Association -- http://www.iowapork.org/producer-resources/rules-and-regulations/managing-odors-on-your-operation/

Complementing these materials are numerous educational publications on these topics that were developed and published by the research and extension programs at land grant universities in states with significant hog production.

Respiratory Ailments and Pork Production

We recognize and sympathize with those of our neighbors that are dealing with asthma and respiratory ailments. Based on the best research and science that we are aware of, though, we do not think that these problems for our neighbors can be attributed to our swine operations. For example, North Carolina was the number two hog producing state in the country, by value, in 2017. We certainly raise a number of hogs in that state, and those production systems commonly use lagoons and spray fields.

Yet North Carolina does not have an unusual incidence of asthma. The Centers for Disease Control ranks North Carolina 45th in the nation for adult prevalence of asthma. See https://www.cdc.gov/asthma/most_recent_data_states.htm.

Further, the data on the incidence of asthma on a regional basis in the state indicates that the hog producing areas of the state are consistent with the rest of the state. The State of North Carolina reports asthma data broken down into 10 distinct regions of the state. See http://www.schs.state.nc.us/data/brfss/2015/nc/ncer/ASTHNOW.html. Region 8 consists of 9 counties, 3 of which are the top hog-producing counties in the state with nearly 60% of all the hogs and pigs. Yet the region reports a low prevalence of asthma, as shown in the following table. Region 8 is in the lower end of the distribution of incidences around the average.

REGION	% ASTHMA
Region 9 & 10	10.7
Region 1 & 2	9.1
Region 7	8.6
Region 3	8.3
Region 5	8.3
Region 8	**7.3**
Region 6	7.2
Region 4	7

Senator BARRASSO. Thank you very much, Dr. Hill.
Secretary Scuse.

STATEMENT OF MICHAEL SCUSE,
SECRETARY OF AGRICULTURE, STATE OF DELAWARE

Mr. SCUSE. Good morning, Chairman Barrasso and Ranking Member Carper, members of the Committee. I appreciate the invitation to speak to you today about the impacts of Federal regulations and policies on American farming and ranching communities.

Delaware has benefited from many of the environmental policies and regulations that have come from our Federal partners. We are able to see examples on a daily basis that are benefiting not only our family farms, but also the State and our efforts to improve the overall environment.

Middletown, Delaware, once a large farming community, continues to have good neighborly relations today. While our understanding of agriculture might not be the same as the original farm community, Middletown citizens have embraced agriculture through education and advocacy from the local agriscience programs, cooperative extension, as well as farm groups.

As you can imagine, the influx of additional residents has increased the usage of water resources, while farmers still need to irrigate their crops. Through the town's wastewater treatment plant, wastewater is recycled and used to spray irrigation on those neighboring farms, as part of the Chesapeake Watershed, making sure runoff does not occur; it is extremely important.

Delaware farmers are able to utilize a variety of conservation practices supported by research. The moneys that are provided for conservation districts and supplemented by USDA NRCS have been extremely important in enhancing and supporting the usage of cover crops. These crops not only can reduce the amount of soil loss from wind and water erosion, but can also scavenge residual nutrients and release them during the next growing season.

EPA has helped generate funds to support one of the best nutrient management programs in the country, thanks to now Senator Carper, then-Governor Carper. With a talented staff dedicated to helping farmers and protecting the environment, we have been able to update our compliance standards, meeting the regulations set forth by EPA. We have been able to fund collaborations with third-party specialists, like Tetra Tech, to develop modeling and enhanced data to support our new compliance standards.

The Renewable Fuel Standard has increased demand for corn. In 2000 American farmers produced 10 billion bushels of corn. By 2016 farmers were producing 14.6 billion bushels of corn to meet the demand. Many people look at the Renewable Fuel Standard creating a demand for corn dedicated to ethanol that improves our air quality and lessens our demand on non-renewable resources, but it also created additional feed markets.

Poultry litter relocation programs have spawned a growing industry between poultry farms without acreage to utilize those in need of fertility. It has offered an alternative option to farmers who have phosphorous overload and cannot apply poultry litter to their fields. The program has also created compost products and pilot energy generation projects.

In Delaware, we have noted climate changes, including patterns of increased temperate with risk of drought and extreme rainfall events. In addition to the obvious effects of increasingly frequent drought conditions, climate change is also predicted to result in higher frequency and intense rainstorms. Increasing intervals of intense storms presents a risk for agriculture BMP practices that are designed for trapping and treating capacity for storm water or combined water flows from agricultural areas. These intense rainfall events will impact crops as the timing of these intense rainfalls could result in crop failures, such as when the crop has not yet emerged in the early development, and thus much more susceptible to flooding.

In some cases, rainfall can also destroy older crops, particularly fruits and vegetables, like watermelons and cantaloupes, that have substantial input cost. Likewise, warmer winter temperatures can lead to fruit trees setting earlier blossoms, which increases the chance of frost-freeze damage, as was witnessed in the Mid-Atlantic in the spring of 2016.

Last, as the climate warms/changes, there is the chance that certain agricultural and forest pests may expand their ranges. For instance, some pest ranges may have been limited by cold temperatures. But as that maximum low temperature for an area rises, then that pest now is able to expand its range and survive where it previously could not.

The Delaware Agriculture Department is partnering with USDA NRCS on agriculture conservation through programs like the Environmental Quality Incentives Program, that help with cover crops and practices that improve our environment and the Agriculture Conservation Easement Program, or Ag Land Easements, that benefit Delaware's Farmland Preservation program. But there is a need for streamlining efforts. The ACEP-ALE was instituted, replacing an older program, and it took us 3 years of negotiation until terms were agreed upon. In those 3 years Delaware lost its funding.

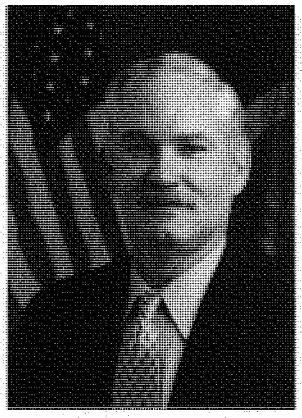
The uncertainty and continuation of deadline extension surrounding CERCLA has caused confusion for producers and States, and there is a need for a legislative fix. We cannot keep putting farmers on notice, wondering when they will be hit with legal liability for untimely or inaccurate reporting.

Farmers and ranchers value and understand the need to protect waters of the U.S. The Department of Agriculture and the States are willing to put the effort to assist farmers, but we would appreciate a common sense approach to address the issues, as well as timely outreach and education materials to WOTUS. We need a clear definition that is objective.

Finally, an additional option to improving the environmental conditions would be to remove environmentally sensitive tillage acreage from consideration, changing the CRP program acreage from 24 million to 30 million acres.

Ladies and gentlemen, our farmers and ranchers are in fact the first true environmentalists, and I want to thank you for the opportunity for being here today.

[The prepared statement of Mr. Scuse follows:]



Michael T. Scuse
Secretary of Agriculture
State of Delaware

In January 2017, Michael T. Scuse was reappointed by Governor John C. Carney as Delaware Secretary of Agriculture. Scuse previously served with the U.S. Department of Agriculture as Acting U.S. Secretary of Agriculture, Acting Deputy Secretary of agriculture, and Under Secretary for Farm and Foreign Agricultural Services. As Under Secretary, he oversaw USDA's Farm Service Agency, Risk Management Agency, and Foreign Agricultural Services. He served as Delaware Secretary of Agriculture from 2001-2008, and also served as Chief of Staff to former Gov. Ruth Ann Minner. He has received the Medal of Achievement from the Delmarva Poultry Industry, Inc. in 2006, the Secretary's Award for Distinguished Service to Delaware Agriculture in 2012, and the Ambassador Circle Award by the National Association of State Departments of Agriculture (NASDA) in 2016. Secretary Scuse and his wife, Patrice, live in Smyrna on a corn, soybean and wheat farm.

Testimony of
Delaware Secretary of Agriculture Michael T. Scuse
before
Senate Environment and Public Works Committee

February 7, 2018

Good morning, Chairman Senator Barrasso, Ranking Member Senator Carper, and members of the committee. I appreciate the invitation to speak today about the impacts of federal regulations and policies on American farming and ranching communities.

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As a part of the Chesapeake Watershed, making sure runoff does not occur is extremely important. Delaware farmers are able to utilize a variety of conservation practices supported by research. The monies that are provided for conservation districts and supplemented by USDA-NRCS have been extremely important in enhancing and supporting the usage of cover crops. These crops not only can reduce the amount of soil loss from wind and water erosion, but can also scavenge residual nutrients and release them during the next growing season.

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The Delaware Department of Agriculture is partnering with the USDA-NRCS on agricultural conservation, through programs like the Environmental Quality Incentives Program (EQIP) that helps with cover crops and practices that improve our environment and the Agricultural Conservation Easement Program – Ag Land Easements (ACEP-ALE) that benefit Delaware's Farmland Preservation program, but there is a need to streamline efforts. After ACEP-ALE was instituted, replacing an older program, it took three years of negotiation until terms were agreed upon. Those were three years that Delaware lost funding to help protect farmland for preservation.

The uncertainty and continuation of deadline extensions surrounding CERCLA has caused confusion for producers in the state and there is a need for a legislative fix. We cannot keep putting farmers on notice, wondering when they will be hit with legal liability for untimely or inaccurate reporting.

Farmers and ranchers value and understand the need to protect Waters of the United States. Departments of Agriculture are willing to put in the effort to assist farmers but we would appreciate a common sense approach to address issues, as well as timely outreach and education materials related to WOTUS. We need a clear definition that is objective.

Finally, an additional option for improving environmental conditions would be to remove environmentally sensitive tillage acreage from consideration, changing the Conservation Reserve Program (CRP) acreage from 24 million to 30 million acres.

Thank you for the opportunity to testify on the impact of federal environmental regulations and policies on Delaware agriculture.

Senate Committee on Environment and Public Works
Hearing entitled, "The Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities"
Questions for the Record for Michael Scuse
February 7, 2018

Responses to Ranking Member Carper:

1. When EPA initially released its proposed regulation for livestock air emissions reporting in the early part of 2008, it excluded all farms from reporting regardless of their size. When EPA finalized its rule at the end of 2008, EPA decided against exempting all farms. Instead, EPA maintained the reporting requirements for large ones under the Emergency Planning and Community Right-to-Know Act. The agency did so in response to comments received from state emergency planning officials, air quality regulators, and the general public in support for having access to this information. Since 2009, large farms have been reporting their emissions to local officials. Are you aware of any large farms that were required to report in 2009 that have been unable to do so successfully? Do you have a sense of how much effort was required of farmer to submit a report?

I am not familiar with any farms that reported at all in 2009, I do not believe that producers were aware that they were required to report. This lack of clarity around reporting requirements and particularly lack of outreach to large farmers about their requirement to report has been part of the issue.

2. The Administration has taken a number of steps that would substantially curtail the information available to states, tribes, and local governments on climate change impacts. In March, President Trump disbanded the State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience, which advised the Federal Government on how to best help communities across the country deal with the impacts of climate change. In August, President Trump rescinded federal risk standards for managing construction in flood-prone areas. In December, President Trump disbanded the Community Resilience Panel for Buildings and Infrastructure Systems, which helped state and local officials protect communities from extreme weather. EPA and other agencies have seen scientific information about climate change impacts disappear from their websites. Do you think these actions help or hurt farmers and ranchers who are seeking to deal with the impacts of climate change on their farms?

These actions hurt our agricultural community, we have already seen dramatic swings in our climate that will continue. We need to find ways to help all of our producers to deal with changes in our climate. Under the former administration, USDA developed six regional climate hubs that were tasked with determining ways to help our producers address changes in climate. Efforts like these need to continue if producers are going to be able to deal with the changes that we are experiencing here in Delaware.

3. President Trump's FY2018 and FY2019 budget requests proposed draconian and unprecedented cuts to USDA operations and Farm Bill programs. If these cuts became reality, I fear that they would undermine essential programs that support farmers and ranchers. In your testimony, you mention that Delaware farmers are engaged in important conservation work with conservation districts and USDA's Natural Resources Conservation Service. Would you elaborate on the importance of funding these conservation initiatives? What should the Administration be considering when it comes to giving farmers the tools and resources they need to prosper? What should Congress be considering?

Conservation efforts are a significant part of the Delaware agriculture industry, several of the state's farmers engage in conservation programs like the Conservation Reserve Enhancement Program, Conservation Reserve Program, Wetlands Restoration Program, and the Agricultural Conservation Easement Program (ACEP). The ACEP program is an important tool to enable the state of DE to protect our farmland from development, which helps the state to maintain an agricultural land base that provides environmental benefits and wildlife habitat. Delaware, as part of the Chesapcake Bay watershed is extremely dependent on these other conservation programs to help the state improve water quality, not just in the Chesapeake Bay region but also in our inland bays region and Delaware River as well.

4. During the hearing you mentioned the economic benefits of the Renewable Fuels Standard to farming communities across the country. Based on your experience as Delaware's Secretary of Agriculture, can you elaborate on how the Renewable Fuels Standard has benefited rural communities in Delaware?

The Renewable Fuels Standard (RFS) has created additional markets and particularly increased the value of corn produced in the state. In today's economic climate the increase in the value has helped our farmers remain profitable. It is important to note not only an environmental benefit of improved air quality, but the RFS also saves our consumers money by lowering the price of gas that would otherwise not be realized if we relied on all petroleum-based products.

5. In your written testimony, you stated that "there is a need for a legislative fix" with respect to reporting of air emissions from livestock operations under CERCLA. As you may know, I have joined some of my Senate colleagues in introducing S. 2421, "The Fair Agricultural Reporting Method Act." Do you believe this legislation addresses the concerns of the constituents that you and I both represent?

The proposed legislation does address the concerns that have been expressed by our producers in that it would alleviate any unnecessary burden of reporting.

<u>Responses to Senator Markey:</u>

6. The Trump Administration wanted to cut the U.S. Department of Agriculture's budget by $4.8 billion – more than a fifth of its entire funding. They proposed cutting USDA's

research and extension programs, including research on the impact of climate change on agriculture, by one-third.

a. While you were at the USDA, were you involved in or did you oversee any programs that either researched climate impacts or helped farmers and ranchers adapt to those impacts?

Yes, USDA created six regional based climate hubs with the mission to review the changes in climate that were occurring and identify ways for producers to address those changes regardless of the products they produced.

b. Do you think there's a need to continue these programs?

Yes, we not only have a need to continue with these programs, but a need to substantially increase the research and extension dollars that are allocated to USDA.

c. What more could the USDA do if additional funding was provided for these programs?

There is a strong need for research dollars to be devoted to areas that larger companies are not currently investing in, including specialty crop poultry and livestock industries.

7. Emails between USDA employees show that staff were instructed to avoid terms like "climate change" and "climate change adaptation" after President Trump took office. One of the emails said, "It has become clear one of the previous administration's priorities is not consistent with that of the incoming administration. Namely, that priority is climate change."

a. Does preventing Department of Agriculture employees from using terms like "climate change" make it harder for them to perform research and communicate with the farming and ranching communities about threats to their businesses?

These limitations do negatively affect staff, farming and ranching communities, and the industry. The staff at USDA acknowledge that climate change is a reality and know that we need to find a way to identify the changes that are occurring and effectively communicate, to the industry, these impacts and strategies to address them. It is unfortunate that some continue to deny that climate change exists, even in the face of mounting evidence such as the unprecedented melting of arctic ice that has occurred over the last two months. States are faced with the challenge of having to plan for climate change locally without the financial resources of the federal government.

Senator BARRASSO. Thank you very much for your testimony.
Mr. Teske.

STATEMENT OF DONN TESKE, VICE PRESIDENT, NATIONAL FARMERS UNION

Mr. TESKE. Thank you, Chairman Barrasso, Ranking Member Carper, for this opportunity to visit today.

And especially thank you, Senator Moran, for that more than gracious introduction. I have had the honor of considering the Senator a friend for many, many years, and the bad thing about that is he learns all the dirt on me, so this makes me a little nervous.

My wife, Cathy, and I farm a farm operation in Wheaton, Kansas, in Pottawatomie, on the eastern edge of the Flint Hills. It is ranching and cropping. We farm it along with our children and grandchildren, and we got a slug of grandchildren. Grandchildren are fun. I am the fifth generation on the farm. God willing, our children will be the sixth and grandchildren seventh, and my goal here today is to work together to try and figure out how to give them a world they can prosper and thrive in.

I currently serve as Vice President of the National Farmers Union. I am not quite sure how that ever worked out, but when I was contacted to visit with you today, my initial thoughts were to decline the invitation; I thought it would be too controversial and didn't think I was any expert to talk about it. Upon further contemplation, I kind of suspected that most of the testimony would be pretty aggressively antagonistic, and I see that was right.

[Laughter.]

Mr. TESKE. And I thought maybe my experiences with the EPA and some of my thoughts could bring some perspective to it all. So, this is a good discussion to have.

Most of us in this room are of the age to remember when the rivers were burning in our cities. We fixed them. It didn't break us. Our goal through this is to create a world for our grandchildren that they can thrive and prosper in, and it is our responsibility. This isn't something to push off on our children. And it is too late for our ancestors.

So, somehow, we have to figure out how to work together to protect our environment and to allow our farmers to farm profitably. And we can do that. But throwing the baby out with the bath water by eliminating all regulations is just irresponsible. So, we need to work together and think how to do this.

I already have Rob's ulcer acting up. I am rambling away from the script, but he will have to put up with that.

My next thing I wanted to talk about was WOTUS. When WOTUS was introduced, it created a vicious backlash, and probably rightly so. It wasn't prepared right; it wasn't introduced right. Administrator Jackson appointed me to a Farmer Rancher Advisory Committee to the EPA, and then later on, Administrator McCarthy reappointed me to that, and it is called—and I have to read it off. I have a button, and I can't even remember how to say it.

It is the Farm, Ranch, and Rural Communities Federal Advisory Committee. So, anyhow, that is actually a pretty good deal. I consider it a conduit between rural America and the wonks in the

EPA, and that is a good thing. We were never brought into this discussion as WOTUS was developed or introduced, and I wonder how a farmer relationship in there might have changed that and how it might have been perceived.

Another grumbling point along that is the fact that in over a year, we have not had a phone call or an e-mail, so it shouldn't really matter what Administration is in charge. I think the communication between rural America and EPA would be a good thing. Why has that ceased to happen?

I need to hurry up, or I won't cover the top parts.

In the 1990s I worked for the Kansas Rural Center's Clean Water Farms Project. This is a win-win thing. This was EPA 319 Funds, and I worked with farmers across the State of Kansas improving their water quality. They get a stipend grant to help them toward that. We hosted tours on it to show their neighbors what they were doing. It was all just great. And this is an example of how good things can happen as you do this.

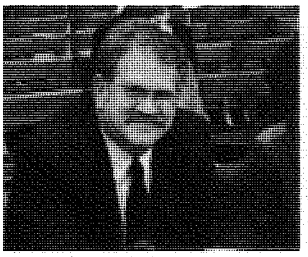
Another great thing was Farmer's Union's Carbon Credit Program. We were the nation's leader in carbon sequestration; it was modeled after the successful project of the Iowa Farm Bureau. We had over 5 million acres enrolled in carbon sequestration practices, and they got paid a stipend for that. These are good things.

The Renewable Fuel Standard. I have 7 seconds to talk about it. Keep it; it is a good deal.

[Laughter.]

Mr. TESKE. Thank you.

[The prepared statement of Mr. Teske follows:]

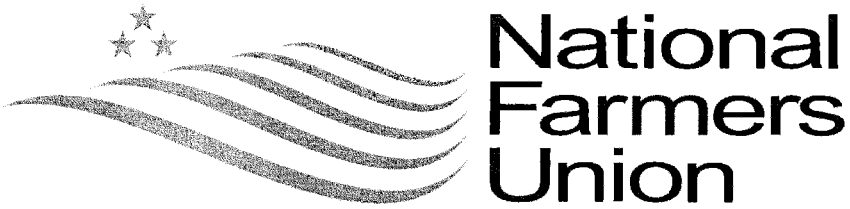


Donn Teske
Vice President, National Farmers Union
President, Kansas Farmers Union

Donn Teske was elected vice president of National Farmers Union during the organization's 112th anniversary convention in 2014. Teske has also served as president of Kansas Farmers Union since 2001.

Prior to serving in Farmers Union leadership roles, Teske worked as a farm analyst for Kansas State University and as a field coordinator for the Kansas Rural Center. He has also been active in community affairs, including the Kansas Young Farmers Educational Association, Kansas Future Farmers of America and the Kansas 4-H programs.

Teske continues to be an active family farmer on a farm near Wheaton, Kansas, where he and his wife, Kathy, have lived with their family since 1973.



TESTIMONY OF DONN TESKE

VICE PRESIDENT

NATIONAL FARMERS UNION

SUBMITTED TO THE U.S. SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

REGARDING THE IMPACT OF FEDERAL ENVIRONMENTAL REGULATIONS AND POLICIES ON AMERICAN FARMING AND RANCHING COMMUNITIES

FEBRUARY 7, 2018

WASHINGTON, DC

Chairman Barrasso, Ranking Member Carper, and members of the committee, thank you for the opportunity to testify today. My name is Donn Teske, I farm and ranch near Wheaton, Kansas, and serve as vice president of the National Farmers Union (NFU). NFU represents roughly 200,000 family farmers, ranchers, and rural members across the country.

Examining the impact of federal environmental regulations and policies on farming and ranching is an important discussion to have. The effects of climate change have had a significant impact on farmers and ranchers for years. Rising temperatures, extreme precipitation, and severe drought and flooding have had far-reaching impacts on farm productivity. Extreme weather events limit farmers' number of workable days and affect plant and animal growth and reproduction, pest and weed pressure, and soil health.

As a family farm organization, NFU is particularly concerned with the challenges climate change poses to family farmers' ability to pursue improvements in global food security. Thus far, we have adapted to meet the needs of consumers despite the changing climate thanks in large part to public and private research and energy development. However, in the longer term, our existing technologies will not be enough to buffer climate change's impacts on farmers and consumers.

United States environmental regulations and policies must promote innovation beyond what will make our farms more productive. We must also look to make our agricultural systems and entire food supply more resilient and sustainable. We share a collective responsibility to preserve a world where our children and grandchildren can thrive and prosper. The challenge we face is understanding how to improve our sustainability while also maintaining productivity and opportunities to farm and ranch profitably.

Clean Water Act

Rural America's passionate response to the 2014 rule defining "waters of the United States"[1] was indicative of the agricultural community's wariness of uncertainty. NFU policy opposes broadening the definition of what waters are considered jurisdictional.[2] At the same time, NFU recognized the agencies' rulemaking process as an opportunity to bring certainty to a regulatory landscape that allows for inconsistent determinations of the Clean Water Act's definition of jurisdictional waters. While the final rule reflected improvements from the initial proposal, it still lacked the clarity that farmers and ranchers need.

Since its establishment in 2008, I have served on the Environmental Protection Agency's (EPA) Farm, Ranch, and Rural Communities Federal Advisory Committee (FRRCC). The committee serves an important role in providing policy advice, information and recommendations on a range of

[1] Definition of "Waters of the United States" Under the Clean Water Act, 79 Fed. Reg. 22198, (proposed April 21, 2014) (amending 33 C.F.R. §328.3).
[2] National Farmers Union, *2017 Policy of the National Farmers Union (2014)*, 97, http://1yd7z7koz052nb8r33cfxyw5-wpengine.netdna-ssl.com/wp-content/uploads/2017/04/2017-Policy-Book_FINAL.pdf

environmental issues that are important to agriculture and rural communities.[3] Unfortunately, the FRRCC was never consulted when the EPA and the Army Corps of Engineers (Corps) introduced the WOTUS rule. I believe the FRRCC's input could have resolved a lot of the uncertainty surrounding the ambiguity of the Clean Water Act's definition of jurisdictional waters. Given the opportunity, we could have provided a valuable contribution in helping EPA and the Corps better achieve the CWA's purpose to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[4]

Last June, EPA and the Corps proposed a rule that would rescind WOTUS and recodify previous regulations that existed prior to 2015.[5] The FRRCC was not consulted in this decision nor have we received any correspondence from EPA over the last year. Protecting the nation's water resources is a complicated matter, and so by necessity are the CWA and any rule implementing it. The topic requires careful consideration and thoughtful engagement with the regulated community. While I agree that WOTUS's broadening of the definition of jurisdictional waters would be harmful to the agricultural community, I am deeply concerned by the lack of any subsequent plan to promote consistent application of EPA policies regarding jurisdictional waters.

While regulation is often seen as a burden, it's important to remember that appropriate regulation also presents opportunities. I previously worked for the Kansas Rural Center on a clean water initiative that was funded by a Clean Water Act Section 319 Nonpoint Source Management Program. In this project, I helped farmers across Kansas apply for small grants to improve the waters of their operations. I then helped them implement best management practices. Once the practices had been successfully implemented, we would host tours to demonstrate the value of those practices to other farmers in the same watershed.

Of the Section 319 funds that go to watershed projects, 30 to 40 percent annually go toward addressing agricultural sources of pollution. Our work in Kansas resulted in the removal of several segments of the Neosho River and many of its tributaries from Kansas' list of impaired waters. Collectively, Section 319 programs nationwide have restored over 6,000 miles of stream and over 164,000 acres of lakes since EPA began tracking progress in 2005.[6] These projects are a great example of how targeted incentives and appropriate regulation can act in concert to help us achieve our environmental goals.

Carbon Cap and Trade

Carbon credit exchanges are another example of how regulations can create opportunities for farmers and ranchers. In 2006, North Dakota Farmers Union (NDFU) and National Farmers Union partnered to create the National Farmers Union Carbon Credit Program. NDFU and NFU served as an aggregator of

[3] https://www.epa.gov/faca/frrcc
[4] 33 USC §1241(a).
[5] Definition of "Waters of the United States" – Recodification of Existing Rules, 82 Fed. Reg. 34899, (proposed July 27, 2017)(amending 33 C.F.R. §328.3).
[6] Environmental Protection Agency, *National Nonpoint Source Program: A catalyst for water quality improvements (2017)*, 3, https://www.epa.gov/sites/production/files/2016-10/documents/nps_program_highlights_report-508.pdf

carbon credits that were traded on the Chicago Climate Exchange (CCX), which was a voluntary cap and trade system similar to the mandatory system enacted internationally under the Kyoto Protocols.

The NFU Carbon Credit Program employed a national model that was adapted from the successful in-state model utilized by Iowa Farm Bureau. NDFU served as the fiscal agent, selling carbon credits earned by acreage with land management practices such as no till and reduced till cropping, long-term grass seeding, and intensive rangeland management. Along with storing carbon in the soil, the conservation methods implemented provided substantial fuel savings, improved soil tilth, water storage and water efficiency, and reduced soil erosion.

The program was highly successful, and NDFU became the largest aggregator of carbon credits in the United States. Over five years, NDFU distributed over $7.4 million to 3,900 farmers who sequestered carbon on over five million total acres. Ironically, it was a lack of regulation that ultimately led to the demise of the voluntary carbon market. Following the Supreme Court's ruling in Massachusetts v. Environmental Protection Agency (2007), Congress failed to pass legislation to address the EPA's role in regulating greenhouse gas (GHG) emissions. The lack of any cap and trade legislation ultimately limited the viability of the voluntary market and trading on the CCX market ceased.

The earlier success of the carbon market indicates farmers' and ranchers' willingness to adopt practices if they can receive incentives to offset their costs. In many ways, the program's function was similar to the Environmental Quality Incentives Program and Conservation Stewardship programs currently administered by the United States Department of Agriculture's Natural Resources and Conservation Service. The success of these NRCS programs is further evidence of family farmers' and ranchers' desire to serve as good stewards of our natural resources. However, we operate in a marketplace with incredibly tight margins, especially with the current state of the farm economy. Access to government and market-based incentives is critically important to offset the costs of implementing and adopting new practices.

While the primary goal of the Carbon Credit Program was to reduce carbon dioxide in the atmosphere, it also improved soil and water resources. Despite expiration of the Carbon Credit Program, many farmers and ranchers continue to utilize these practices, because the methods enhance farm productivity. Appropriate regulation that confronts our growing climate challenges could once again make a carbon market viable.

Renewable Fuel Standards

NFU has also been a longstanding proponent of the RFS's proper implementation. The RFS provides numerous benefits, including:

- The reduction of GHG emissions that drive climate change;
- The creation of jobs that cannot be outsourced;
- The reduction of U.S. dependence on foreign fuel sources;
- Incentives for additional investment in rural communities;
- Opening the transportation fuels market to competition; and

- Lowering transportation fuel prices for consumers.

Farmers have been the backbone of the growing renewable fuels industry in the United States. In addition to supporting the corn ethanol industry; farmers contribute to ensuring that advanced biofuel volumes can be met.

The RFS, when implemented properly, offers farmers and consumers a way to reduce emissions by producing and utilizing transportation fuels with lower lifetime emissions than transportation fuels derived from fossil sources. Over ten years, the RFS reduced carbon emissions by 589.33 million metric tons. That's the equivalent of removing more than 124 million cars from the road.[7] These reductions, combined with price advantages that can be expected as production and distribution expands, could substantially lower the transportation sector's total emissions.

Advances in both the popularity and efficacy of practices like nutrient stewardship, soil health, cover cropping, riparian buffer strips, precision conservation and other practices, work to counter many of the expressed concerns over water quality or habitat regarding additional planting. The RFS will allow producers, refiners and consumers to establish a strong market for perennial and low-input cropping systems that achieve far greater GHG emission reductions than we are yet experiencing through the program. As feedstock production practices and biofuel technology continue to advance, the RFS should encourage development of a market for advanced biofuels, which have even greater GHG benefits.

A 2017 report from USDA titled, a Life-Cycle Analysis of the Greenhouse Gas Emissions of Corn Based Ethanol in 2017, finds that GHG emissions associated with corn-based ethanol in the United States are about 43 percent lower than gasoline when measured on an energy equivalent basis. The report also examined the benefits of improving the efficiency of ethanol refinery plants and adoption of additional conservation practices on corn-producing farms. In a scenario where these improvements and practices are universally adopted, the GHG benefits of corn ethanol are even more pronounced over gasoline, about a 76 percent reduction.[8] We must seek new ways to harness the greater GHG benefits of growing feedstocks for lower emission fuels in a farming system that promotes soil carbon sequestration. NFU supports the proper implementation and continued stability of the RFS. At the same time, we urge Congress to examine opportunities to promote the development of government or market-based incentives for climate-friendly conservation practices.

Conclusion

When properly implemented, environmental regulations and policies can promote innovation that make America's farms more productive, sustainable, and profitable. We have the technology and the resources in our toolbox to leave a better world for our grandchildren. To accomplish that goal, farmers

[7] Biotechnology Industry Organization, *The Renewable Fuel Standard: A decade's worth of carbon reductions (2015)*, 3, https://www.bio.org/sites/default/files/RFS%2010%20Year%20GHG%20Reductions.pdf

[8] Mark Flugge et. al., J. *A Life-Cycle Analysis of the Greenhouse Gas Emissions of CornBased Ethanol (2017)*, Report prepared by ICF under USDA Contract No. AG-3142-D-16-0243, https://www.usda.gov/oce/climate_change/mitigation_technologies/USDAEthanolReport_20170107.pdf

and consumers must work collectively to become better stewards of our nation's natural resources. Thank you for the opportunity to testify.

Senate Committee on Environment and Public Works
Hearing entitled, *"The Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities"*
February 7, 2018
Questions for the Record for Donn Teske

Ranking Member Carper:

1. When EPA initially released its proposed regulation for livestock air emissions reporting in the early part of 2008, it excluded all farms from reporting regardless of their size. When EPA finalized its rule at the end of 2008, EPA decided against exempting all farms. Instead, EPA maintained the reporting requirements for large ones under the Emergency Planning and Community Right-to-Know Act. The agency did so in response to comments received from state emergency planning officials, air quality regulators, and the general public in support for having access to this information. Since 2009, large farms have been reporting their emissions to local officials. Are you aware of any large farms that were required to report in 2009 that have been unable to do so successfully? Do you have a sense of how much effort was required of farmers to submit a report?

   I am not aware of large farms that have been unable to complete emissions reporting to local officials. Farms that trigger those reporting requirements are generally concentrated animal feeding operations that require complex reporting pursuant to the permits they need to operate; any trouble these operations had complying was likely attributable to local authorities not having the infrastructure to receive and utilize the reports. Farms of this size are already likely reporting similar data pursuant to necessary permits.

2. The Administration has taken a number of steps that would substantially curtail the information available to states, tribes, and local governments on climate change impacts. In March, President Trump disbanded the State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience, which advised the Federal Government on how to best help communities across the country deal with the impacts of climate change. In August, President Trump rescinded federal risk standards for managing construction in flood-prone areas. In December, President Trump disbanded the Community Resilience Panel for Buildings and Infrastructure Systems, which helped state and local officials protect communities from extreme weather. EPA and other agencies have seen scientific information about climate change impacts disappear from their websites. Do you think these actions help or hurt farmers and ranchers who are seeking to deal with the impacts of climate change on their farms?

   U.S. farm families are in desperate need of more, not less, reliable and independent sources of information about climate change. The actions taken to block or eliminate these resources will be very damaging to farmers and their communities. National Farmers Union takes great effort to connect farmers with resources like those that have been dismantled. Given adequate information and the financial incentive to do so, farmers will take action that not only

protects their operations from the negative impacts of climate change but also lower atmospheric greenhouse gasses, working against the cause of some of these negative impacts.

Senator Markey:

3. Human-caused climate change presents incredible challenges for our nation's farmers and ranchers, both today and for future generations. The 2017 Climate Science Special Report, which was jointly prepared by 13 federal departments and agencies, found that, "Some temperature and precipitation extremes have already become more frequent, intense, or of longer duration, and many extremes are expected to continue to increase or worsen, presenting substantial challenges for built, agricultural, and natural systems."[1] In 2011, a heat wave caused more than $1 billion in losses to our farmer and ranchers[2].
    a. You testified in front of the Select Hearing on Global Warming in 2007 and said you were concerned about the global climate change and what this threat means to your family. Ten years later, have you and other members of the National Farmers Union seen the impacts of climate change, and are you still concerned?

       Since 2007, we've witnessed intense drought in much of the country, intense wildfires that have impacted livestock production, and several hurricanes that have devastated farms, ranchers, and damaged the processing facilities and means of transportation that connect the food we raise to the consumers who rely on us. We have witnessed increasing impacts from climate change, and we are increasingly concerned, especially given the resistance toward definitive action on climate that currently exists.

    b. What more could the U.S. Department of Agriculture do to help our agricultural families adapt to climate impacts?

       To help producers adapt to climate change, USDA should promote the regional vulnerability assessments through the Climate Hubs to help farmers better understand the changes coming to their farm, direct more emphasis to climate-smart agriculture research, and set climate change as a priority for Natural Resources Conservation Service conservation outreach.

4. When you testified in front of the Select Committee on Global Warming in the House in May 2007, diesel cost $2.75 a gallon. Back then, you said fuel costs were a major problem for the agricultural industry—a production cost that was getting increasingly hard to absorb in the

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[1] **USGCRP**, 2017: *Climate Science Special Report: Fourth National Climate Assessment, Volume I*[Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 470 pp, doi: 10.7930/J0J964J6.

[2] Hatfield, J., G. Takle, R. Grotjahn, P. Holden, R. C. Izaurralde, T. Mader, E. Marshall, and D. Liverman, 2014: Ch. 6: Agriculture. Climate Change Impacts in the United States: The Third National Climate Assessment, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 150-174. doi:10.7930/J02Z13FR.

razor-thin margins which so many of our farmers and ranchers have to manage. While prices have fluctuated over the past decade, diesel retail costs are around $3 a gallon and rising.[3] Under Scott Pruitt, the EPA is taking aim at fuel economy standards—the same standards that the agency found would provide net benefits of nearly $100 billion and reduce oil consumption by 1.2 billion barrels.

a. Are high fuel costs still a problem for farmers?

Yes, high fuel costs remain a problem for farmers. Transportation costs are still a significant part of overall expenses at the farm. The main source of fuel that farmers and ranchers use for farm machinery and equipment, the combines, tractors, semi-tractors, pickups, and other equipment, is diesel fuel. Price volatility associated with petroleum also has negative effects on the ability of farmers to manage their input costs. Further, transportation costs are an important part of marketing agricultural goods. Since my testimony in 2007, the USDA and DOT have found that increases in transportation costs to agriculture can be directly translated into decreased prices paid to farmers, and even higher costs to consumers. Fuel prices play a primary role in the economics of farm production, and high fuel prices are very problematic for farmers, who are struggling throughout this country.

b. Would farmers and ranchers benefit from stronger fuel economy standards that result in more efficient cars, trucks, and tractors?

Enhancing transportation efficiencies can lower transportation costs, increase farm income, and reduce consumer prices. These efficiencies include promoting better engines to meet fuel economy standards, which may require higher octane fuels. Mid-level ethanol blends, which are high octane fuels, provide significant benefits to the rural economy by supporting farm income and agricultural prices, improving vehicle efficiencies, and combating adverse environmental impacts from greenhouse gas emissions that are affecting farms.

[3] https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMD_EPD2D_PTE_NUS_DPG&f=M

Senator BARRASSO. Well, thank you very much for your testimony.

Thank you, Senator Moran, for taking a picture of him as he just concludes that testimony. He can keep talking if you need to shoot him. Take three or four.

Senator MORAN. The Chairman never gives anyone more time.

[Laughter.]

Senator BARRASSO. Let me get started.

Mr. Secretary, I noted that you gave positive remarks about the Renewable Fuel Standard, the RFS, in your testimony. I would just note that just last week your boss, the Governor of Delaware, petitioned the EPA to reduce the burdens of the Renewable Fuel Standard on refineries in Delaware and across the country. Your Governor actually stated that the RFS "will undoubtedly severely harm the State of Delaware, the entire Middle Atlantic Region, and the national economy."

And I ask unanimous consent to enter that Governor's petition, from the Governor of Delaware, in the record.

[The referenced information was not received at time of print.]

Senator BARRASSO. Mr. Hansen, like many producers in the West, you have a great deal of experience in dealing with Federal agencies that administer grazing permits. You have also worked for decades with the agencies, the University of Wyoming, State experts to develop and to maintain coordinated ecosystem monitoring. You have seen the NEPA process in action countless times.

Can you describe for me the differences that you have seen before Federal NEPA processing and the State process for things like range management improvements, economic, environmental, in terms of value of public lands?

Mr. HANSEN. Thank you, Mr. Chairman. When we were working with the State of Wyoming, probably the biggest issue that we deal with is water development, and we are generally looking at about a 6 month process to turn the permits around with the State of Wyoming. Depending on which watershed I am in, working with the BLM, I am guaranteed at least a year, probably 2, occasionally more. The paperwork and time involved is just ridiculous and very burdensome.

Senator BARRASSO. In your discussion with fellow ranchers in Wyoming, are you more or less confident in the economic direction of ranching and farming under this Administration versus dealing with the previous Administration?

Mr. HANSEN. Yes, very much so.

Senator BARRASSO. OK. And what do you think has changed to make things better for ranching and farming in Wyoming and in other States?

Mr. HANSEN. Definitely have a can-do attitude in the agencies. There is a desire to work with the people on the land again, back to what we had prior to the last Administration. We had people in the agencies that were reaching out and identifying issues that we could get together on. Prior to that it was a very negative environment, and the morale in the agencies was horrible; we were losing good people right and left.

Senator BARRASSO. I think at the end of the answer to your previous question you talked about how much time it takes to do some

of this Federal paperwork. You know, in 2008, when the EPA provided an exemption to small farms and ranches from reporting animal waste emissions under the Comprehensive Environmental Response Compensation Liability Act, CERCLA, and EPCRA, the Agency determined that limiting the scope of reporting under those two laws would reduce the time burden on farms and ranches required to report. This was the estimation then of the EPA in 2008: 1,290,000 hours over a 10 year period.

Now, the D.C. Circuit Court overturned that exemption, as you know, in April 2017, forcing farmers and ranchers to report all of these things.

So, Mr. Hansen, Mr. Hill, and Duvall, the producers that you represent, do they have the ability to spend this kind of time trying to comply with these laws?

Mr. HANSEN. Mr. Chairman, the major problem, no, we don't have the time. But we don't have the tools. There is no way to do it on a range livestock operation. It is impossible.

Senator BARRASSO. Mr. Duvall.

Mr. DUVALL. Yes, sir. You know, when we start thinking about reporting—and I expected this question would probably come up because it is a big issue across farmland—there is an individual farm concern that we have, but I would like for the Committee to think about two other concerns, one being public safety concerns. You know, if we asked 200,000 farmers to report to the National Response Center, which they have to respond to, it would overwhelm them and draw resources away from actual emergencies.

The second issue I would like for you to think about is a national security issue, because as our farmers start reporting their animals and what is being emitted there, then we are going to create a roadmap that anybody can find any farm anywhere where our food system is produced, and those people that lurk around our world trying to do harm to our country and to our people will have access to our food supply, and that is a very dangerous area to go into.

And then I will talk about the individual farmer. The individual farmer will have to give up his personal information, where he lives, and that exposes him to being harassed by activists all around. And don't think that is not happening, because it does happen.

Senator BARRASSO. Dr. Hill, anything you would like to add to this?

Mr. HILL. Yes. As my friend from Wyoming has said, they don't have the tools to do that, and the NAEMS Study was designed to help EPA develop those factors, which that program was done back in the early 2000s and still hasn't been completed. We would at least like to see those factors developed so that producers do have some way of estimating, and it would only be estimates of what their emissions are in case they do have to report it.

The other thing is we don't consider farming and the emissions from a farm as an emergency; that is an everyday process. And we ask ourselves who wants this information, and in some cases it is the advocates that don't want livestock production, and they can misuse that information. In the case of Prestige Farms, who was trying to build a packing plant in Mason City, Iowa, they had reported back in earlier their emissions and 45 farms, and the activ-

ists brought that information and made the people in the community believe that those 45 reports were violations and got the people so aroused that they eventually voted down allowing that packing plant to occur.

Senator BARRASSO. Thank you very much.

Senator Carper.

Senator CARPER. I was asked by Senator Booker to yield to him. I am happy to do that.

Before I do that, I would just ask unanimous consent to submit for the record a document that demonstrates the robust benefit, as pointed out by Secretary Scuse, of the Renewable Fuel Standard in Delaware and also in other parts of our country.

The issue that is before us here is East Coast refineries and how they are affected by the volatility, the lack of clarity—opaqueness—if you will, of RINs, and that is the issue that our Governor is raising. EPA could help us resolve this, and we have asked them to help us do that, to play a constructive role, and my hope is that they will.

Senator BARRASSO. Without objection.

[The referenced information follows:]

Feedstuffs

NEWS

Study finds RFS offers substantial benefits to U.S. economy

RFS has lowered gasoline prices, decreased crude oil imports and added value to U.S.-produced agricultural commodities.

Aug 23, 2017

A new economic modeling study that will be published soon in the *American Journal of Agricultural Economics* found that the Renewable Fuel Standard (RFS) has substantially benefited the U.S. economy by lowering gasoline and crude oil

prices, cutting crude oil imports, adding value to U.S.-produced agricultural commodities and reducing U.S. greenhouse gas (GHG) emissions.

"The results confirm that the current RFS program considerably benefits the agriculture sector but also leads to overall welfare gains for the United States," according to the study's authors, Iowa State University economists GianCarlo Moschini, Harvey Lapan and Hyunseok Kim. "We find that the RFS has indeed proved to be a remarkably effective tool for farm support."

The analysis found that the RFS saved the U.S. economy $17.8 billion in gasoline expenses in 2015 compared to a case where no RFS existed. That's equivalent to $142 per American household. Gasoline prices were 18 cents/gal. (9.5%) lower because of the RFS. In addition, the RFS is responsible for increased federal tax revenues.

Further, the results highlight the impact of the RFS on domestic energy security, showing that "the RFS leads to a modest contraction in domestic crude oil production and a larger decline in imports of crude oil." According to the study, crude oil imports would be nearly 200 million barrels lower in 2015 than if the RFS did not exist. Furthermore, domestic crude oil production was only 0.3% lower in the "2015 RFS" case than in the "no RFS" case.

The RFS program was also found to have boosted the value of the U.S. agriculture sector by $14.1 billion, or nearly $6,800 per American farm. Without the RFS, the model found that corn prices would have averaged just $2.75/bu. in 2015 -- far below the cost of production. However, with the RFS in place, corn prices averaged $3.68/bu. -- a 34% increase over the "no RFS" case.

"The results that we have presented confirm that the current RFS program considerably benefits the agriculture sector," the authors reiterated.

Meanwhile, even though the authors used overly conservative assumptions about the GHG savings associated with biofuels usage, they found that an increased use of

biofuels in 2015 under the RFS did reduce carbon emission in the U.S. (by about 29 million tons of carbon dioxide equivalent).

Finally, the study examined the impacts of an "optimal" case that maximized the economic benefits of the RFS according to the model structure. Under this case, the economists found that "it would be desirable to expand corn-based ethanol production beyond the 15 billion gal. cap" envisioned by the U.S. energy bill. The model showed that the optimal amount of ethanol blending in the near term is 16.8 billion gal., equating to a blend rate of nearly 12%. Such a scenario would result in a 14% reduction in gas prices, $28.7 billion in economy-wide savings on gasoline expenses ($228 per U.S. household), additional reductions in crude oil imports and slight increases in corn production and the value of corn.

"This new study confirms that American families and our nation's economy significantly benefit from the Renewable Fuel Standard," Renewable Fuel Assn. president and chief executive officer Bob Dinneen said. "Whether it is lower gas prices, decreased oil imports from hostile nations, a more valuable agriculture sector or reduced greenhouse gas emissions, this study underscores that the RFS is indeed delivering on its promise and meeting the goals established by Congress when it adopted this seminal energy policy."

Source URL: http://www.feedstuffs.com/news/study-finds-rfs-offers-substantial-benefits-us-economy

Senator BARRASSO. Senator Booker.

Senator BOOKER. Thank you very much, Chairman Barrasso, and thank you for your generosity, Senator Carper.

In 2016 residents from Duplin County, North Carolina, came to Washington, asking for help. Now, there are about 60,000 people that actually live in this county in North Carolina, but there are more than 2 million pigs being raised there to produce pork. And the waste from 2 million pigs, as you probably know, Mr. Hill, is equivalent to the waste of about 20 million people that would produce. And the primary way pig waste is being disposed of in Duplin County is by piping it into huge, open air manure lagoons and spraying the waste out onto open fields.

These residents came to Washington complaining about suffering from very serious respiratory problems like asthma, higher rates of asthma, higher rates of eye irritation, depression, and numerous other health problems caused by living near these lagoons and the spray fields.

I was so astonished by this; we don't really have these in New Jersey, that I actually went down to Duplin County to see, firsthand, what was going on. I saw the pig waste being sprayed; I watched it with my own eyes. I saw how it was misting off of the spray fields into the local community, carrying it onto adjacent properties, and the wretched smell, everywhere we went, around there in people's communities and their homes is something I won't forget.

I met with local residents in a large group and heard their stories, painful stories about how the drinking water in their wells has been poisoned by runoff from the CAFOs and how they felt like prisoners in their own homes; how they couldn't run their air conditioners, couldn't open their windows.

So, while I agree that we need to make sure our farmers do not have unnecessary Government regulations and red tape, I also know that something has to be done about these horrible conditions I saw that nobody would want their families to live in that is harming farmers and the communities they live in. And I really want to be clear here, because I do not think it should be contract farmers, who, too, are living in challenging conditions, often making very low wages at really rough margins. I don't think these folks, these good, hardworking Americans, some of the most hardworking people I have met, they should not have to solve this problem.

It is the big, huge integrators who make billions of dollars in profits. One of the biggest companies down there is a Chinese owned company that in many ways, with the pork that is being shipped to their country, they are outsourcing these problems to us, while taking the benefit of our pork.

So, Mr. Hill, my time is short, but this was one of the more painful things I have seen as an American. And it is a long answer to the question, I am sure, so just to respect my time, my limited time, could you please provide to me a written response for the record about what steps your industry is taking to reduce the harmful impact of the kind of CAFOs that I saw and they are having on real American people? Could you provide that answer for me in writing, sir?

Mr. HILL. Possibly, we could do that. You know, we have the largest population of swine in Iowa, and we have used new technology to apply manure.

Senator BOOKER. And sir, just for my own time—I apologize, I don't mean to interrupt you, but I have other questions. Could you just respond in writing? What I saw there, no human being should have to live in those conditions. The property values around those CAFOs have gone way down. People have been on that soil since the 1800s. Please just respond to me in writing, because I have some other questions I would like to ask you, Mr. Hill.

Mr. Hill, some of these family farmers are right behind you, incredible Americans who I have come to just have a reverence for and respect. They are in the hearing room today, including some hog farmers amongst them. They have expressed serious concerns to me about a different problem, the Pork Checkoff Program, which they are required to pay into, but too often feel doesn't work to their interests.

As you know, last week a Federal court found that payments of millions of dollars of checkoff funds from the Pork Board to your organization, the Pork Producers Council, were improper, and they said they must stop.

Senator Lee, a Republican Senator from Utah, and I have introduced a bipartisan bill that would make reforms to the Checkoff Program. So, do you agree that it would be beneficial to make those programs more transparent so that family farmers like the folks behind you, who are doing so much of the real work in America, can quickly see the budgets and expenditures that are approved by the USDA?

And do you agree that it is good to have periodic independent audits of those checkoff programs so there is a fundamental fairness for, again, these small family farmers who are struggling so much? And do you agree that checkoff funds should only be used in ways that benefit all farmers paying into them, especially and including small family farmers that are here today?

Mr. HILL. And they are. They are being used to the benefit of everybody. We export, now, 26 percent of all of our pork. That increases the value of every pig about $50. In 1993 we were a net importer of pork. So those funds are used for a lot of different things, but part of it is used for developing customers outside of the United States, which our industry depends on, which helps every producer that is raising pigs.

Senator BOOKER. My time has expired, Mr. Chairman, but a judge has disagreed with the gentleman's answer, and you can see from the heads shaking back and forth no, there are a whole bunch of local farmers around this country who are not getting the benefit and feel really mistreated by this program. I think it is something that we and Senator Lee and I are trying to lead this, that we should reform and change.

Senator BARRASSO. Thank you, Senator Booker.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

You know, in my work on this Committee, and having chaired the Committee for a number of years, it is not difficult to understand and come to the conclusion that a lot of these costly and out-

rageous rules are about one thing and one thing only, and that is control, and primarily Federal control.

I have looked at some of the regulations that this Administration has done away with, and I tie that directly to the success, economic success, the GDP that is coming in and jumping up from 1.5 percent a year to over 3 percent a year, and good things are happening.

One of the regulations that I was trying to do away with, and this was a year ago, it was the first one that this President was successful in doing away with with the congressional review process, was a rule that was put in by the previous Administration that said that if you are a domestic oil or gas company and you are competing with China or someone else, you have to give them all of the playbook that you are using, actually putting them at a disadvantage over our opposition overseas.

Now, it was easy to draw up a CRA and pass it. It did pass; we had a signing ceremony. But you know, the fact that we have all these regulations out there is really pretty outrageous.

Mr. Duvall, you mentioned in your opening statement—you talked about the WOTUS bill. Now, I know that when I went around my State of Oklahoma before, you took a position, and most of the other organizations took the same position that are representing farmers, that in my area of Oklahoma, in western Oklahoma, it is very arid, and those people out there, of all the regulations that were put in by the previous Administration, that was the No. 1 regulation, and it ended up being the No. 1 regulation also from the American Farm Bureau and other organizations.

So, I would just ask you if there is anything that you didn't say about that particular regulation that would either be costly, how it would be costly or inconvenient, and have a negative effect.

Mr. DUVALL. Yes, sir. If you start looking at some of the conservation practices that we put on the ground to protect our soil and water on our farms, and you start transitioning land from one use to another, not commercial to agriculture, but one agricultural practice to another, there are unbelievable permitting procedures that certain areas of the country or the country has to go through to be able to do that.

Senator INHOFE. Are you familiar with the panhandle of Oklahoma?

Mr. DUVALL. Not really. I am coming to the panhandle of Oklahoma, though.

Senator INHOFE. Their concern was, after a rain, that could, all of a sudden, be considered to be a wetland.

Mr. DUVALL. Yes, sir.

Senator INHOFE. And all of a sudden, you lose the State jurisdiction, and the Federal jurisdiction takes over. Do you see that consistently around the country?

Mr. DUVALL. I see it consistently, and also I see a variance of determination between agencies of what really is a wetland, what is not.

Senator INHOFE. That is exactly right.

Mr. DUVALL. And it is unclear to farmers how they can perceive what their land really is.

Senator INHOFE. I appreciate that very much because that certainly is true.

Mr. Hansen, I want to do this real quickly here because you probably are familiar with what we try to do with the lesser prairie-chicken and the ESA. We had seven States—I am sorry, five States, Oklahoma, Texas, Kansas, New Mexico, and Colorado, that got together and they determined what they could do and what kind of reform that they could have, and everyone agreed it was near perfect; it was everyone deciding at home what the solution was.

Now, you sometimes wonder if we go through all that trouble through the private sector, the landowners, and the landowners we know are the ones who are most concerned about the endangered species, about their own farms and taking care of environmental problems, why it is that you look at others doing that and Government just doesn't seem to put much weight behind that? I am talking about local suggestions, local programs that are working. Ever thought about that, Mr. Hansen?

Mr. HANSEN. All the time, Senator. It is very frustrating to work on trying to find a solution to an issue that is identified on the land and then have the rug pulled out from under you. In the situation you address, the Fish and Wildlife Service was privy to all the conversations, all the negotiations, the plan that was built. They knew what was coming; they agreed to it and then pulled the rug out from under those operators.

Senator INHOFE. That is exactly what happened. And by the way, Fish and Wildlife did agree. They also agree that the best stewards of the land are the landowners themselves, so they need to be listened to also.

Mr. HANSEN. Yes, sir.

Senator INHOFE. Thank you very much.

Senator BARRASSO. Thank you, Senator Inhofe.

Senator Carper.

Senator CARPER. I am happy to yield to Senator Merkley, and I will have a chance to ask some questions later on.

Jeff, we are happy you are here.

Senator MERKLEY. Well, thank you very much, Senator.

I appreciate you all bringing your experiences here to Capitol Hill. One of the things that is important to my farmers back in Oregon is the Agricultural Research Service. The Administration had proposed a significant cut, $360 million cut, to ARS and closing 17 ARS laboratories across the country. And on a bipartisan basis, we worked to keep that program, recognizing its impact on the yield of our crops, new diseases, and the importance of exploring the qualities of different plants that might work under different conditions.

So, I just wanted to ask you, Mr. Duvall, with your role, do you support the Agricultural Research Service? Do you feel it is important to American agriculture?

Mr. DUVALL. By all means, Senator. It is so important for our country to invest in research and development in agricultural business. And if you look around the world, we are being outspent in research and development dollars, and that really is alarming to us and very concerning to us, that other parts of the world are having

the opportunity to catch up and go ahead in some areas. So, research and development is a very key thing that we need to do to help our farmers stay on the cutting edge and being competitive in the world.

Senator MERKLEY. Well, I am not sure what the next Trump budget will look like; we will have it soon, but if it proposes cuts again, I hope we will have your support, continuing to preserve those programs.

A second piece that is important to a number of my farmers and ranchers are the conservation programs, conservation stewardship program, Environmental Quality Incentives Program, or EQUIP. This weekend I was out visiting 16 little towns in northeast Oregon. In one of the towns I met with a rancher who is also a local county commissioner, and he said his ranching operation would have gone down if it wasn't for the conservation program that helped provide support and resources to make the balance, if you will, the books balance. And I hadn't heard it put quite in those terms, that it made the difference between making it or not making it, but in general, is the Farm Bureau supportive of these conservation programs?

Mr. DUVALL. Yes, sir. You have also hit on another topic that is very important to us. You know, if we are going to be required by regulation to do certain things, and of course, as farmers, we want to be able to take care of our land and our water, so to have a partnership through those programs with the general public and the Government, a partnership, and I will emphasize that, to help us do the right thing, help us do the right thing, because we are making huge investments ourselves in those same projects.

Senator MERKLEY. Well, these are voluntary programs that I think is pretty much a win-win for everyone.

Mr. DUVALL. It is voluntary, and it is cost sharing.

Senator MERKLEY. By the way, he also talked to me about his concern on the sage grouse, because we have had a voluntary program where ranchers can essentially adopt a certain number of measures, and then they are protected from any rules that the Endangered Species Act might invoke in the future by having been up front and helping, and we had hundreds of ranchers sign up for this in Oregon.

I am not really asking a question about it, I am just noting that they are very concerned about the partnership that had been put together to try to avoid a listing might fall apart under some of the pressures from the current Administration.

I also wanted to ask about the agricultural work force. Many of us here, from our orchardists, from our wine makers, from our growers in almost every field, the importance of farm workers to make that economy function and that a whole lot of traditional workers that have been there year after year are not showing up under the current prevailing commentary and attitude toward the role of farm workers.

Does the Farm Bureau support working to essentially embrace the role of our farm workers as part of our agricultural economy?

Mr. DUVALL. Our existing farm workers that are here in the country are skilled workers, and our business requires skilled workers, and it is vitally important. It is the biggest limiting factor

to farms to be able to be productive, add to the economy of their community, and to be able to create additional jobs, whether it be on the farm or manufacturing or performing finished products of our commodities after we grow them, so it is a critical issue. It is the most restraining issue that we have outside of regulation.

Senator MERKLEY. I certainly look forward to working with you all as we endeavor to address this challenge. Thank you.

Thank you, Mr. Chairman.

Senator BARRASSO. Thank you, Senator Merkley.

Senator Wicker.

Senator WICKER. Dr. Hill, my friend from New Jersey outlined a very graphic situation in North Carolina, and in a minute I want to give you an opportunity to respond to that because the response on the record will be helpful to hundreds of people, but there are thousands of people listening on television. I think they need to know that I think that what you are about to tell us is that it doesn't have to be that way, and in your farms in Iowa you have a solution there.

But what we are talking about with regard to CERCLA and EPCRA is a reporting requirement, and Congress thought—we thought we had recognized that certain farmers should be excluded from this reporting requirement, and the U.S. Court of Appeals for the D.C. Circuit disagreed with this exemption. The decision has now been stayed, and farmers really don't know where they are.

I notice that Mr. Scuse—in his testimony, Secretary Scuse said that we need a legislative fix. And I think probably, Dr. Hill and Mr. Duvall, you agree with that. Mr. Scuse said, "We cannot keep putting farmers on notice, wondering when they will be hit with legal liability for untimely or inaccurate reporting." So, I think maybe we have bipartisan support here, and consensus, that we need a legislative fix.

I will tell the members of the panel that Senator Fischer and Senator Donnelly, a Republican and a Democrat, intend to introduce legislation this week, the Fair Agriculture Reporting Method Act, which would clarify this rule to exempt all animal feeding operations from CERCLA reporting and small operations from EPCRA reporting requirements.

So, if you could speak to that, Dr. Hill and Mr. Duvall, but also go ahead and finish your thought, which might give some reassurance in Duplin County, North Carolina, that they don't have to experience what was described by my friend from New Jersey.

Mr. HILL. Thank you. Well, first of all, I would say we would support that bill 100 percent. We need clarity. What producers fear now is that they are going to use inadequate tools to try to estimate these emissions, and then, if they are wrong, they are going to get huge penalties. So that bill would be supported by us.

I think Senator Booker misrepresented the pork industry in North Carolina. I worked in North Carolina for 5 years. That is a gross misrepresentation of the farms in North Carolina. They do use different technology than we do in Iowa. They have a growing crop year round—we do not—so they can use spray fields to apply mainly dewater the lagoons. It is not raw manure that they are putting on the Bermuda grass.

In Iowa, almost all of our manure today is incorporated at the 4 to 6 inch, No. 1, to prevent runoff; No. 2, to prevent smell. So, we feel like we have made tremendous progress in this manure application, and there is new technology for pit additives, polymers that reduce odor dramatically that producers are using, that, along with cover crops. We see a tremendous increase in cover crops in Iowa. So I think producers are trying to do everything they can to be good stewards.

Senator WICKER. Mr. Duvall, what would the Farm Bureau think about this legislation that I described from Senator Donnelly and Senator Fischer? And do we agree that what we are talking about here is an unfortunate decision by the Circuit Court about a reporting requirement on these small operations?

Mr. DUVALL. We do agree with that, Senator, and we applaud the Senators that are getting involved in trying to fix something that is wrong, that is wrong, and be very difficult. My neighbor to my left here has explained it very eloquently. It would be put our farmers at risk. I have 400 mama cows that have a calf by their side, spread over 1,500 acres in Gainsbourg, Georgia. How in the world am I going to monitor that? How am I going to report that? And then I have four chicken houses. How am I going to report the emissions of those animals?

It just puts us a big liability. There is no need in doing it, and it was not the intent of the Congress that we think it was, so we would agree with that and applaud it.

Senator WICKER. Thank you very much.

And thank you, Mr. Chairman.

Senator BARRASSO. Thank you.

Senator Duckworth.

Senator DUCKWORTH. Thank you, Mr. Chairman.

And thank you to our witnesses for joining in this very important conversation.

In my home State of Illinois, the agricultural community is our backbone, but also our heart. I have witnessed firsthand how, when our farmers thrive, the entire State thrives.

One policy of critical importance to our farmers is the Renewable Fuel Standard, which requires our transportation fuel to be mixed with biofuels. Since it was enacted, the policy has helped us cut our dependence on foreign oil and our greenhouse gas emissions, which is critical to our efforts to combat climate change.

It is also an important economic policy. In Illinois alone, the RFS supports more than 4,000 jobs and generates more than $5 billion in economic impact. Nationwide, it supports 86,000 jobs and has helped generate $8.7 billion in tax revenues that go to schools, roads, firefighters, all the first responders.

Mr. Scuse, can you please share how the RFS is helping revive rural and agricultural communities?

Mr. SCUSE. Sure. Thank you. Thank you. I would like to comment on the Chairman's comment earlier about Governor Carney and his opposition to the Renewable Fuel Standard. It deals with the purchase of the RINs, or the credits, and the blending, and that is something that needs to be addressed because of the speculation that has driven the cost of those RINs up, and that is something that does need to be addressed.

But when you look at the Renewable Fuel Standard and what it has been able to do for our rural communities, we are producing 4.6 billion, 4.8 billion bushels of corn now every year. If we weren't using approximately 4.5 billion bushels of that for the ethanol industry, which is improving our environment, the price of corn would be so far below production that we would not be able to produce corn in this country.

And when you look at the feed value of the by-product, in 2012, when we had one of the worst droughts in the history of the United States and there were those that were arguing to set the Renewable Fuel Standard aside because of the fear that there would not be enough corn, livestock producers—I traveled across the United States talking to producers during the drought—livestock producers in every single State that I visited said please do not allow EPA to set that fuel standard aside; we need the dry distillers grain to feed our livestock, whether it was the dairy industry, the pork industry, or the beef industry.

So, when you look at a more cost effective feed, if you look at the money—and Senator Moran said it like you just did—the health of our rural communities is depending on the health and well being of our farmers and ranchers in this country, and the Renewable Fuel Standard has done that; it has created jobs, it has improved the environment, and it has given our producers another outlet for the crops that they produce to help keep those rural communities viable.

Senator DUCKWORTH. So changing biofuel production in this country, as EPA Administrator Pruitt, who comes from an oil producing State, has called to do for the RFS, could actually negatively impact farm prices and farm income.

Mr. SCUSE. Yes, it could have, and would have, a large negative impact on the price that our producers are receiving for the corn that they produce. And the reality is most vehicles on the road today could use E–15. And we now have stations across the United States that are now putting in blend pumps so that producers or consumers have a choice, they can get E–15; and in many cases now there are stations that are providing E–85, so I think that is the direction that we need to go in, with a renewable energy, not one that we have to pump out of the ground that is not renewable. And again, this one is helping our rural communities across the country and our livestock producers.

Senator DUCKWORTH. Thank you. I have been burning E–85 in my F–150 since 2006, so she burns nice and clean.

Fifty-five percent of my home State is experiencing drought conditions, and the trend nationally is that drought conditions are on the rise. Whether you believe they are associated with changing climate or not, the fact is that our farmers and ranchers are concerned that growing seasons are changing, and not necessarily for the better.

Mr. Teske, as a farmer and a leader in the agricultural community, can you please share what types of tools and resources farmers and ranchers need to help you adapt to these changing climate conditions?

Mr. TESKE. Thank you, Senator Duckworth. In Kansas, it is very obvious that we have a changing climate, and so, you know, I see

farmers getting ready to plant corn and going out in the fields in March, and I go to just shake my head. You know, there is a coffee shop thing that everybody here, they get their machines ready, and then they want to be the first ones out in the field, but actually it is working more and more. In my own operation, I was an organic farmer for 13 years. I finally gave that up because of the changing weather patterns. And our springs have changed so much that it got to the point where I couldn't slip in between weather events and get the ground worked up and worked down and planted, so I had to change my operation to match the weather patterns. I wish I was still organic.

Farmers are planting more and more on catastrophic events. I heard the Governor of Iowa, a few years back, talking about it was the goal of Iowa to deal with climate change by tiling the entire State. You know, weather patterns affect different areas dramatically, and I happen to be on top of the world, so I don't have to worry about floods, but I do have to worry about maintaining my stream banks and dealing with ever changing climate, especially with livestock.

Senator DUCKWORTH. Thank you.

I am out of time, Mr. Chairman.

Senator BARRASSO. Thank you, Senator Duckworth.

Senator Fischer.

Senator FISCHER. Thank you, Mr. Chairman. I am very excited you are holding this hearing today. I am a rancher, so I appreciate Senator Duckworth's comments about farming and ranching communities as the backbone and the heart of a State, because that is true in Nebraska as well.

So, thank you, Senator.

And what a great panel we have; Farmers Union, Farm Bureau. I loved your comments, sir, on the RFS and E–15. I have some legislation on that, so that is great.

I appreciated, Dr. Hill, that you had the opportunity to respond when Senator Wicker asked you to earlier comments made by Senator Booker, so I appreciate that. My husband and I, we do have a cattle ranch. Our sons are fourth generation Sand Hills ranchers.

We understand conservation. We understand being true environmentalists. Our family does; our neighbors in the Sand Hills do; ag producers all across the State of Nebraska do; and ag producers, farmers and ranchers, all across the United States understand it. We take care of the land. We live on the land. We want clean air, we want clean water, and we manage our livelihood, our lives to make sure that we have that and that we continue to preserve it for future generations.

I am going to talk to another rancher now. So, Mr. Hansen, thank you so much for being here. I would like to build off of Senator Barrasso's comments a little bit, if we can. In your statement, you discussed reporting requirements for animal waste odors under CERCLA and the EPCRA, and with CERCLA reports, those are directed to the National Response Center, and that is operated by the United States Coast Guard. I don't know if people are aware of that.

They are used by the Federal Government to facilitate a Government coordinated emergency response effort to animal waste odors,

and to me, this really doesn't make a lot of sense. Not only is there no added value of these reporting requirements, but the abundance of farm reports is going to jam up the response personnel at the National Response Center and prevent them from responding, I think, to true emergencies.

Mr. Hansen, can you please describe what measures cattle producers would have to take to comply with all of these reporting requirements?

Mr. HANSEN. Thank you, Senator. We have no tools to do that, so I can't answer the question, I'm sorry.

Senator FISCHER. Well, then you can't fill out the report, right?

Mr. HANSEN. Pardon?

Senator FISCHER. You can't fill out the report.

Mr. HANSEN. Exactly.

Senator FISCHER. Right.

Mr. Duvall and Dr. Hill, you both were talking about privacy concerns with these reports, and also concerns with activists coming onto personal private property. Do you have anything to add to comments that you made earlier on that, either one of you?

Mr. DUVALL. You know, our farmers and ranchers are in a very difficult economy right now; we don't need to put any burden on them. And this presents a huge liability issue for them. Farmers and ranchers aren't doing anything wrong out there, but when you give them a tool as far as reporting there, and I would answer the same, we have no way of measuring that.

And we would have to hire some expert, and the Government could disagree with the expert and make us a hire a different one and spend thousands and thousands of dollars that we can't afford to do in a very bad economy. Even when it is good we couldn't afford it.

Senator FISCHER. Thank you.

Mr. Hansen, you also mention in your written testimony the compliance challenges producers face as a result of the Spill Prevention, Control, and Countermeasure, the SPCC rule for on-farm fuel storage. And while WRDA did include a provision that I championed that would provide more flexibility, this overreach continues to weigh heavily on the minds of farmers and ranchers in Nebraska and across our country.

As you noted, this rule was originally applied to oil refineries, but now ag producers are being forced to also comply. So, what do you believe must be done so that we can alleviate that burden of that SPCC rule for our farmers and ranchers on the fuel storage?

Mr. HANSEN. Thank you, Senator. You know, I guess I would have to say we just need to exempt the people out on the ground. It is such a different situation; the risk is minimal compared to what the Act is designed to address.

Senator FISCHER. Right. And in the previous Administration there was a study done that we had requested on this Committee, and I would just point out that one of the areas studied was leakage with jet fuel. I don't know too many farms and ranches that have jet fuel there. So, I think when you have a flawed study, it leads to flawed policy and flawed decisionmaking.

So I would hope that we could move ahead not just on the CERCLA rule, but also on the SPCC and in other number of rules

that are out there that people on the land, everyday producers who are trying to take care of their families, take care of their communities, find such a disadvantage in trying to fight Government every single day.

Thank you.

Senator BARRASSO. Thank you, Senator Fischer.

Senator CARPER. Thanks, Mr. Chairman.

I will start on a lighter note. Before we started the hearing, I asked Mr. Duvall, I said, where did you get a name like Zippy, and he told me, and I think this is worth repeating, just very briefly, Mr. Duvall, also known as Zippy. I don't know many Zippys——

Mr. DUVALL. Mr. Senator, this is the first time I've ever been asked that.

Senator CARPER. Probably in a congressional hearing.

Mr. DUVALL. In a congressional hearing, I will tell you that.

Senator CARPER. We could put you under oath, if it is necessary.

Mr. DUVALL. Well, by my father's words, he said I was my mother's first C-section, second child. He was wanting a big family so he could get all his farm work done, and it disappointed him, so the nurses said, that's a piece of cake; we'll put a zipper in her stomach. So, I got nicknamed Zipper and it got moved over to Zippy in the years to come.

Senator CARPER. Does not seem to have impeded your progress in life, Mr. President.

Mr. DUVALL. Thank you, Senator.

Senator CARPER. Mr. Teske, I wanted to just clarify what I think you said earlier. In the past year, I understood you said the Agriculture Advisory Committee has not yet heard from this Administration. Is that what you said?

Mr. TESKE. Could you repeat that?

Senator CARPER. I thought I heard you say earlier, you talked about hearing from the previous Administration, I think with respect to the Agriculture Advisory Committee, and I think you also said that you have not heard yet, by phone, by e-mail, whatever, from the current Administration. Did I hear you correctly?

Mr. TESKE. Yes. Administrator McCarthy had reappointed me right before she left that position, with the intention of having some continuation from the previous advisory group to the next advisory group, and so I would have liked to have thought that, if there was any action going on, I would have known about it, and it has been total silence.

Senator CARPER. All right; thanks.

Mr. TESKE. I think that is a loss for us all.

Senator CARPER. I think you are probably right. Thank you for telling us that.

If I could, Mr. Secretary, Secretary Scuse, a question relating to waters of the U.S. Help us to understand, was it not the intention and the result of the Obama administration's Clean Water Rule to create certainty in the regulatory process?

I heard for years that farmers didn't understand; they needed clarity in terms of where they would get in trouble. Developers needed clarity and certainty, predictability, with whether they would get into trouble by developing or raising crops in ways that were inconsistent with the Clean Water Act. And as a result of

that, the effort was launched to develop what we call the waters of the U.S. We did literally a town hall meeting on a farm in Delaware, as you may recall, and had farmers there, developers there, and we had folks from EPA, from the Army Corps of Engineers. This was like a couple years ago, to actually understand what was being asked; what was needed in the way of certainty.

And it sounds like, from some of the testimony we have heard here and comments in other places, that everything was fine, and we didn't have uncertainty before. Actually, I think we had a lot. So WOTUS was an effort to try to deal with that.

You were in the middle of this as the Acting Secretary, the Acting Deputy Secretary, and so forth, so your thoughts, please, I think would be illuminating. You were on the inside.

Mr. SCUSE. Thank you, Senator. I think, you know, we need to take a step back and look at why all of this happened. And if memory serves me correctly, all of this resulted from a Supreme Court hearing with the EPA in the Chicago area, where there was a wetland that they deemed was waters of the U.S. that was not connected to any other waters.

So, when you look at the confusion with that case, and then the EPA attempted to define what in fact were waters of the U.S. and the overreach by the EPA in attempting to come to what constituted waters of the U.S., I think that is when we started down the road to look at what does constitute waters of the U.S.; what do we need to put in place to protect certain waters that we have across the United States.

So, the last Administration attempted to bring that certainty, in fact, to the producers and to other areas of the United States to show what in fact was waters of the U.S.

As the Senator pointed out, there were the hearings in the State of Delaware, reached out to all of our communities that we thought would be impacted. But unfortunately, I don't know, Senator, that that happened in other areas of the United States. But this was an attempt by the Obama administration to bring some clarity that was being demanded by all the sectors; not just the agriculture sector, but other sectors as well, as to what did in fact constitute waters of the U.S.

Senator CARPER. Thank you very much. My recollection was that as the Waters of the U.S. rule was being developed, there were 4 years of extensive public outreach and regulation development—4 years; hundreds of meetings with farmers, ranchers, developers, State and local leaders, and others, including in our State; a review of some 1,200 peer reviewed scientific studies; robust legal policy and economic analyses; and consideration of over 1 million public comments without any effort to rebut the rule or build a new informed or credible basis to pursue a different course. A million comments, and I am told they were essentially all responded to.

So, I just want to put that out there for the record. Thank you for your clarification, as well.

Mr. Chairman, if I could, maybe one last question, and this will be for the entire panel.

Again, thank you all for coming here today. I appreciate what you do in your lives in the real world, the rest of the world, with your families and all, and we appreciate very much your being here

and sharing your insights with us, regardless of what your first names are.

As the Chairman knows, I like to look for win-win opportunities, he does, too, and rather than being in conflict with one another, I see many potential opportunities for win-win outcomes with regard to environmental policy in farming and ranching communities. You have talked about that today; each one of you have.

For example, if there is an application in fertilizer that could reduce farmers' input costs and reduce nitrogen runoff and greenhouse gas emissions of nitrous oxide; roll till farming is another we oftentimes hear about, but oftentimes there are barriers that prevent us from achieving these win-win outcomes.

We here in Congress can help break down those barriers so that we can then all seize these opportunities, and maybe each of you could just give us a good example of a win-win opportunity out there that is waiting to be seized if we would just seize it, and how you might help us achieve that.

And if I could, I am just going to start off. I was joking with him earlier; he had his hat on and everything, and I said, I was just listening yesterday to one of my favorite CDs, Glenn Campbell's Greatest Hits. The Chairman and I are big music buffs. And the first song there was Rhinestone Cowboy. You came in here today, and I said, there's a rhinestone cowboy.

But actually, you are the real deal, so would you just lead us off, please, Niels? Would you just lead us off, please? Again, we are looking for a win-win, just an example of another win-win opportunity. You cited a number of them in each of your testimonies, win-win opportunities where cleaner environment, cleaner air, cleaner water, and actually more profitable farming actually coexist well. They work together; they don't exclude another.

But just another, maybe, example of where we can do that, should do that. If you have an example of an area that you think is fertile for us to explore and to participate, to help nurture, we would be happy to do that. If anybody else wants to jump in.

Zippy, you look like you are ready to say something.

Mr. DUVALL. Yes, sir, Mr. Senator. There are a lot of situations where we have regulations that are overlapping, and we are looking into things twice, where, you know, if we could just simplify it and do it efficiently, for example, FIFRA has, over 40 years, had the responsibility of doing approval of pesticides. You know, there is no reason for the Clean Water Act to be involved in it and ask them to make the same judgments that FIFRA has been doing for 40 years. And that is just one example.

You know, farmers and ranchers want to do the right thing, and in the past we used to go to our extension service or the FSA to ask for advice and get help and look for a partner for us to do the right thing on the farm. We are scared of our Federal agencies now. We are actually fearful of them because we know that they could cost us hundreds of thousands of dollars trying to arrange permitting and hiring consultants and lawyers to be able to get to that.

We want to be a partner with our Federal Government. We want to have agencies that are friendly to us, and we are hoping that we can work with you to make that happen.

Senator CARPER. Thank you.

Others, please.

Mr. Hill.

Mr. HILL. I would use the example of the nutrient reduction program that we have in Iowa that is supported by our Governor, our past Governor, and our current Governor, and also by our secretary of agriculture. It is a voluntary cooperative project; it was just funded by the State legislature for over a 10 year period for $300 million. It is projects that producers work in conjunction with State regulatory agencies to put processes in place to reduce runoff, reduce contamination of water, and I think it is the right way to go, a cooperative, voluntary program, rather than somebody from Washington coming down and saying this is what you have to do. Producers respond to it a heck of a lot better.

Senator CARPER. Thank you for that.

I would just say to Secretary Scuse it reminds me a little bit of what we did in Delaware, what we have done in Delaware.

Would you opine for us, too, Michael?

Mr. SCUSE. You know, Senator, there are a lot of different examples. You know, I look at what we did in Delaware when we created—when you created, as then-Governor, the Nutrient Management Commission and the great things that we have been able to do to help clean up our waters that ultimately discharge into the Chesapeake.

I mean, there is a great example of everyone working together to make that happen. And the latest Chesapeake Bay model, I think you will be pleased to know, will show that Delaware has had tremendous improvements in a very short period of time.

You know, we heard about the act for those that are endangered species. I am here to tell you that, yes, there are some things that could be done differently, but in my home State of Delaware—your home State of Delaware, Governor—pretty much every day now I am seeing bald eagles, something that, when I was a child, we never ever saw today. You look at some of the other things that are occurring where——

Senator CARPER. Bald eagles or did you say Philadelphia Eagles?

[Laughter.]

Senator CARPER. I couldn't resist. I could not resist. Excuse me.

Mr. SCUSE. Good catch, Senator. I said bald eagles. I meant Philadelphia Eagles.

You know, you look at, by working together, we all know, all of us at this table understand that there is a serious issue with honey bees across the United States, and with USDA, EPA, and our State partners working together to help find a solution to those problems in areas, we are making a difference.

The monarch butterfly is an issue where we are seeing rapid declines of the monarch butterfly. But now we have States working with our Federal partners to plant, you know, milkweed along some of our highways to make sure that, you know, we have the proper habitat for those areas.

And I know there is legislation that you are working here to renew that, but the Pesticides Registration Act that helps companies do the research for our producers to help them do a better job

and get better projects to our producers, there is another area where these things actually do work.

Can there be a better job? There is no doubt about it. Senator, there can be a better job in many of these areas. But I think what we need to do when we start looking at regulation is working together with all of those that are ultimately impacted, and listening and finding a solution. And in that way we can eliminate, in my opinion, some of the problems that we have had over past Administrations with the implementation of regulations.

Senator CARPER. Let me just ask the other panelists if you approve that message; would you raise your hand?

Let the record show the other four panelists raised their hands. Good.

All right, Mr. Teske, please, same question, please.

Mr. TESKE. Thank you, Senator. There are two things I would like to discuss, and both of them are in regards to mitigating and adapting to climate change, which is something I am passionate personally about. No. 1 is whatever we do as we move forward to mitigate climate problems, a huge part of that is going to have to be agricultural involvement. We are the stewards of the land. We are the stewards of the carbon sink.

Another, if cap and trade ever comes to be, and we can reimplement a carbon trading program, that is a win-win all the way around. That is sequestering carbon; that is making better soils; that is paying a producer a stipend for doing the right thing. That is just logical. And the models there can be very successful, and it can make significant differences quickly. It isn't going to be the only solution to the problem, but we are a key part of it.

And then the other one is the further evolution of the renewable fuels and the Renewable Fuel Standard. If we can grow beyond the status of corn ethanol into perennial crops and higher value crops that use less moisture and less nutrients, we could see dramatic differences in our future with renewable fuels.

So, I think there is potential in both and win-wins in both.

Senator CARPER. Thank you very much.

Mr. Chairman, I kid him when I say I go to Wyoming about every other week, Camden, Wyoming; it is a little town just south of Delaware.

But we have great pressures in our State, a little State. A lot of people want to come to our beaches; great 5 star beaches. And a lot of people come, which is good. Tourism is real important for us, but it drives development, and we have to be careful that we just don't overdevelop our State.

One of the things we worked on when I was Governor, and before that, Mike Castle, and since then with your administration when you worked with Governor Minner, was how do we encourage farmers to stay on the land. And one of the best ways to encourage farmers to stay on the land, instead of development taking over, is with farmers being able to make money and to be profitable. And Mr. Teske, you just mentioned a couple of things that will actually help to do that, and I think we need to be mindful of that.

There are obviously things that we disagree on that we talked about here today, but there is actually a lot that we agree on, and the Chairman's colleague from Wyoming, Mike Enzi, Senator Enzi

likes to talk about the 80/20 rule. When I first heard him talk about it, he said the 80/20 rule explained why he and Ted Kennedy got so much done on the Health, Education, Labor, and Pension Committee; one a very conservative Republican, the other a very liberal Democrat.

Mike Enzi introduced me to the 80/20 rule. He said, Ted and I agree on 80 percent of the stuff; we disagree on 20 percent of the stuff. And what we decided to do was focus on the 80 percent where we agree; set the other 20 percent aside for another day. That is the 80/20 rule, right out of the mouth of a former mayor of Gillette, Wyoming. It is actually a good rule for not just the Health, Education, Labor Committee, but a good rule for this Committee and I think for the Congress as a whole.

This has been a wonderful hearing. Thank you all.

Mr. Chairman, thanks for bringing us together.

Senator BARRASSO. Thank you, Senator Carper.

Mr. Hansen, it looked like you were trying to say something to answer one of the responses. Anything you would like to add today?

Mr. HANSEN. Thank you, Senator. I would like to address Senator Carper's question. I have to ask your forgiveness. I am very dedicated about what I do, but I can't hear a thing.

[Laughter.]

Mr. HANSEN. When it comes to working together, the field is ripe with opportunity in the West on Federal lands, and in our operation we have proven that there is common ground, and there is a lot of common ground, but we always run into the headache of the Federal regulation.

NEPA is a huge one. We get tied up in the paperwork, the decisionmaking process on something that should be really simple to do. So, expanded authority on categorical exclusions, if we could get a lot of the red tape pulled out of the way, the unnecessary questions and timetables, would really assist us in improving things on the land. And every time we do something good on the land, it affects everything. On our operation, we have increased our elk population, our mule deer population, our antelope population, and have increased our livestock, creating a more profitable operation.

Senator CARPER. Thank you. That was worth waiting for. Thanks very much.

Senator BARRASSO. And when I asked three of you earlier about the time it would take to try to do some of this paperwork requirements, I think you had said, Mr. Hansen, you didn't have the tools and the time; Dr. Hill as well.

While you raised the issue about trying to report, and Senator Fischer did as well, to this National Response Center on the release, it is the Coast Guard, of all things. They have expressed concern that this dramatic increase in reporting is going to overwhelm the capacity to deal with this. They estimate the volume of calls that they get now, the NRC would increase from about 100 calls a day to over 1,000, hindering their own ability to respond to real emergencies. So that is the additional side of this that sometimes Government comes up with ideas and mandates that make it a lot harder for them to do the job that we need them to do in terms of the guarding of the coasts.

I do have one question for you, Mr. Duvall, because it has to do with waters of the U.S. and the Clean Water Act. The Corps of Engineers is the agency that makes the vast majority of jurisdictional determinations that identify waters that are regulated under the Clean Water Act. Now, according to testimony this Committee heard during a hearing with the Corps last year, in April, the Corps was not included fully in this whole process that we just had outlined here, in terms of developing the 2015 WOTUS rule. You talked about 1 million people testifying and all of those things.

In fact, the Corps stated that they did not believe that the rule and the preamble, as ultimately finalized, they say "were viable from a factual, scientific, or legal basis." And the Corps went on to say "It would be incredibly difficult for the Corps leaders, regulatory and legal staff, to advance and defend this rule." So that is the Corps of Engineers.

They also testified in statements and characterizations that the WOTUS rule is a joint product by the EPA and the Corps, which is what the EPA said, a joint product of the EPA and the Corps, the Corps says are flat false, flat out false.

So, my question to you is, given these statements by the Corps of Engineers, how much faith do we have in the science behind the current WOTUS rule as proposed by the previous Administration?

Mr. DUVALL. We have no faith in it because in different Corps districts you have different people that are making those determinations and judgments, and there is no scientific basis that they can base their decisions on. And we can show you situation after situation where farmers have spent money with consultants and lawyers, and were able to put in for a permit, for a Corps or a regulatory person to say, no, I don't agree with you and send you back to the drawing board to spend that money again and try to get them to agree with you. And it is all over the board; there is no consistency.

You know, I had the opportunity to have lunch with Mr. Pruitt the other day, and he asked me what did we need in the Clean Water Act, a definition of navigable waters. I said, you know, a farmer knows his land better than anyone else does anywhere, especially better than the people looking at it from a computer, and we ought to be able to ride out in that field in our pickup and simply be able to identify what navigable waters are and waters of the U.S. And if we could do that, we could take a huge financial burden off our farmers. We could create more jobs, add to our communities, and we are not going to destroy it. My land, every piece of it is like my house. I am not going to do anything to destroy or hurt my land or the water around it, because I want my great-great-grandchildren to be able to be there.

Senator BARRASSO. Senator Carper, you had a quick question?

Senator CARPER. Just a quick unanimous consent request, Mr. Chairman, to submit additional documents related to the topic of environmental regulatory impacts on farming and ranching communities for the record.

Senator BARRASSO. Without objection.

[The referenced information follows:]

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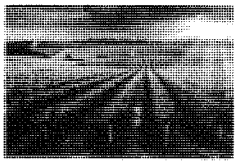

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Overview

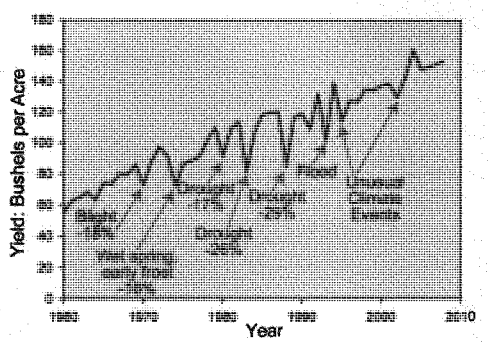
Key Points

- Moderate warming and more carbon dioxide in the atmosphere may help some plants to grow faster. However, more severe warming, floods, and drought may reduce yields.
- Livestock may be at risk, both directly from heat stress and indirectly from reduced quality of their food supply.
- Fisheries will be affected by changes in water temperature that make waters more hospitable to invasive species and shift the ranges or lifecycle timing of certain fish species.

Agriculture is an important sector of the U.S. economy. The crops, livestock, and seafood produced in the United States contribute more than $300 billion to the economy each year.[1] When food-service and other agriculture-related industries are included, the agricultural and food sectors contribute more than $750 billion to the gross domestic product.[2]

Agriculture and fisheries are highly dependent on the climate. Increases in temperature and carbon dioxide (CO2) can increase some crop yields in some places. But to realize these benefits, nutrient levels, soil moisture, water availability, and other conditions must also be met. Changes in the frequency and severity of droughts and floods could pose challenges for farmers and ranchers and threaten food safety.[3] Meanwhile, warmer water temperatures are likely to cause the habitat ranges of many fish and shellfish species to shift, which could disrupt ecosystems. Overall, climate change could make it more difficult to grow crops, raise animals, and catch fish in the same ways and same places as we have done in the past. The effects of climate change also need to be considered along with other evolving factors that affect agricultural production, such as changes in farming practices and technology.

Impacts on Crops



Despite technological improvements that increase corn yields, extreme weather events have caused significant yield reductions in some years. Source: USGCRP (2009)

Click the image to view a larger version.

Crops grown in the United States are critical for the food supply here and around the world. U.S. farms supply nearly 25% of all grains (such as wheat, corn, and rice) on the global markct.[4] Changes in temperature, atmospheric carbon dioxide (CO_2), and the frequency and intensity of extreme weather could have significant impacts on crop yields.

For any particular crop, the effect of increased temperature will depend on the crop's optimal temperature for growth and reproduction.[1] In some areas, warming may benefit the types of crops that are typically planted there, or allow farmers to shift to crops that are currently grown in warmer areas. Conversely, if the higher temperature exceeds a crop's optimum temperature, yields will decline.

Related Links

EPA

- National Agriculture Center
- Student's Guide to Climate Change: Agriculture

Other:

- National Climate Assessment: Agriculture
- USDA: Agriculture and Climate Change
- IPCC: Fifth Assessment Report - Food Security and Food Production Systems

- Higher CO_2 levels can affect crop yields. Some laboratory experiments suggest that elevated CO_2 levels can increase plant growth. However, other factors, such as changing temperatures, ozone, and water and nutrient constraints, may counteract these potential increases in yield. For example, if temperature exceeds a crop's optimal level, if sufficient water and nutrients are not available, yield increases may be reduced or reversed. Elevated CO_2 has been associated with reduced protein and nitrogen content in alfalfa and soybean plants, resulting in a loss of quality. Reduced grain and forage quality can reduce the ability of pasture and rangeland to support grazing livestock.[1]
- More extreme temperature and precipitation can prevent crops from growing. Extreme events, especially floods and droughts, can harm crops and reduce yields. For example, in 2010 and 2012, high nighttime temperatures affected corn yields across the U.S. Corn Belt, and premature budding due to a warm winter caused $220 million in losses of Michigan cherries in 2012.[1]

- Dealing with drought could become a challenge in areas where rising summer temperatures cause soils to become drier. Although increased irrigation might be possible in some places, in other places water supplies may also be reduced, leaving less water available for irrigation when more is needed.
- Many weeds, pests, and fungi thrive under warmer temperatures, wetter climates, and increased CO_2 levels. Currently, U.S. farmers spend more than $11 billion per year to fight weeds, which compete with crops for light, water, and nutrients.[1] The ranges and distribution of weeds and pests are likely to increase with climate change. This could cause new problems for farmers' crops previously unexposed to these species.
- Though rising CO_2 can stimulate plant growth, it also reduces the nutritional value of most food crops. Rising levels of atmospheric carbon dioxide reduce the concentrations of protein and essential minerals in most plant species, including wheat, soybeans, and rice. This direct effect of rising CO_2 on the nutritional value of crops represents a potential threat to human health. Human health is also threatened by increased pesticide use due to increased pest pressures and reductions in the efficacy of pesticides.[3]

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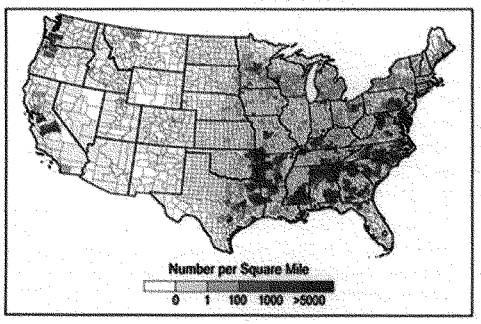
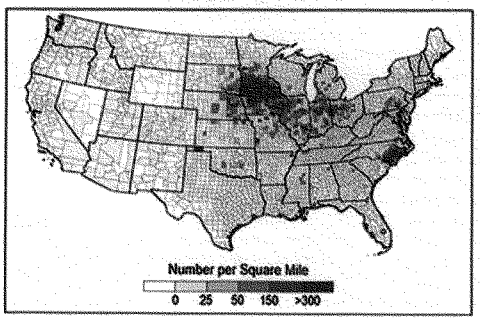
Impacts on Livestock

Locations of Livestock

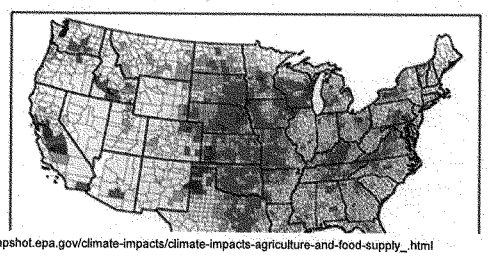
Number of Broilers and Other Meat-Type Chickens per Square Mile, 2012

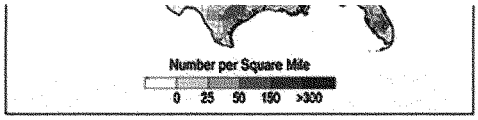


Number of Hogs and Pigs per Square Mile, 2012



Number of Cattle and Calves per Square Mile, 2012





Livestock locations in the continental United States. Source: USGCRP (2016)

Click the image to view a larger version.

Americans consume more than 36 million metric tons of meat and poultry annually.[4] Livestock and poultry account for over half of U.S. agricultural cash receipts, often over $100 billion per year.[5] Changes in climate could affect animals both directly and indirectly.

- Heat waves, which are projected to increase under climate change, could directly threaten livestock. In 2011, exposure to high temperature events caused over $1 billion in heat-related losses to agricultural producers.[1] Heat stress affects animals both directly and indirectly. Over time, heat stress can increase vulnerability to disease, reduce fertility, and reduce milk production.
- Drought may threaten pasture and feed supplies. Drought reduces the amount of quality forage available to grazing livestock. Some areas could experience longer, more intense droughts, resulting from higher summer temperatures and reduced precipitation. For animals that rely on grain, changes in crop production due to drought could also become a problem.
- Climate change may increase the prevalence of parasites and diseases that affect livestock. The earlier onset of spring and warmer winters could allow some parasites and pathogens to survive more easily. In areas with increased rainfall, moisture-reliant pathogens could thrive.[6]
- Potential changes in veterinary practices, including an increase in the use of parasiticides and other animal health treatments, are likely to be adopted to maintain livestock health in response to climate-induced changes in pests, parasites, and microbes. This could increase the risk of pesticides entering the food chain or lead to evolution of pesticide resistance, with subsequent implications for the safety, distribution, and consumption of livestock and aquaculture products.[3]
- Increases in carbon dioxide (CO_2) may increase the productivity of pastures, but may also decrease their quality. Increases in atmospheric CO_2 can increase the productivity of plants on which livestock feed. However, the quality of some of the forage found in pasturelands decreases with higher CO_2. As a result, cattle would need to eat more to get the same nutritional benefits.

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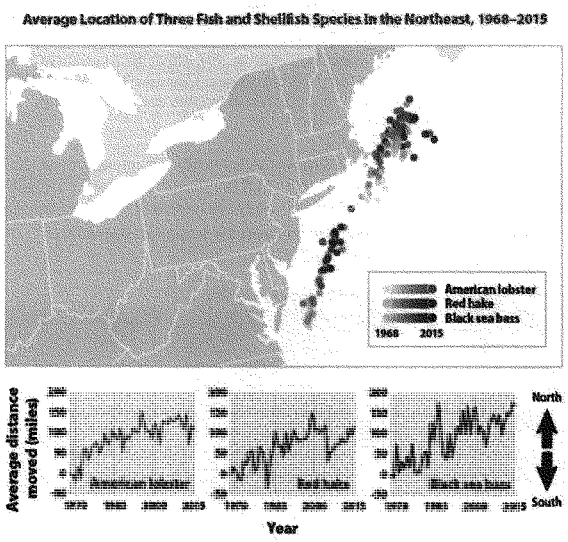
Impacts on Fisheries

American fishermen catch or harvest five million metric tons of fish and shellfish each year.[7] U.S. fisheries contribute more than $1.55 billion to the economy annually (as of 2012).[8] Many fisheries already face multiple stresses, including

overfishing and water pollution. Climate change may worsen these stresses. In particular, temperature changes could lead to significant impacts.



This map shows the annual centers of biomass for three species in the northeastern United States from 1968 to 2015. Dots are shaded from light to dark to show change over time. Source: US EPA (2016). *Climate Change Indicators in the United States: Marine Species Distribution.* Data Source: NOAA (2016). OceanAdapt. EXIT

Click the image to view a larger version.

The ranges of many fish and shellfish species may change. In waters off the northeastern United States, several economically important species have shifted northward since the late 1960s. The three species shown in [the figure to the left] (American lobster, red hake, and black sea bass) have moved northward by an average of 119 miles. [9]

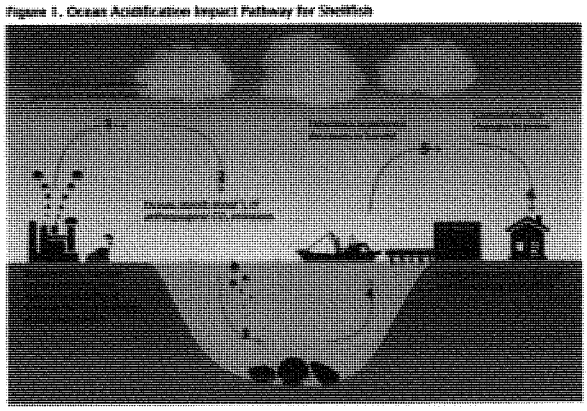
- Many aquatic species can find colder areas of streams and lakes or move north along the coast or in the ocean. Nevertheless, moving into new areas may put these species into competition with other species over food and other resources, as explained on the Ecosystems Impacts page.
- Some marine disease outbreaks have been linked with changing climate. Higher water temperatures and higher estuarine salinities have enabled an oyster parasite to spread farther north along the Atlantic coast. Winter warming in the Arctic is contributing to salmon diseases in the Bering Sea and a resulting reduction in the Yukon Chinook Salmon, Finally, warmer

temperatures have caused disease outbreaks in coral, eelgrass, and abalone. [3],[10]

- Changes in temperature and seasons can affect the timing of reproduction and migration. Many steps within an aquatic animal's lifecycle are controlled by temperature and the changing of the seasons. For example, in the Northwest warmer water temperatures may affect the lifecycle of salmon and increase the likelihood of disease. Combined with other climate impacts, these effects are projected to lead to large declines in salmon populations.[1],[11],[12]

In addition to warming, the world's oceans are gradually becoming more acidic due to increases in atmospheric carbon dioxide (CO_2). Increasing acidity could harm shellfish by weakening their shells, which are created by removing calcium from seawater. [10] Acidification also threatens the structures of sensitive ecosystems upon which some fish and shellfish rely. [1],[13]

Figure 1. Ocean Acidification Impact Pathway for Shellfish



This diagram shows the impact pathway of carbon dioxide emissions on the shellfish market. Carbon dioxide is absorbed by oceans, resulting in ocean acidification. Acidification reduces the size and abundance of shellfish, which in turn leads to decreased harvest and eventually to changes in prices for consumers. Source: US EPA (2015). *Climate Change in the United States: Benefits of Global Action*

International Impacts

Climate change is very likely to affect food security at the global, regional, and local level. Climate change can disrupt food availability, reduce access to food, and affect food quality.[14] For example, projected increases in temperatures, changes in precipitation patterns, changes in extreme weather events, and reductions in water availability may all result in reduced agricultural productivity. Increases in the frequency and severity extreme weather events can also interrupt

food delivery, and resulting spikes in food prices after extreme events are expected to be more frequent in the future. Increasing temperatures can contribute to spoilage and contamination.

Internationally, these effects of climate change on agriculture and food supply are likely to be similar to those seen in the United States. However, other stressors such as population growth may magnify the effects of climate change on food security. In developing countries, adaptation options like changes in crop-management or ranching practices, or improvements to irrigation are more limited than in the United States and other industrialized nations.

Any climate-related disturbance to food distribution and transport, internationally or domestically, may have significant impacts not only on safety and quality but also on food access. For example, the food transportation system in the United States frequently moves large volumes of grain by water. In the case of an extreme weather event affecting a waterway, there are few, if any, alternate pathways for transport. High temperatures and a shortage of rain in the summer of 2012 led to one of the most severe summer droughts the nation has seen and posed serious impacts to the Mississippi River watershed, a major transcontinental shipping route for Midwestern agriculture. This drought resulted in significant food and economic losses due to reductions in barge traffic, the volume of goods carried, and the number of Americans employed by the tugboat industry. The 2012 drought was immediately followed by flooding throughout the Mississippi in the spring of 2013, which also resulted in disruptions of barge traffic and food transport.[3] Transportation changes such as these reduce the ability of farmers to export their grains to international markets, and can affect global food prices.

Impacts to the global food supply concern the United States because food shortages can cause humanitarian crises and national security concerns. They also can increase domestic food prices.

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The Washington Post

Energy and Environment

EPA website removes climate science site from public view after two decades

By Chris Mooney and Juliet Eilperin April 29, 2017

This article has been updated.

The Environmental Protection Agency announced Friday evening that its website would be "undergoing changes" to better represent the new direction the agency is taking, triggering the removal of several agency websites containing detailed climate data and scientific information.

One of the websites that appeared to be gone had been cited to challenge statements made by the EPA's new administrator, Scott Pruitt. Another provided detailed information on the previous administration's Clean Power Plan, including fact sheets about greenhouse gas emissions on the state and local levels and how different demographic groups were affected by such emissions.

The changes came less than 24 hours before thousands of protesters were set to march in Washington and around the country in support of political action to push back against the Trump administration's rollbacks of former president Barack Obama's climate policies.

"As EPA renews its commitment to human health and clean air, land, and water, our website needs to reflect the views of the leadership of the agency," J.P. Freire, the agency's associate administrator for public affairs, said in a statement. "We want to eliminate confusion by removing outdated language first and making room to discuss how we're protecting the environment and human health by partnering with states and working within the law."

The agency also said it would carefully archive pages from the past administration.

The change was approved by Pruitt, according to an individual familiar with the matter who spoke on the condition of anonymity to discuss internal deliberations, to avoid a conflict between the site's content and the policies the administration is now pursuing.

The staffer described the process of reviewing the site as "a work in progress, but we can't have information which contradicts the actions we have taken in the last two months," adding that Pruitt's aides had "found a number of instances of that so far" while surveying the site.

Yet the website overhaul appears to include not only policy-related changes but also scrutiny of a scientific Web page that has existed for nearly two decades, and that explained what climate change is and how it worked.

The EPA's extensive climate change website now redirects to a page that says "this page is being updated" and that "we are currently updating our website to reflect EPA's priorities under the leadership of President Trump and Administrator Pruitt." It also links to a full archive of how the page used to look on Jan. 19, before Trump's inauguration.

The EPA's Friday press statement did not explicitly refer to changes affecting this site, but it did say that "content related to climate and regulation is also under review."

The archived EPA climate page notes, in a key section under the "causes of climate change," that

> Recent climate changes, however, cannot be explained by natural causes alone. Research indicates that natural causes do not explain most observed warming, especially warming since the mid-20th century. Rather, it is extremely likely that human activities have been the dominant cause of that warming.

It is this language, when the site was still up, that directly contradicted Pruitt. Pruitt had argued on CNBC last month that "measuring with precision human activity on the climate is something very challenging to do and there's tremendous disagreement about the degree of impact, so no, I would not agree that it's a primary contributor to the global warming that we see."

The EPA's climate change website stated otherwise, and did so by citing findings of the United Nations' Intergovernmental Panel on Climate Change.

There had been reports early in the Trump administration that the EPA climate change website was set to be taken down, but in the end it did not happen immediately.

The page contains scientific explanations of climate change and its causes and consequences, and has existed in one form or another since at least 1997. At that time it was called the agency's Global Warming site.

"If you are looking for information on "climate change," "the greenhouse effect," or "global warming, " you've come to the right place," it declared in August 1997. "At this web site you will find information pertaining to the science of global warming; current and projected impacts of global warming; international and U.S. Government policies and programs; opportunities for individuals and corporations to help stop global warming (and in many cases, save money, too!); state and local actions that help mitigate greenhouse gas emissions; and, easy ways to obtain more information by fax, email and electronic order form."

The site has long served an informational role and sought to provide a comprehensive review of basic climate science, the effects of climate change, and how it is affecting the United States. In addition it contained information about the agency's approach to climate change and how people could take steps to lower their own contributions to climate change.

However, the site has run into political headwinds before. Under President George W. Bush, updates to the site were frozen and then required to undergo White House review. However, this process did not lead to substantive changes in scientific content.

"The EPA's climate site includes important summaries of climate science and indicators that clearly and unmistakably explain and document the impacts we are having on our planet," said Katharine Hayhoe, a climate scientist at Texas Tech University, in response to the website change.

"It's hard to understand why facts require revision," she continued.

Janet McCabe, who headed EPA's Office of Air and Radiation during Obama's second term, said in an interview Saturday that while "you would expect a new administration to reflect their policies on their website," the agency had made a point in the past of making the regulatory history of different policies available on its website even when administrations changed hands and shifted direction.

"Historical and factual information about these issues, and regulations over time, is something that EPA has always made available to people," McCabe said. "It belongs to the people, and people should be able to find it easily."

In its press statement, the EPA said that when it comes to website changes, "the first page to be updated is a page reflecting President Trump's Executive Order on Energy Independence, which calls for a review of the so-called Clean Power Plan."

That site, www.epa.gov/cleanpowerplan, now redirects to https://www.epa.gov/Energy-Independence, which features an image of President Trump signing an executive order aimed at dismantling the power plant rule and other Obama-era climate regulations.

In the press statement, the EPA said that "language associated with the Clean Power Plan, written by the last administration, is out-of-date."

A group that has been closely monitoring government environmental and science websites for changes in the Trump years, the Environmental Data and Governance Initiative, had a cautious reaction to the changes.

"The clear communication by the EPA notifying of the impending website overhaul is good transparency practice, but it remains to be seen how information and information access will change as the EPA site is updated," said Toly Rinberg, a member of the group's website tracking committee.

Several career EPA employees, who asked for anonymity out of fear of retribution, said they were not briefed in advance about the decision to alter the agency's site.

"People are obviously unhappy," one employee said. "It is, in my opinion, the best climate education website out there."

David Doniger, director of the climate and clean air program for the advocacy group Natural Resources Defense Council, tweeted Friday, "Cleansing has begun. EPA website scrubbed of pages on "so-called" Clean Power Plan. Now only alternative facts."

Another EPA website, documenting climate change "indicators" across the United States, remained up on Friday.

–Brady Dennis contributed to this report.

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Chris Mooney reports on science and the environment. Follow @chrismooney

Juliet Eilperin is The Washington Post's senior national affairs correspondent, covering how the new administration is transforming a range of U.S. policies and the federal government itself. She is the author of two books—one on sharks, and another on Congress, not to be confused with each other—and has worked for the Post since 1998.
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NSAC'S BLOG

TRUMP'S PROPOSED BUDGET CUTS WOULD SPELL DISASTER FOR RURAL AMERICA

May 24, 2017

http://sustainableagriculture.net/wp-content/uploads/2017/05/mickmulvaney.jpg)

Budget Director Mick Mulvaney holds up a copy of President Donald Trump's proposed fiscal 2018 federal budget. Photo credit: Andrew Harnik, AP.

The outcry from farmers, farm and food groups, and Members of Congress came swiftly this week following the release of President Trump's fiscal year (FY) 2018 budget proposal. The nation got its initial preview of the Administration's priorities this March in an outline budget document termed "the skinny budget (http://sustainableagriculture.net/blog/trump-budget-guts-agriculture/)". This week the full proposal, which did not stray from the original agenda despite significant early pushback, was released. By putting forward a budget proposal that so blatantly seeks to dismantle critical support programs for farmers and rural communities, President Trump has put the final nail in the coffin of an already tenuous relationship with American agriculture.

The Trump budget calls for deep cuts across most federal agencies, including those housed within the U.S. Department of Agriculture (USDA), which would see a 21 percent cut to its FY 2018 discretionary funding. Such a significant reduction would force USDA to lay off thousands of staff members across the country, and according to the Trump budget plan, include the elimination or severe reduction of many food, farm, and nutrition programs. With non-defense discretionary funding for federal programs already at its lowest level since the Eisenhower years, the Administration's budget would likely cause unprecedented strife to industries and communities across the nation.

This budget proposal is also unique in that it goes beyond the traditional laying out of discretionary funding priorities by seeking to reopen the farm bill to make a wide range of changes to food, farm, and agricultural policies. Though many opponents of the budget have confidently asserted that the President's proposal would be "dead on arrival" in Congress, the tone set by this toxic proposal is still likely to have some serious impact on the budget and appropriations debate processes.

Budget Overview

If Congress were to enact the Administration's budget proposal as written, USDA would be subject to a discretionary funding cut of 21 percent ($47 billion over 10 years). If Trump's proposed farm bill policy changes are added in, another $228 billion would be cut from USDA programs over the next 10 years.

Some of the biggest cuts proposed for FY 2018 include: $193 billion from the Supplemental Nutrition Assistance Program (SNAP) over ten years, $91 million from the Conservation Technical Assistance (CTA) program, and a cut of $95 million that would eliminate USDA's rural business and cooperative development programming. Within the category of budget and farm bill recommendations for next year, the Trump budget plan recommends the elimination of the Conservation Stewardship

Program (http://sustainableagriculture.net/publications/grassrootsguide/conservation-environment/conservation-stewardship-program/) and Regional Conservation Partnership Program (http://sustainableagriculture.net/publications/grassrootsguide/conservation-environment/cooperative-conservation-partnership-initiative/), as well as the Farmers Market and Local Food Promotion Program and Specialty Crop Block Grants.

The ultimate fate of the FY 2018 proposed cuts and eliminations will rest with the Congressional Appropriations Committees as they fashion their 2018 spending bills later this year. The ultimate fate of the mega proposals to slash social entitlement cuts like SNAP and potentially farm subsidy programs as well will be in the hands of the Congressional Budget Committees as they prepare budget resolutions for the next fiscal year – there is considerable concern that the resolution may include reconciliation instructions for the Agriculture Committees with respect to SNAP, which could doom chances for a farm bill in 2018. If the Agriculture Committees dodge any reconciliation instructions in the FY 2018 Budget Resolution then the ultimate fate of Trump's farm bill proposals will rest with the Agriculture Committees next year.

In this breakdown of the President's budget proposal, we have outlined areas of particular interest and concern to the sustainable agriculture community, including:

- Conservation
- Nutrition Assistance
- Research and Food Safety Outreach
- Socially Disadvantaged Farmers
- Rural Development
- Local and Regional Food Systems
- Farm Loans
- Crop Insurance and Commodities

Conservation Programs

The budget proposes a $325 million cut to the Environmental Quality Incentives Program (EQIP) (http://sustainableagriculture.net/publications/grassrootsguide/conservation-environment/environmental-quality-incentives-program/), a voluntary conservation program that provides farmers and ranchers with financial and technical support to adopt conservation on their lands in agricultural production. The President's request did not include sequestration for mandatory programs, so when combined with sequestration cuts, this level of reduction would eliminate nearly 25 percent of funding as authorized by the 2014 Farm Bill. In recent years these types of cuts (known as Changes in Mandatory Program Spending, or CHIMPS) have forced USDA to turn away up to three-quarters of eligible EQIP applicants seeking conservation assistance.

The President's budget also proposes cutting $91 million from Conservation Technical Assistance (CTA), which is in line with the President's recommendation that conservation planning be privatized. Although the National Sustainable Agriculture Coalition (NSAC) recognizes the usefulness of public-private partnerships in delivering conservation assistance, it is unrealistic to think that the private sector alone could fill the support gap that such a monumental cut would create. A cut of this proportion would eliminate nearly 500 NRCS field staff who deliver critical services and support across the country and greatly limit farmers' ability to access farm bill conservation programs.

Finally, we are extremely concerned about the 2018 Farm Bill proposals included in the President's budget that seek to decimate the bill's conservation title. The President's proposal would also completely eliminate the Conservation Stewardship Program (CSP) (http://sustainableagriculture.net/publications/grassrootsguide/conservation-environment/conservation-stewardship-program/) – USDA's largest working lands program – as well as the public-private partnerships under the Regional Conservation Partnership Program (RCPP) (http://sustainableagriculture.net/publications/grassrootsguide/conservation-environment/cooperative-conservation-partnership-initiative/). No cut (or increase) to the Conservation Reserve Program (CRP) is included, however the proposal does include policy language that would undermine USDA's ability to help farmers install conservation buffers that reduce nutrient loss.

Nutrition Assistance

NSAC and our allies in the anti-hunger and nutrition communities strongly oppose the President's proposal to cut $193 billion from the Supplemental Nutrition Assistance Program (SNAP) program over the next ten years. SNAP helps connect millions of children and their families with healthy foods every year, and also opens market opportunities to local and regional farmers.

The majority of the "savings" from the SNAP cut ($116 billion) would be made by block-granting the program to states, effectively putting them on the hook to match as much as 25 percent of the program's costs by 2023. Putting additional restrictions on the eligibility of able-bodied adults would make up $49 billion of the total cut, and a new application fee on retailers who participate in the program would represent $252 million of the cut. This fee would include not only brick and mortar retailers, but also farmers markets interested in expanding access to healthy, local foods for SNAP families.

These unprecedented cuts, larger even than the 2013 attempt by the House to cut $40 billion from SNAP (which effectively caused the farm bill to fail in that chamber), would be sure to cause serious bifurcations in Congress and doom any chances of passing a new farm bill.

Research and Food Safety Outreach

The budget also includes deep cuts to USDA's research programs, including a 30 percent cut to the Sustainable Agriculture Research and Education (SARE) program. The proposal also slices 7 percent from the Agriculture and Food Research Initiative (AFRI). The cuts to both SARE and AFRI would fly in the face of the wishes of Congress, who just recently provided both programs with significant increases in both the FY 2016 and FY 2017 appropriations acts.

Organic research is also cut in the budget proposal: although the Organic Agriculture Research and Extension Initiative (OREI) is left whole, the Organic Transitions (ORG) program (http://sustainableagriculture.net/publications/grassrootsguide/sustainable-organic-research/organic-transitions-research-education-and-extension-program/) has its funding eliminated entirely.

The Food Safety Outreach Program's (FSOP) funding is left flat at $5 million, not nearly enough to serve the 100,000+ farmers that need support to understand the law and how they may need to comply with the new rules and regulations required by the Food Safety Modernization Act.

The bill also includes $1 million for the National Bioengineered Food Disclosure Standard to implement the Genetically Modified Organism (GMO) labeling law that was passed in 2017.

Socially Disadvantaged Farmers

The mandatory farm bill funding for the Outreach and Assistance to Socially Disadvantaged and Veteran Farmers and Ranchers program (http://sustainableagriculture.net/publications/grassrootsguide/farming-opportunities/socially-disadvantaged-farmers-program/) (also known as the 2501 Program) was left unscathed in the President's budget. However, additional discretionary funding is badly needed to restore the program to full capacity, and last year the Obama Administration proposed a funding level to bring it back up to the annual level under the 2008 Farm Bill. NSAC will continue to seek restoration of this program to its historic funding level of $20 million.

Rural Development

Rural development programs take the brunt of the cuts in the budget, including a 26 percent reduction in overall funding. The entire discretionary budget for the Rural Business and Cooperative Service – $95 million – is proposed to be eliminated, including: the Rural Business Development Grants (RBDG) program, Rural Cooperative Development Grants (RCDG), Business and Industry Loan Guarantee Program (B&I), and Appropriate Technology Transfer for Rural Areas (ATTRA) program. In the case of the Value-Added Producer Grants (http://sustainableagriculture.net/publications/grassrootsguide/local-food-systems-rural-development/value-added-producer-grants/) (VAPG) program, the budget not only eliminates discretionary funding, it also zeros out mandatory funding provide for the program (leaving the program with no funds with which to make grants to farmers).

Without these critically important business and infrastructure development programs, rural communities will continue to suffer with lackluster economic growth rates, higher than average unemployment rates, population loss, and high poverty rates. The President's budget would undermine efforts to develop the human capital and provide the resources necessary to create desirable and viable rural communities that can attract new businesses and professionals – including the next generation of farmers.

The budget also requests several policy changes to the farm bill that would eliminate a host of Rural Development programs, including the Rural Energy for America Program, Rural Economic Development Program, and elements of the Rural Utilities Service. Combined, these eliminations would reduce investment in rural America by at least $2 billion.

On top of these draconian cuts and complete program eliminations, the Administration has also announced a reorganization of USDA (http://sustainableagriculture.net/blog/trading-away-rural-development/)that would eliminate the entire Rural Development Mission Area at USDA, get rid of the position of Under Secretary for Rural Development, and demote rural development to a small office that would report to the Secretary. The proposed budget, though eliminating many programs and billions in loans and grants to rural communities, would establish a new rural infrastructure fund – in essence, a slush fund – with a proposed $162 million in it that would operate outside the normal program and regulatory framework of USDA.

Local and Regional Food Systems

The budget includes 2018 Farm Bill proposals to eliminate two critical local and regional food system support programs, the Specialty Crop Block Grant program (http://sustainableagriculture.net/publications/grassrootsguide/local-food-systems-rural-development/specialty-crop-grants/) (SCBG), and the Farmers Market and Local Food Promotion Program (http://sustainableagriculture.net/publications/grassrootsguide/local-food-systems-rural-development/farmers-market-promotion-program/) (FMLFPP). FMLFPP supports the expansion of local and regional food markets by helping farmers connect with consumer and overcome barrier to expanding local and regional markets. SCBG provides important funding for marketing and research projects that improve the competitiveness and promote consumption of specialty crops including local and statewide priorities.

Farm Loan Program

Despite the fact that Congress prioritized support for USDA's Farm Service Agency (FSA) loan programs (http://sustainableagriculture.net/publications/grassrootsguide/farming-opportunities/farm-ownership-operating-loans/)in the FY 2017 omnibus by significantly expanding the agency's lending authority for Guaranteed Farm Ownership Loans, and Direct and Guaranteed Operating Loans in the face of the multiyear downturn in the farm economy, the Trump budget proposes dramatic cuts in FY 2018 – which would no doubt leave thousands of farmers stranded without access to the capital they need to sustain their farms.

According to the President's proposal, Guaranteed Farm Ownership loans would be cut by $250 million, Direct Operating Loans would be cut by $225 million, and Guaranteed Operation Loans would be cut by $566 million.

Given the dramatic downturn in the farm economy, now is not the time to be restricting farmer access to crucial credit and loan programs – especially for new farmers who are left with few other options to finance their farm expenses. American producers are currently suffering through an extended period of low prices, during which banks are scaling back their own lending and FSA-backed loans have been in extremely high demand.

Crop Insurance and Commodity Subsidy Programs

The Administration's budget includes several 2018 Farm Bill policy proposals aimed at modifying the federal crop insurance program. The biggest reform would be a recommended cap on the taxpayer-funded premium subsidy of $40,000, which would likely only impact farms with over 2,000 acres (depending on the area of the country and crop prices). This proposal would save $16.2 billion over 10 years. Previous government reports have indicated that a cap at this level would impact less than 4 percent of farms.

The budget also proposes an Adjusted Gross Income (AGI) cap of $500,000, which would prevent the wealthiest landowners from receiving unneeded government safety net assistance. This cap, which is lower than the current $900,000 AGI cap, would apply to Title I subsidy programs (ARC and PLC), conservation programs (CSP, EQIP), and Title XI crop insurance program subsidy benefits. This proposal is projected to save $1.7 billion over 10 years.

The last proposal to reform crop insurance is the elimination of all subsidies for the Harvest Price Option (HPO), which allows farmers to choose the projected price or the harvest price for the purposes of calculating whether they are entitled to a payout on a revenue protection crop insurance policy. The rational for inclusion of this provision is that it is not the government's job to assist farmers in hedging against market fluctuation. The budget does indicate, however, that private companies would be allowed to provide this coverage as an add-on to the federally back crop insurance policy. This proposal would save $11.9 billion over 10 years.

NSAC supports strategic changes to strengthen the federal crop insurance program by expanding access, better targeting benefits, and strengthening the relationship between crop insurance and conservation goals. However, we oppose any changes to the program that will undermine its ability to provide an appropriate level of risk management for farmers.

What Happens Next?

The President's budget proposal is an important document in that it sets the tone for debate in Congress around the federal spending for the year. Fortunately, it is *only* a proposal and congressional appropriators are under no obligation to take all or part of the President's recommendations.

This week, the House Agriculture Appropriations Committee held its first hearing with USDA Secretary Perdue to discuss the President's budget proposal – the response was highly critical. This hearing kicks off the appropriations process, which is already months late. Because they are already behind schedule, Congress now has only four months until the current budget expires (at the end of September) to craft a new appropriations bill for FY 2018.

Congress is also just beginning the budget process, which is usually concluded by now. It will now be up to the Budget Committees to decide whether or not to provide reconciliation instructions to the Agriculture Committees that would implement the Administration's SNAP or farm program overhaul policy proposals.

Stay tuned to the NSAC blog for more updates and analysis as things progress.

Categories: Beginning and Minority Farmers (http://sustainableagriculture.net/category/beginning-minority-farmers/), Budget and Appropriations (http://sustainableagriculture.net/category/budget-appropriations/), Commodity, Crop Insurance & Credit Programs (http://sustainableagriculture.net/category/commodity-insurance-credit/), Conservation, Energy & Environment (http://sustainableagriculture.net/category/conservation-energy-environment/), Farm Bill (http://sustainableagriculture.net/category/farm-bill/), Food Safety (http://sustainableagriculture.net/category/food-safety/), Grants and Programs (http://sustainableagriculture.net/category/grants-and-programs/), Local & Regional Food Systems (http://sustainableagriculture.net/category/local-food-systems/), Marketing and Labeling (http://sustainableagriculture.net/category/marketing-labeling/), Nutrition & Food Access (http://sustainableagriculture.net/category/nutrition-food-access/), Research, Education & Extension (http://sustainableagriculture.net/category/research-education-extension/), Rural Development (http://sustainableagriculture.net/category/rural-development/)

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5 responses to "Trump's Proposed Budget Cuts Would Spell Disaster for Rural America"

1. Judy Finley says:
   May 25, 2017 at 10:54 am (http://sustainableagriculture.net/blog/trump-budget-proposal-disaster/#comment-1036890)
   These cuts would have a devastating effect on rural New Mexico.

2. C Graham says:
   June 2, 2017 at 12:50 pm (http://sustainableagriculture.net/blog/trump-budget-proposal-disaster/#comment-1036990)
   The cuts would hurt, but overall the government has to tighten it's belt and reduce spending. Programs will have to be cut or combined to be more efficient. It will not only be tight on the programs, but the government employees that it impacts. BUT we cannot stand by and watch our country go deeper and deeper in debt with these swollen government budgets.

3. Pattie Hines says:
   June 20, 2017 at 3:28 pm (http://sustainableagriculture.net/blog/trump-budget-proposal-disaster/#comment-1037181)
   There are plenty of other areas to cut instead of butchering agriculture!! Obviously he doesn't have a clue where his food he eats comes from!

4. A. Troutman says:
   June 20, 2017 at 5:38 pm (http://sustainableagriculture.net/blog/trump-budget-proposal-disaster/#comment-1037183)
   so sustainable agriculture must include hundreds of billions of dollars in government spending? Can we not stand on our own two feet and farm without our neighbors propping us up with their hard earned money? Sustainability should include both the environment and economics

5. Reana Kovalcik says:
   June 21, 2017 at 1:43 pm (http://sustainableagriculture.net/blog/trump-budget-proposal-disaster/#comment-1037195)
   Support for sustainable agriculture is needed and warranted given the decades of imbalance in the other direction – i.e. subsidies and supports for industrial agribusinesses and megafarms. Ideally we would have a level playing field wherein minimal outside support for farmers was needed, but unfortunately we are not yet at that point.

The Washington Post

Post Nation

Heavy cuts to rural development and infrastructure in latest Trump budget

By Jose A. DelReal May 23, 2017

Rural Americans stand to lose billions of dollars in federal assistance to support infrastructure and economic development in their communities, according to an analysis of the Trump administration's 2018 federal budget. Many of the programs for elimination provide direct services to rural areas where Trump is most popular.

The White House would slash rural housing subsidies, mortgage loan guarantees, programs that maintain clean water and other utilities and independent agencies that support job training programs. In many cases, states would be expected to offset spending cuts to critical infrastructure, like sewer repairs; but in other cases, including development grants that revitalize neighborhoods or seed new local businesses, communities would likely have to turn to private organizations for funding or assistance.

Members of Congress likely will fight against many of the proposed cuts that benefit their constituents directly.

The Rural Utilities Service would lose billions of dollars under the proposed budget for the U.S. Department of Agriculture, including more than $2 billion used to keep power lines, phones and Internet connectivity working in rural areas. Funding for rural business owners also would be slashed, from nearly $130 million in 2017 to $31 million.

"The 2018 budget eliminates this program because it has not been able to show evidence of improved outcomes; such as economic growth and decreasing out-migration," the proposal says.

USDA's Rural Housing Service would also see billions in cuts that virtually eliminate direct loans and mortgage guarantees for rural households, potentially making homeownership and revitalization more difficult. Under the administration's proposals, there is no funding for new housing grants for rural families or farm laborers in the budget, nor for direct loan subsidies.

The Rural Housing Insurance Fund — which provides mortgages to rural home buyers and insures home loans — would cut the budget for its direct-loan program to $250 million in 2018, from nearly $3.7 billion in 2016. The budget does not detail the

White House's reasoning for ending the program, but the conservative Heritage Foundation — which has provided much of the groundwork for the administration's budget priorities — has railed against the program in the past, saying that government subsidies deter private lenders from entering the market.

The budget would also end housing repair grants for very low-income people in non-metro areas, saving $30 million from 2016 levels, and would end a program that provides loans for rural housing revitalization, saving another $20 million. The budget also shaves $30 million by ending a program that provides guidance for people seeking to build their own homes in partnerships with other families.

The administration is also seeking to cut nearly $50 million in subsidies to renters in rural areas, reducing funding for that program to $1.3 billion. The budget continues to provide about $1.3 billion in funding for such people.

Funding for research meant to benefit rural and agricultural areas would also be greatly diminished by the new budget. The Agricultural Research Service — which funds scientific research specifically focused on issues related to farming, livestock, nutrition and food safety — would see its discretionary budget cut by $165 million.

The budget also calls for the termination of several independent agencies that invest heavily in rural America, including the Appalachian Regional Commission and the Delta Regional Commission. The ARC is particularly popular among politicians and community leaders in Appalachia. Because many infrastructure projects, such as sewer system overhauls and highway repairs, are not high-profile, many Americans who benefit from such federal funding are unaware. In Kentucky, one program funded by the ARC is helping retrain workers who have lost their jobs in computer training, including coal miners; other funding has gone toward creating seniors centers, community kitchens, drug rehabilitation spaces and educational programs.

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Analysis: How Trump's budget helps the rich at the expense of the poor

221 Comments

Jose DelReal is a national correspondent covering America's rural-urban divide, the USDA, and HUD. During the 2016 presidential election, he traveled to over 40 states while chronicling Donald Trump's astonishing political rise. Jose grew up in Anchorage, Alaska, and graduated from Harvard College. He lives in Washington, D.C. Follow @jdelreal

I'm a rancher, and I support the Endangered Species Act

By Guest Author / Published: January 9, 2018

In a recent op-ed for The Hill, Robert Henneke of the Texas Public Policy Foundation shared his opinion that "The Endangered Species Act is an ineffective regulatory burden." I believe Mr. Henneke lacked a full perspective of the bedrock American environmental policy.

A sixth generation rancher defends the Endangered Species Act as "a much needed incentive" for conservation

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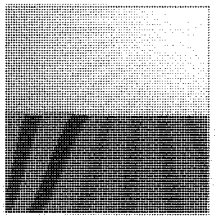
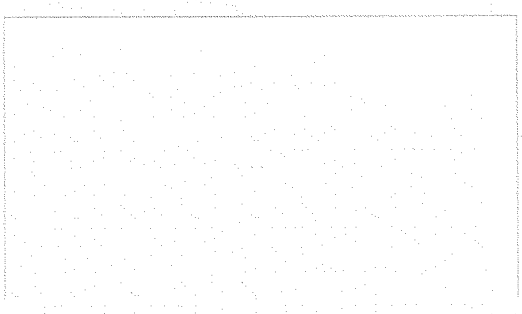
As a fellow Texan, I was surprised to see Mr. Henneke



forget about the great wildlife success stories in our home state. The whooping crane, the Kemp's Ridley sea turtle and the Northern Aplomado Falcon have all experienced growing populations in Texas, thanks to conservation efforts made possible by the Endangered Species Act (ESA). Though they are still classified as "endangered," these species have turned the trajectory from extinction to recovery, so I wouldn't say the Act is ineffective, and I certainly wouldn't go so far as Mr. Henneke does to call it "a terrible approach" to saving species with "an abysmal track record."

I'm a sixth generation rancher in Brady, Texas. My husband George and I love and care for the land, the livestock, and the wide variety of Texas wildlife that call our ranch home. That's why we were eager to sign up as pilot participants of the Monarch Butterfly Habitat Exchange – the very program Mr. Henneke describes as an effective voluntary program that "should be allowed to flourish." I agree with Mr. Henneke on this point. George and I feel we have a commitment to care for the land and the critters on it, and we are positioned well to do this.



Amy Greer with her husband George on the ranch.

But the case for market-based programs like the exchange comes down to supply and demand. Landowners can provide the habitat, but who will pay for it?

The ESA provides a much needed incentive for public and private investment in conservation.

The U.S. Fish and Wildlife Service has a 2019 listing decision deadline for the monarch butterfly. That deadline is a big motivator for participation in programs like the monarch exchange, both for investors like the Environmental Defense Fund members who kick-started funding for the conservation project on our ranch, and for landowners who might not otherwise have known about the species' status.

Instead of trying to undermine the ESA, Congress should look to market-based approaches like the

exchange as inspiration and impetus for more action and investment before species are added to the endangered species list in the first place.

Amy Greer is a sixth generation rancher at Winters-Wall Ranch in Brady, Texas.

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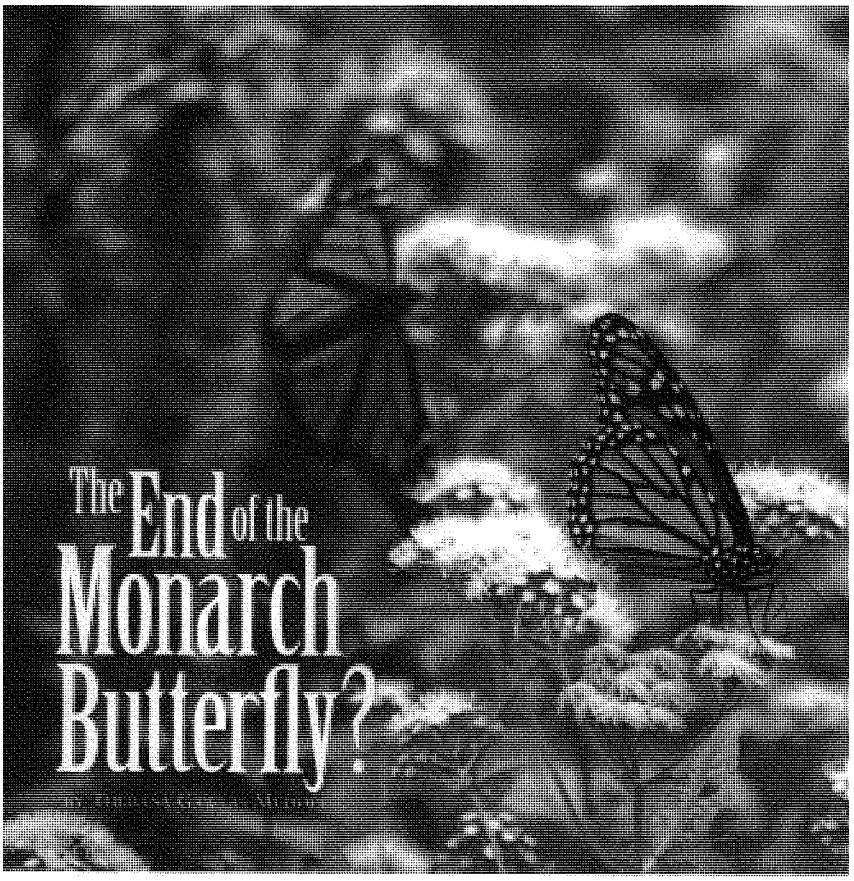
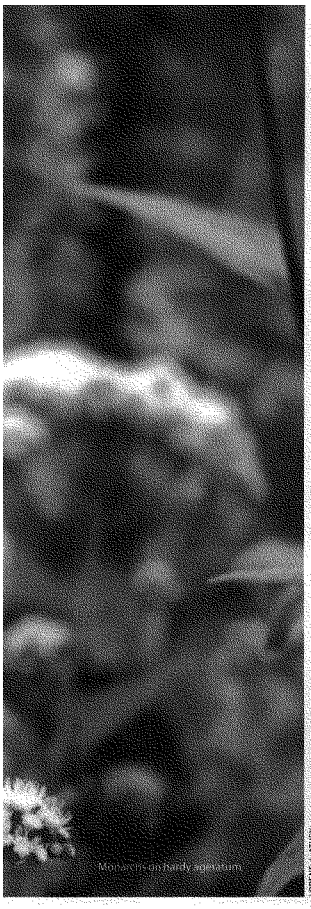


The End of the Monarch Butterfly?

According to the "Butterfly Effect," the flutter of a butterfly's wings in China could affect weather patterns in New York City, thousands of miles away. It is possible, then, that a very small occurrence – like the beating of butterfly wings – can produce unpredictable and sometimes drastic results by triggering a series of increasingly significant events. So what lies ahead for us, if the monarchs disappear?

IMAGINE WALKING into a fir tree forest in central Mexico and encountering a wall of orange and black—millions of monarch butterflies festooning the trees for acre upon acre. The sun comes out, and the butterflies fly about and then reform their clusters. "It's absolutely one of the most beautiful sights you can see in the natural world," says Lincoln Brower, a monarch expert at



LORENE J. ATHEY

Monarchs on hardy ageratum

Sweet Briar College in Virginia. Unfortunately, these days all you can do is imagine the scene, because the number of monarchs in North America has dropped precipitously in the past two decades, and even over the past three years.

As recently as 1996, monarchs covered more than 54 acres of Mexican forest each fall; last year, they covered a mere 2.4 acres.

And this year? "If it's any smaller than it was last year, we're in trouble," Brower says.

In Delaware, at Brandywine Creek State Park near Greenville, the news is bleak. "Over the last two years, the number of monarchs has declined drastically both here and at other parks," says Lisa Watt, the park's Nature Center and programs manager. The park has an annual tag and release program every September, and staff also manage the park's meadows to help monarchs by providing two monarch way stations. These provide vital habitat for the monarchs from egg to hatching, and as they migrate. Watt says the monarch decline is so bad that they have not had any monarchs hatched and available to tag. "We have had to alter the program from releasing monarchs to educating the public about the importance of native plants like milkweed, to increase the number of monarchs," Watt says.

Wondrous Natural Phenomenon Upended

The news is the same in all the parks, according to Rob Line, ecologist with DNREC's Division of Parks and Recreation. Line works in all the state parks and wild properties throughout Delaware, "and we didn't see monarchs this year," he says.

The Delaware Nature Society participates in the annual North American Butterfly Association Fourth of July Butterfly Count. This year's results were "schizophrenic," says Sheila Vincent, group programs coordinator at the Nature Society's Ashland Nature Center. In a "normal" year, Delaware's butterfly counters would tally between 50 and 100 monarchs in an area the size of Ashland Nature Center. This year, Vincent counted just one monarch at the center on a cool, rainy morning, while 28 monarchs were seen at Coverdale Farm Preserve on a warm, sunny afternoon. She called the results of the count at Coverdale "encouraging, though hardly spectacular, given the large area covered."

The great migration

The monarch migration is one of nature's greatest phenomena. The same delicate monarchs that flutter around our gardens in late summer and early fall fly all the way to Mexico to overwinter, typically arriving in early November. In March, they begin to make their way back north, flying as far as Texas, Louisiana and North Florida before laying the eggs for a new generation of butterflies that will head north to the prairies of the Midwest and the fields of the East. In contrast to that one remarkable, long-lived generation, there will typically be two to three generations of butterflies throughout the summer. So the monarchs that migrate to Mexico in the fall have never been there

LORENE J. ATHEY

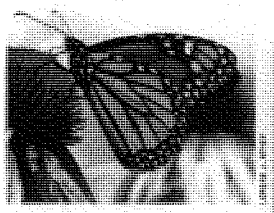
Monarch caterpillar on butterflyweed.

before. They are migrating and finding their way purely by instinct.

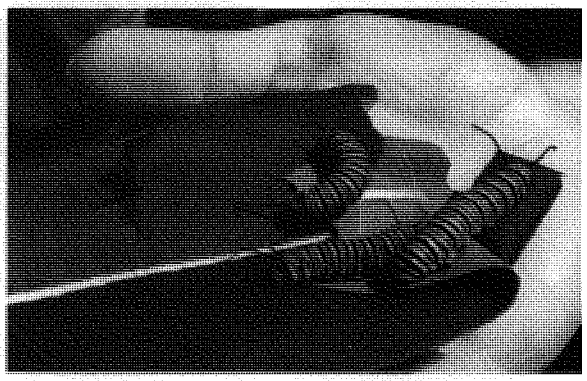
But we might be in danger of losing the natural phenomenon of this amazing migration. A dramatic loss of habitat—of milkweed, which is the only plant that the monarch caterpillars feed on, and of the nectar plants [see sidebar on page 16] that nourish the butterflies—has led to a correspondingly dramatic drop in the number of monarchs, and that drop has biologists and conservationists attempting to raise the public alarm, so far without receiving the level of response needed.

"Ornithologists ought to be screaming bloody murder about what's happening out there," says Chip Taylor, founder of Monarch Watch, a nonprofit education, conservation, and research program based at the University of Kansas, which focuses on the monarch butterfly, its habitat, and its spectacular fall migration. That's not only because the migrating monarch could die out in North America, but also because monarch caterpillars are a food source for numerous bird

Above and below: Alapocas Run and Wilmington State Parks, in partnership with teachers from the Red Clay School District, Delaware Master Gardeners, the Delaware Nature Society and the U.S. Fish and Wildlife Service, hosts a two-day workshop each summer for formal and informal educators covering monarchs, their migration and the cultures they touch.



Monarch on purple coneflower, also known as echinacea.



species, but as significantly, monarchs are an indicator species—"the canary in the coal mine," as Taylor calls them. If we're losing monarchs, we're also losing other insects that birds feed on as well as other pollinating species, like honey bees.

"We have 4,000 species of native bees, and they all feed on the same types of plants that the monarchs do. If our agricultural practices are eliminating the monarch, they are also eliminating other species," says Doug Tallamy, professor of entomology and wildlife ecology at the University of Delaware.

A recent article in the journal *Science* warned that we are in the middle of a "mass extinction" of life on Earth. Mass extinctions have taken place five times before, scientists say, but previous ones—the most well-known being the extinction 66 million years ago that killed off the dinosaurs, and three out of four species on Earth—were caused by natural conditions. The current mass extinction is attributable to one cause: humans, the article's lead author, Rodolfo Dirzo of Stanford University, told *USA Today*.

Causes...

The most serious of the contributors to the monarch's decline is the loss of habitat caused—to a large degree—by the proliferating use of herbicides, primarily glyphosate, active ingredient in the well-known Monsanto product Roundup.

When the large farms of the Mid-

west—and that is where monarchs are concentrated—spray herbicides on the crops, they are affecting all the plants that border the fields, resulting in "the wholesale killing off of the larval food plant and the nectar sources. Millions of acres of land have been sterilized basically," Brower says. He points to one study, by University of Minnesota researcher Karen Oberhauser, showing that 80 percent of the milkweed in Iowa has been eliminated in the last decade.

"Delaware never has had many swaths of milkweed as you would see in the Midwest," says Vincent. "Nevertheless, it's still a problem here. What makes it maybe worse in Delaware is that what little we have is disappearing."

Biofuels are also to blame for the monarch's troubles. Federal subsidies that go to farmers who grow corn—the "bio" in bio fuels—have led farmers to plant ever increasing acreages with corn, wiping out land that used to be full of milkweed and other plants that insects need to live.

But it's not just farms that are contributing. If you're a longtime Delaware resident, you know how much land use has changed in the past decade or so, as new housing developments have sprung up and new businesses and shopping malls have been built. Land once occupied by farms or fields has now been paved over or given way to suburban lawns. All of that development takes a heavy toll on the wildlife that once lived on those lands. And what's happening in Delaware is happening all over the country.

"It's very simple," Tallamy says. "Life starts with plants, and when you eliminate plants from the landscape, you eliminate the life that depends on it. If you do enough of that, we're going to eliminate ourselves. We just can't do [what we're doing] over the long term and call any of that sustainable."

ALAPOCAS RUN AND WILMINGTON STATE PARKS.

And Solutions

But just as the loss of the monarch is a symbol of how we are treating the land, so too can it be a symbol of resuscitation. It's not too late, the experts say. "The good news is that the monarch is an insect, and insects have high birth rates… [T]hey have a capacity to come back pretty fast if conditions are optimal," Brower points out.

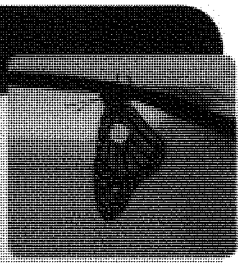
One important step that's already being taken is the reforestation of central Mexico, where the monarchs overwinter. There had been a dramatic loss of fir trees to logging, but the government and private conservation organizations are beginning to turn that situation around.

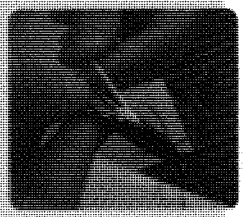
There are other hopeful signs. On June 20, President Obama released a presidential memorandum creating a federal strategy to promote the health of honey bees and other pollinators. The memorandum created a Pollinator Health Task Force to be co-chaired by the Secretary of Agriculture and the Administrator of the Environmental Protection Agency.

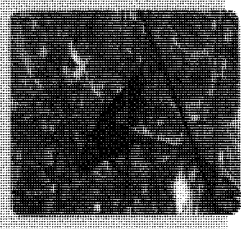
Governments can help in the move to preserve monarchs and other pollinators by mowing roadsides less frequently—just once a year, recommends Brower. Lands where there are power lines and pipeline rights could also be mowed less frequently.

Farmers could help by spraying insecticides more discriminately. And Monsanto could help, Tallamy says, by instituting a widespread education program that warns farmers about the problem and makes recommendations for how to mitigate it. "This is a

Monarch Tagging







BRANDYWINE CREEK STATE PARK

golden opportunity for [Monsanto] to put a big star next to their name, a big green label and say, 'Hey, we're making this product but use it responsibly. Don't do this, don't do that. Leave a big strip of milkweed along all of your fields.' This is something that farmers could do without any loss of yield at all," Tallamy says.

Delaware's State Parks: providing a local solution

At Brandywine Creek State Park, near Greenville, park staffers have been managing its meadows primarily for grassland birds, but also for insects including monarchs. "We manage our meadows in a way that supports both the birds and the monarchs," says Park Superintendent Angel Burns. "We do have a good amount of milkweed in the park, and we've generally seen a good number of monarchs." Burns says the way the meadows are managed can promote milkweed growth. "One of our goals is to cut down on invasive woody plants in the meadows. If we do that, it should help more milkweed to return."

Burns says staff members are careful about mowing at the park, making sure enough milkweed is left in areas not mowed to offset areas that are mowed. "There is one patch that has great milkweed in it that we have specifically not mowed yet to keep it up for monarchs."

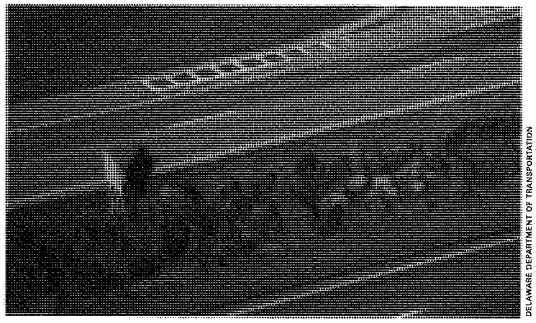
In addition, the park works with a volunteer master gardener to collect milkweed seeds to distribute. And, Burns says, staff collect caterpillars and raise them to butterflies to increase the number of caterpillars that make it to adulthood. "When they are adults we tag them and release them," Burns says.

"At Bellevue State Park, we do an educational program each September for the public about monarchs," says Park Interpreter Claire Mickletz. "We also have a plan to manage mowing to help promote milkweed and other beneficial meadow plants."

Similarly, a small patch of milkweed is planted outside of the Wilmington State Parks, according to Liz Andreskaut, programs manager for Alapocas Run and Wilmington State Parks. "Alapocas/Wilmington State Parks, in partnership with teachers from the Red Clay School District, Delaware Master Gardeners, the Delaware Nature Society and the U.S. Fish and Wildlife Service, host a two-day workshop in the summer for formal and informal educators covering monarchs, their migration and the cultures they touch," Andreskaut says.

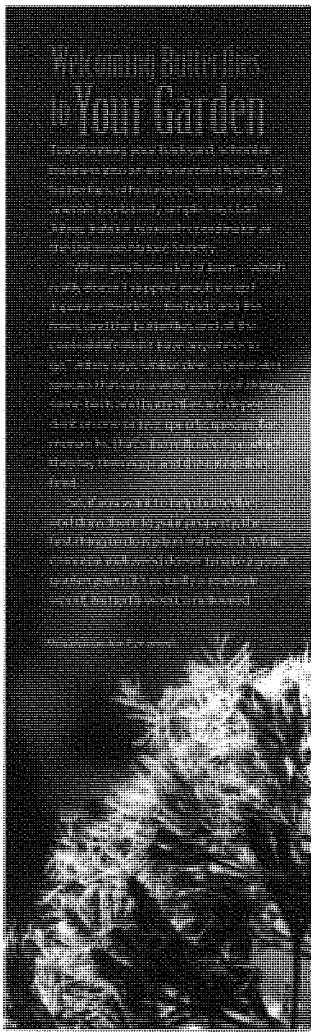
LORENE J. ATHEY

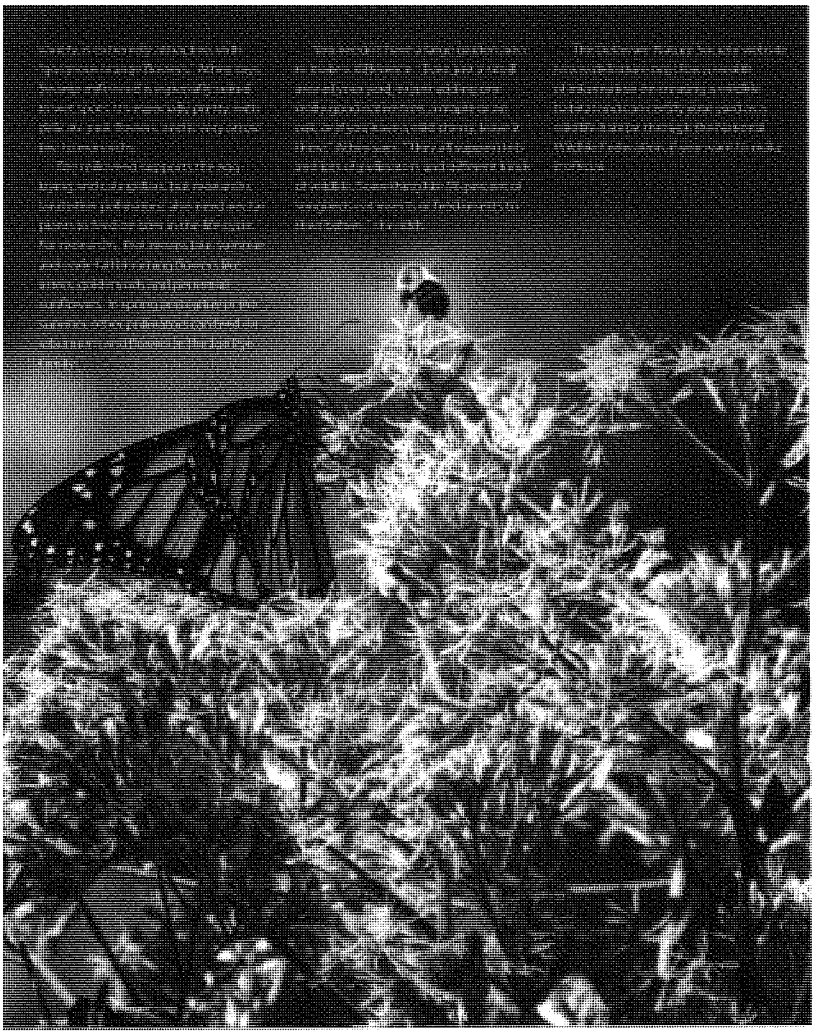
Monarch on native perennial sunflower.



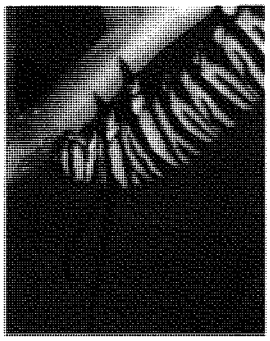
DELAWARE DEPARTMENT OF TRANSPORTATION

DelDOT has had in place for many years a policy of reduced mowing in medians, interchanges and side slopes. The median meadows allow growth of wildflowers and grasses that provide food and habitat for pollinators.





LORENE J. ATHEY



DANIELLE QUIGLEY, UNIVERSITY OF DELAWARE

Monarch caterpillar.

Rachael Phillos, Nature Center manager at Killens Pond State Park near Felton, says the park has historically ordered monarch caterpillars from Monarchwatch.org, and offered public programs in September on monarchs. "However, for the past two years, we have just tried to find caterpillars locally, and have offered a program on them, Phillos says. "We offered a homeschool class this year that covered the lifecycle and the migration of the monarchs to Mexico. "Additionally," Phillos says, "the park usually tries not to mow the meadows until late October or early Novemher to make sure that monarchs have left the area."

Other efforts by state agencies

Similarly, the Delaware Department of Transportation is taking action to benefit the monarchs and other pollinators. According to DelDOT Environmental Scientist Marianne Walch, DelDOT has had in place for many years a policy of reduced mowing in medians, interchanges and side slopes. "When medians are wide enough, we generally mow only a six-foot 'beauty strip' along the edges and allow the rest to be meadow for the summer. Then, once a year, the entire area is mowed to reduce growth of woody vegetation. This saves the state money, yet still keeps a neat appearance that the public demands," Walch says.

While not intended for this purpose, the median meadows allow growth of wildflowers and grasses that provide food and habitat for pollinators. In addition, DelDOT's "Enhancing Delaware Highways" (EDH) program, a joint venture between the DelDOT and the University of Delaware, provides guidance for more sustainable, integrated roadside vegetation management, including the incorporation of native plants. The EDH Concept and Planning Manual states that "when sound horticultural and ecological principles are brought to bear on vegetation management, roadside rights-of-way also serve as regional nature preserves, maximizing biodiversity while minimizing routine maintenance requirements."

One of the Delaware Department of Agriculture's projects is the "Planting Hope in Delaware Garden," which includes a monarch waystation. Established in 2010, the garden is a public-private partnership designed to enhance the well-being and improve the health of the greater Herman Holloway Campus community in Wilmington/New Castle.

It's up to you, too

From the federal to state to local levels, efforts are underway to help the monarch butterflies. But individuals can make a difference, too, by planting milkweed and nectar plants in their home gardens and by encouraging local schools and businesses to do the same (see page 16).

With a coordinated effort, it is possible for the monarch migration to be the dramatic sight it once was—and to improve the environment for other insects and birds at the same time.

For more information:

MonarchWatch.org

MonarchButterflyFund.org

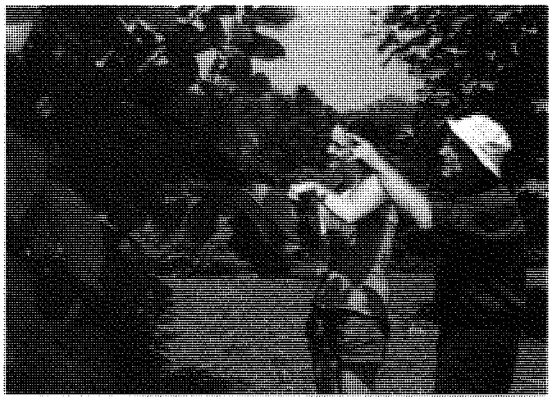
fs.fed.us/wildflowers/pollinators/Monarch_Butterfly/do/index.shtml

NABA.org

Delnature.org

OD

THERESA GAWLAS MEDOFF IS A FREQUENT CONTRIBUTOR TO *OUTDOOR DELAWARE*.



DANIELLE QUIGLEY, UNIVERSITY OF DELAWARE

Doug Tallamy and Emily Baisden of the University of Delaware, collect insects from a garden at Mt. Cuba Center with a leaf blower converted to a vacuum machine.

January 25, 2018

Re: Oppose Efforts to Gut Safeguards Protecting Imperiled Species from Pesticides

Dear Senator/Representative:

The undersigned 258 conservation, consumer, agricultural, and other public interest groups urge you to oppose all efforts to weaken or gut Endangered Species Act requirements to address the effects of toxic pesticides on threatened and endangered species. The Endangered Species Act is our nation's most effective law for protecting wildlife in danger of extinction and has prevented the extinction of more than 99 percent of the species under its care. This vital law is supported by more than 90 percent of American voters.

Some members of the pesticide manufacturing industry are proposing legislation that would exempt their products from key Endangered Species Act safeguards. Their proposal would also exempt this industry from responsibility for the harms caused by pesticides to West Coast salmon, California condors, Florida panthers and a host of other imperiled species. These proposed changes would severely undermine the Endangered Species Act and have devastating consequences for our nation's threatened and endangered species.

Under current law, the Environmental Protection Agency (EPA) must consult with two expert agencies—the U.S. Fish and Wildlife Service and National Marine Fisheries Service ("the wildlife agencies")—to identify and minimize impacts to endangered species caused by pesticide products that EPA registers for commercial use. When necessary, these science-based interagency consultations result in commonsense protections, such as limits on spraying pesticides in key areas where endangered species live.

The industry-proposed legislation would gut these longstanding requirements and instead put large corporate interests in control. In addition, this dangerous legislation would exempt all approved pesticide use from enforcement under the Endangered Species Act, even where it directly kills or injures endangered wildlife.

Our organizations are supportive of administrative innovations to improve interagency consultations on the impacts of pesticides on endangered species. The National Academy of Sciences made recommendations to do just that in a 2013 report. This process is already underway with a set of pilot consultations on three neurotoxic pesticides—chlorpyrifos, malathion and diazinon—and we support its continued implementation and refinement.

Unfortunately, in April of 2017, Dow AgroSciences asked EPA Administrator Scott Pruitt to stop all of his agency's work to assess the effects of these three pesticides on endangered species. This request came shortly after Mr. Pruitt defied his own agency's previous finding that chlorpyrifos is unsafe, especially to young children, by allowing it to remain on the market. We urge you to ensure that this interagency consultation process continues in earnest and that EPA and the wildlife agencies involved receive adequate funding.

Endangered species are often the early warning system to alert us to the unintended harms of pesticides. It was the catastrophic decline of the bald eagle, peregrine falcon and other endangered species that caused the U.S. Fish and Wildlife Service and other agencies to sound the alarm on DDT. Thankfully, the bald eagle, our national symbol, was saved from extinction by the protections afforded by the Endangered Species Act. The Act remains the "gold standard" for species protection and recovery today, both here and around the world. We ask you to protect this vital law, not only to save our most treasured rare plants and animals, but also to protect our waters, our lands, and our health. Please oppose all efforts to weaken the Act's ability to protect our environment from toxic pesticides.

Sincerely,

NATIONAL ORGANIZATIONS

Advocates for Snake Preservation
All-Creatures.org
American Bird Conservancy
American Birding Association
American Indian Mothers Inc.
Animal Legal Defense Fund
Animal Welfare Institute
Animals Are Sentient Beings; Inc.
Avaaz
Avian Research and Conservation Institute
Basin and Range Watch
Beyond Pesticides
Bold Visions Conservation
Born Free USA
Boulder County Audubon Society
Center for Biological Diversity
Center for Food Safety
Center for Environmental Health
Citizens for Sludge-free Land
Clean Water Action
Coalition on the Environment and Jewish Life
Conservation Imaging, Inc.
Cornell Lab of Ornithology
Defenders of Wildlife
Desert Tortoise Council
Earthjustice
Ecosistemas Andinos
Endangered Small Animal Conservation Fund
Endangered Species Coalition
Food & Water Watch
For the Fishes
Friends of the Earth US
Fund for Wild Nature

Garden, Inc.
Great Old Broads for Wilderness
GreenFaith
GreenLatinos
Greenpeace
Hawk Mountain Sanctuary Association
Hilton Pond Center for Piedmont Natural History
Honor the Earth
Humane Society Legislative Fund
In Defense of Animals
International Bird Rescue
International Fund for Animal Welfare
International Marine Mammal Project of Earth Island Institute
Justice for Wolves
Moms Advocating Sustainability.org
Native American Community Board
Native Plant Conservation Campaign
Natural Resources Defense Council
Oceana
One More Generation
OneLessStraw
Peace and Freedom Party
Pesticide Free Zone
Power Shift Network
Predator Defense
Project Coyote
Public Employees for Environmental Responsibility
Public Lands Project of Rochester Area Vegan Society
Sailors for the Sea
Save Animals Facing Extinction
Save EPA
SAVE THE FROGS!
Saving Birds Thru Habitat
Sequoia ForestKeeper
Sierra Club
Slow Food USA
Spirit of the Sage Council
SustainUS
Tellus Institute
The Carl Safina Center
The Cougar Fund
The Humane Society of the United States
The Institute for Bird Populations
The Rewilding Institute
Tikkun's Network of Spiritual Progressives
Turtle Island Restoration Network
Urban Bird Foundation
Voces

Walden Woods Project
Waterkeeper Alliance
Western Watersheds Project
WildEarth Guardians
Wild Horse Education
Wilderness Watch
WilderUtopia
Wildlands Network
Wildlife Rescue & Rehabilitation Inc.

REGIONAL ORGANIZATIONS

Alabama
Alabama Environmental Council
Black Warrior Riverkeeper
Cahaba River Society

Alaska
Alaska's Big Village

Arizona
Grand Canyon Trust
Maricopa Audubon Society
Sustainable Arizona
Tucson Audubon Society

California
Alameda Creek Alliance
Antelope Valley Conservancy
Battle Creek Alliance, Defiance Canyon Raptor Rescue
California Chaparral Institute
Californians for Alternatives to Toxics
Californians for Pesticide Reform
Californians for Western Wilderness
Citizens Committee to Complete the Refuge
Endangered Habitats League
Environmental Action Committee of West Marin (EAC)
Environmental Protection Information Center
Friends of Harbors, Beaches and Parks
Friends of the Santa Clara River
Golden Gate Audubon Society
Klamath Forest Alliance
KyotoUSA
Moms Advocating Sustainability
Native Songbird Care & Conservation

North County Watch
Occidental Arts and Ecology Center
Pacifica Beach Coalition
Poison Free Malibu
Pomona Valley Audubon Society
Raptors Are The Solution
Redwood Region Audubon Society
San Bernardino Valley Audubon Society
San Francisco Baykeeper
San Joaquin Raptor/Wildlife Rescue Center
San Joaquin Valley Conservancy
Santa Clara Valley Audubon Society
The Urban Wildlands Group
Tuolumne River Trust
Ventana Wilderness Alliance
Watershed Alliance of Marin
Wild Nature Institute
WILDCOAST

Colorado
Animas Valley Institute
Blue Sky Rehabilitation
Boulder Rights of Nature, Inc.
Colorado State Beekeepers Association
Living Rivers & Colorado Riverkeeper
People and Pollinators Action Network
Rocky Mountain Recreation Initiative
Rocky Mountain Wild
San Juan Citizens Alliance
Wilderness Workshop

Delaware
Delaware Ecumenical Council on Children and Families
Green Delaware

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Georgia
Georgia ForestWatch

Hawaii
Apollo Kauai
Conservation Council for Hawai'i
Maui Forest Bird Recovery Project

Idaho
Kootenai Environmental Alliance
Selkirk Conservation Alliance
WildLands Defense

Illinois
Bird Conservation Network
Chicago Audubon Society
Seven Generations Ahead

Indiana
Hoosier Environmental Council
Independent Environmental Conservation & Activism Network
South Bend-Elkhart Audubon Society

Iowa
Iowa Audubon

Kentucky
Kentucky Heartwood

Louisiana
Gulf Restoration Network
Orleans Audubon Society

Maine
Friends of Merrymeeting Bay

Maryland
Audubon Naturalist Society
Climate Stewards of Greater Annapolis
CSGA
Gunpowder RIVERKEEPER
Maryland Ornithological Society
Maryland Pesticide Education Network
Potomac Riverkeeper

Wicomico Environmental Trust

Massachusetts
Berkshire Environmental Action Team
Eastern Coyote/Coywolf Research
Mass Audubon
RESTORE: The North Woods

Michigan
Charter Sanctuary
Chocolay Raptor Center

Minnesota
Fairmont, MN Peace Group
Howling For Wolves
Mankato Area Environmentalists
Minnesota River Valley Audubon Chapter
Occupy Duluth
Pollinate Minnesota
Save Our Sky Blue Waters

Montana
Alliance for the Wild Rockies
Cottonwood Environmental Law Center
Friends of the Bitterroot
Friends of the Wild Swan
Speak Up For Wildlife Foundation
Swan View Coalition

Nebraska
Western Nebraska Resources Council

New Hampshire
Audubon Society of New Hampshire

New Jersey
Animal Protection League of New Jersey
Monmouth County Audubon Society

New Mexico
ON A WING AND A PRAYER
Southwest Environmental Center
Southwestern New Mexico Audubon Society
Upper Gila Watershed Alliance

New York
Citizens Campaign for the Environment
NYC Audubon
Save the Pine Bush
Wild Birds Unlimited of Syosset

North Carolina
Cape Fear River Watch
Dogwood Alliance
MountainTrue
NC WARN
The Canary Coalition
The Forest Foundation, Inc
Toxic Free North Carolina

Oregon
Beyond Toxics
Geos Institute
Greater Hells Canyon Council
Kalmiopsis Audubon Society
Klamath Riverkeeper
Klamath Siskiyou Wildlands Center
KS Wild
Northeast Oregon Ecosystems
Northwest Center for Alternatives to Pesticides
Northwest Environmental Advocates
Northwest Environmental Defense Center
Oregon Natural Desert Association
Salem Audubon Society
Wild and Scenic Rivers

Pennsylvania
Delaware Valley Ornithological Club
Juniata Valley Audubon Society
Pennsylvania Native Plant Society
Save Our Allegheny Ridges

South Carolina
Upstate Forever

Tennessee
Cumberland-Harpeth Audubon Society
Tennessee Clean Water Network

Tennessee Environmental Council
Tennessee Ornithological Society
Tennessee Riverkeeper

Texas
Texas River Revival

Utah
Uranium Watch
Wasatch Clean Air Coalition
Western Wildlife Conservancy
Yellowstone to Uintas Connection

Vermont
Vermont Center for Ecostudies

Virginia
Audubon Society of Northern Virginia
Friends of Dyke Marsh
Shenandoah Riverkeeper

Washington
Conservation Northwest
Friends of Bumping Lake
Kettle Range Conservation Group
Wolf Haven International

West Virginia
Upper Potomac Riverkeeper

Wisconsin
Madison Audubon
Raptor Services, LLC
Viroqua Biodynamic Group & Kickapoo Peace Circle
Western Great Lakes Bird and Bat Observatory, Inc.

Puerto Rico
Citizens of the Karst

February 7, 2018

The Honorable John A. Barrasso
Chairman
Environment and Public Works Committee
United States Senate
307 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Thomas R. Carper
Ranking Member
Environment and Public Works Committee
United States Senate
456 Dirksen Senate Office Building
Washington, DC 20510

Re: Rural Communities Have a Right to Know About Their Exposure to Hazardous Emissions

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Chairman Barrasso, Ranking Member Carper and members of the Environment and Public Works (EPW) Committee:

In light of the February 7, 2018 Senate Committee hearing entitled, "The Impact of Federal Environmental Regulations and Policies on American Farming and Ranching Communities," the following comments were submitted by individuals and organizations that represent rural community members, farmers, and other constituents, who strongly believe that:

- Americans have a right to know about hazardous substances emitted near their homes and workplaces—no matter what the source.
- There is no reason that people should be denied information about the toxic emissions they are exposed to simply because the emissions come from a CAFO, where hundreds or thousands of animals are confined for long periods in facilities where their waste is concentrated and stored in high volumes, rather than being dispersed naturally across pastures.

ALABAMA:

1) *"Many of our members in Cullman and Blount Counties are sick, literally and figuratively, of these disgusting CAFOs in their areas, but they feel powerless – and intimidated – and thus gain zero momentum in opposition. The problem is exacerbated by the relatively isolated and rural patterns of hobitation there, where little potentiol exists for coordinated community opposition."* – **Charles Scribner, Black Warrior Riverkeeper**

2) *"CAFOs are populating our watershed at a rate never before seen. Houses are larger and generate more bio-waste. As the chicken industry encourages farmers to buy in, our pristine river and its tributaries are becoming contaminated by runoff from improper land application and composting."*

– Bill Shugart, Little River Waterkeeper

ARIZONA:

3) *"We are in federal court suing Hickman's Family Farms for their failure to report ammonia releases from their Tonopah and Arlington, AZ facilities. The ATSDR is set to conduct air monitoring for ammonia and hydrogen sulfide in these affected communities because of health complaints and concerns. See http://dontwastearizona.org/tonapah17.php."* – Stephen Brittle, Don't Waste Arizona

4) *"The air quality is so poor. I used to be able to sit on my porch and enjoy the sunset, but with Hickman's I can barely walk outside without coughing or my eyes watering. It has gone fram a pleasant town to a nightmare."* – Charles Proper

5) *"I live within about 3.5 miles west af an Egg Laying Factory that houses millions of chickens. When the wind shifts our way we are greeted with a variety of foul odors. We have to deal with ammonia, hydrogen sulfide, and rotting flesh. (They de-pop their barns and grind the chickens to be added to their composting and waste management systems.)*

I have been forced to spend a lot of time inside my home because the stench is nauseating at times, I have suffered many asthma attacks after being outside for a few minutes, and we cannot leave windows open for fresh air as we do not knaw when the stench will begin. We have also suffered with symptoms of headaches, burning throats, congestion, nausea and more. My husbond wheezes at night after spending time outside aur home, which staps when we go on vacation.

A few years ago while I was away, my husband tried apening the doors, and he didn't realize that the odor entered the filter for our heat pump/AC unit and later in the day when the unit ran, the smell permeated throughout the house. We have no idea what ather VOC's, particulate matter, and chemicals we are being exposed to every day. They process the chicken manure into fertilizer, which requires a lot of stirring, moving and processing as they bring in manure from a second facility with over 4 million chickens to this location.

There is an elementary school, as well as a preschool, located about 3 miles from this facility. These little anes are at great risk from the exposure to the emissions fram this MEGA CAFO. We are talking several million laying hens plus pullets.

We need pratection. We need to know at what chemicals and the levels of which we are being exposed to. We should not be driven from our homes as this facility continues to grow and expand unchecked because they consider themselves a "family farm" and not industrial. Thank you for your time. – Lorna Proper

6) *"Our community has somewhere in the neighborhood of 6,000,000 chickens that cause waste that has to be hauled approximately 14 miles from ane plant to the other for processing, which smells up the highway. We own property that is between two chicken plants, so we get the smell no matter which directian the wind blows.*

My wife and I have to take allergy medicine to keep our nose and eyes from running. A trip to the Post Office can make you sick because of the smell – you want to puke. Flies are so thick that we have to give up our outdoor BBQ or eating outside because of the flying pests.

If the laws change to eliminate the word odor or allow the companies to check themselves, the bad guy has already won and the people will be without a voice. Our elected officials are required to keep the public safe from unwanted health risks, but I think they have sold out to the highest bidder. When an owner of a chicken farm is on the Board of Supervisors and won't represent his own district because of a conflict of interest, there is something dreadfully wrong. I think the old adage that "something is rotten in Denmark" has nothing on Hickman's Egg Ranch." – **Lloyd Rogers**

7) *"Hickman's Family Pride egg farm moved to Tonopah, Arizona 4 years ago bringing 4,620,000 million birds with them, and when the project is done there will be twice as many hens. 14 of the 28 chicken barns are complete and functioning, with 330,000 hens per barn. The smell is atrocious with ammonia in the air, along with the dander in the air falling on houses in the community and feathers littering our roads.*
We tried to get the county supervisor involved, but that turned out to be futile since our supervisor is Republican Clint Hickman, the VP in charge of sales with the Hickman Family Pride Egg Farm. The county supervisors will be voting soon to change the wording to Rule 320 concerning enforcing odors in Maricopa County. This change will be in favor of air polluters. We know how this vote will end even with Clint Hickman recusing himself from the vote.

The Hickman's picked our quiet community because we are unincorporated and don't have anyone in the county or state levels of government that will listen to our plea. Money talks." – **Jack Reed**

8) *"Ever since Hickman's built a large egg farm dawn the way, I have had respiratory problems. The aroma is definitely chicken waste and the ammonia burns to breathe. They kind of slick by the protocol as Cliff Hickman is on the county board of supervisars. Up until a short time aga he was head of the agriculture section.*

We need the reporting of levels, and we need proper equipment installed and used to minimize these pollutants. If it's not so bad why do the polluters live miles away, across the valley? Please help. Thanks you." – **Elaine Morgan**

9) *"When I go onto the front porch of my house in the morning, the first thing I smell is the chickens, and the smell is terrible. My wife is complaining about her eyes burning, and her throat being scratchy."*
– **Gerald Morgan**

10) *"When the wind blows, it is impossible to go outside."* – **Paul Roetto**

11) *"We have a 5 million chicken egg facility within 100 yards of residents that have lived here for 20 years before the egg facility moved in. Many people are experiencing serious adverse health effects from breathing the toxic emissions. Our county and state agencies are unwilling to help us. Some*

agency officials are telling people to move away from the area as a solution instead of holding the business accountable."

– Daniel Mack, STOPP, Inc.

12) *"Being a full time RVing family, we have been to many states, but have had the worst time with our health while in Arizona. We went to Oklahoma this past summer and had no problems, but when we returned to Tonopah a few weeks later, our breathing problems arose again – asthma, upper respiratory infections, bronchitis, and other respiratory problems. Also, having had laryngitis several times the past year has led me to consider the air quality, as we have no problems until our stay in Tonopah, Arizona, which is roughly 5 miles from Hickman Eggs."* **– Aimee Wheeler**

13) *"Living on the river, updrafts from warming temperatures and downdrafts from cooling temperatures are easily noticed. Twenty friends and acquaintances from around the US gathered to enjoy the evening sunset view from the bluff, and talked about hydrology and karst. We hosted this group near our home so that field trips to the Big Creek Valley and the 6500 hog CAFO's spreading fields, that had recently been permitted in the Buffalo National River Watershed, could be discussed openly and scientifically. Eight air miles SE through the saddle of the mountain in our sight soon became the topic of conversation. The group had enjoyed everything so far and all at once they all stopped talking and looked at me. Timidly the first one asked, "What is that smell?" another said, "Is that it?", another, "You said it, but we didn't believe yau". Know what happened next? They all got up and left."* **– Carol Bitting**

ARKANSAS:

14) *"We live in a river valley. Air currents flow along the river corridor, and they get trapped and settle in the haze of humidity which concentrates odars and particulate motter in the air."* **–Marti Olesen**

15) *"I live adjacent to the Buffalo National River, and keeping it pristine is important to me and my family. The air we breathe follows the river corridor and traps emissions in its valleys and hollows. I need to know that the air I breathe is healthy, and if it isn't, what procedures I can take to preserve my health."* **– Larry Olesen**

16) *"Industrial scale agriculture has been replacing traditional, earth-friendly farming methods over the past 30-40 years. Intensive animal feeding operations create intensive impacts. America was built an our productive farms, but those farms worked in conjunction with natural systems. Farmers knew the importance of caring for the land they work, and farming communities trusted that neighbors would be good stewards. Corporations have no interest in being good neighbors. They exist to make money, and rural America, with a lack of zoning laws (unnecessary before), have become an easy target for exploitation. To survive, we need healthy soil, clean air and safe water supplies. Each of these vital elements is being degraded by extractive methods driven by the desire for profits. Money will not filter the air or produce a drop of potable water. Think of the children and grandchildren coming behind us. We must preserve our planet's resources and balance!"* **-- Lin Wellford**

17) *"The Buffalo National River, the first National River to be designated by Congress in 1972, is a splendidly beautiful, free-flowing 135-mile river, extremely popular and heavily visited by nearly 1.8*

million persons in 2017 for canoeing, kayaking, fishing, wildlife viewing, camping and formerly – breathing fresh air. A large hog CAFO on a major tributary of the Buffalo River, known as Big Creek, is becoming impaired by nutrients –phosphorus nitrates – and is lowering dissolved oxygen and causing enormous algae blooms through the extended worm months. The noxious odors of ammonia and hydrogen sulfide permeate the air on many days, carried on the breeze or wind roughly 6 miles to the Buffalo River. It wrecks the joys and pleasures of canoeing or being on the Buffalo for recreation. Please continue to support the release of information to citizens ocross the U.S. warning them of toxic fumes they are being subjected to. This is a citizen's right to know of avoidable dangers to their health. Please note Arkonsas Senators Boozman and Cotton, and Representatives French Hill, Rick Crawford, Steve Womack, and Bruce Westerman."
-- Alice Andrews, The Ozark Society

18) *"I live eight air miles from a large swine CAFO. During certain weather conditions, I get overpowered by the unspeakable stench of that facility. I have smelled the focility while recreating on the Buffalo National River. I cannot stand to drive to Fayetteville, Arkonsos anymore becouse of the foul odors coming from a multitude of poultry houses. I feel very sorry for people who live close to these animal factories. They are citizens too and deserve your protection."* – Charles Bitting

CALIFORNIA:

19) *"Air, thank heavens, does not sit in one spot. I live in the most polluted city in the US. I do not need any more pollutants in my air."* -- Lorna Paisley

ILLINOIS:

20) *"I am in the center of a triangle af three large CAFOs with thousands of pigs. Each is just one and a half to three miles away from our farm. I am in the midst of three factories emitting toxic fumes. If they were any other kind of factary, the EPA would regulate their emissions. They should do sa here too."* -- Ramona Cook, Cook Farm

21) *"Professional Swine Management is trying to put twa CAFOs in our area. It would severely affect the local residents. There should be much stricter standards set for these LLCs."* – Connie King

INDIANA:

22) *"The lack of any meaningful limits on the harmful and noxious air emissions from CAFOs at the federal or state level hos devastoted the lives of so mony rural Haosiers. It is uncanscionable that our lawmakers hove not only foiled to enact meaningful protections under the Clean Air Act – despite findings af the NAEMS study – but are seeking to further erode the alreody inodequote regulotions in place."* – Kim Ferraro, Hoosier Environmental Council

MAINE:

23) *"Our water and air resources are already badly impacted by these businesses. Please continue to require CAFOs to repart because our health is important."* -- Becky Bartovics, Cider Hill Farm

MISSISSIPPI:

24) *"According to the EPA's 2015 Toxic Release Inventory National Analysis Report, three poultry processing plants dumped over 2.8 million pounds of toxic chemicals into the Pearl River watershed. The environmental costs of this legally authorized dumping are paid for not by the poultry industry, but by the citizens of Mississippi and Louisiana in the form of algae blooms, eutrophication, and watershed impairment due to excess nutrients. Mississippi DEQ must be informed about toxic chemical dumping so that effective Total Moximum Daily Loads can be established to protect our watershed."* – **Abby Braman, Pearl Riverkeeper**

NEW YORK:

25) *"Our well water has been polluted with E. coli from dairy farm and now needs to be treated before it can be used."* – **Justine Green, Big Reuse**

NORTH CAROLINA:

26) *"Our lives are impacted weekly by air emissions from CAFOs in eastern NC. My youngest daughter has suffered from asthma since the age of 18 months. In addition, it is not uncommon that our quality of life is impocted by emissions from such facilities. In my capacity as an environmental professional, I am concerned about my health when working in close proximity to large CAFOs and have personally experienced health impacts from these air emissions. In addition, our waterways suffer from extensive nutrient pollution. We cannot begin to solve this issue and protect our state's water resources which we all depend on, without occurate information as to the amount and source of those nutrients, such as ammonia."*

– **Heather Deck, Sound Rivers, Inc.**

27) *"Anytime you are downwind of a CAFO, breathing is difficult and distasteful. Many people live near these CAFOs and must put up with polluted air on a daily basis. In addition, nutrients and waste sprayed out onto fields eventually end up in our rivers and streams."* – **Dennis Howard**

28) *"Lang impacted by swine factories and their putrid odors from waste lagoons and spraying of animal urine and feces onto surrounding fields in the rural communities of the Lumber River Basin, our rural residents have had the additional burden of a proliferating poultry industry and its impacts. Since 1992 in the Lumber River watershed, chicken factories have grown by 393%. Unlike the liquid waste from the swine industry, the poultry litter is a dry waste. But like swine waste, this poultry litter is spread on surrounding fields, subjecting nearby residents and communities to its stench. CAFOs smell terrible! Just ask their rural neighbors. Where once these rural communities were strong, it would have been difficult to build a CAFO without community support becouse of the social/morol acceptability for one to benefit at the expense of another, now because there is no notification requirement, new poultry CAFOs come into our rural communities unbeknownst to their neighbors. In NC, since the locations of dry litter poultry operations and the disposal of their waste are not known to environmental regulators, it is their rural neighbors who know by virtue of their nose and their health. But they often feel helpless to fight back against these corporate farms to protect themselves, their families and their community from their negative impacts; putrid odors, health consequences, lowered property values, water pollution, and a degraded quality of life to name a few. For these reasons and more, we ask that our communities have access to information about toxic emissions*

from CAFOs in the vicinity of their homes, schools and workplaces and that you DO NOT support the proposed rollback of health information to our rural communities." – **Christine Ellis, Winyah Rivers Foundation, Inc.**

OKLAHOMA:

29) *"In my area, and around my state, people are affected by the odor from these CAFO facilities. People with asthma suffer attacks when the odors are bad, sometimes having to go to emergency rooms. They cannot have cookouts in the back yards or have family and guests over for dinner. Their quality of life has drastically changed. Many would like to move can't sell their homes because of the smell. Too many are getting respiratory illnesses as a result of living near these facilities. People have the right to know about the health effects of these air pollutants and how much they are being exposed to, just as they do from any other industrial facility. Being an agriculture facility should not exclude the public from health and safety effects of their operations. Family farms are not guilty of such exceedances of air quality, please do not make such a mistake or let lobbyists persuade you of that. CAFOs are not the same as family farms and there is a need for regulations, including setbacks, manitoring and public reporting of air quality. Thank you for consideration of my comments."* – **Earl Hatley, Grand Riverkeeper & LEAD Agency, Inc.**

PENNSYLVANIA:

30) *"I lived near many poultry farms in the past and moved because of the smell. People will move to environmentally healthy areas and away from industry."* – **Eric Harder, Mountain Watershed Association**

November 24, 2017

BY EMAIL
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460
cercla103.guidance@epa.gov

Re: Public Health Analysis of the Interim Guidance on CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms

To Whom It May Concern:

We are environmental health scientists with expertise in the public health and environmental impacts of animal feeding operations, including emissions of hazardous substances like ammonia and hydrogen sulfide from the large quantities of animal waste that these operations generate. Thank you for the opportunity to comment on the Environmental Protection Agency's (EPA's) interim guidance, *CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms.*[1]

As EPA implements the decision of the U.S. Court of Appeals for the District of Columbia in *Waterkeeper Alliance v. EPA*, the agency should take account of the scientific literature on emissions of these substances, reviews of their toxicity, and related health effects observed in people living or attending school near animal feeding operations. This literature demonstrates that multiple risks may be posed by ammonia and hydrogen sulfide releases from animal waste.[2] It makes clear the importance of public access, including access by affected communities and independent experts, to information about these releases. We urge EPA to continue to require reporting by animal feeding operations under the Emergency Planning and Community Right-to-Know Act (EPCRA) so that reports of hazardous releases will be available to the public.

Releases of and Exposures to Ammonia and Hydrogen Sulfide from Animal Waste at Farms

Agriculture, and especially the decomposition of manure, urine, and other waste generated by food animal production,[3] is the largest source of ammonia emissions and the second largest source of hydrogen sulfide

[1] EPA, CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms, 2017, https://www.epa.gov/epcra/cercla-and-epcra-reporting-requirements-air-releases-hazardous-substances-animal-waste-farms (accessed November 13, 2017).

[2] *See* Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in America*, 2008, available at http://www.pcifapia.org/_images/PCIFAPFin.pdf (accessed November 16, 2017) at 17 and 27. All sources cited in this comment letter, with the exception of the interim guidance, have been compiled as an appendix that was submitted with these comments.

[3] *See* National Research Council of the National Academies (NRC), *Air Emissions from Animal Feeding Operations: Current Knowledge, Future Needs*, 2003, Washington, DC: National Academies Press at 50-52 and 54-55.

emissions in the United States.[4] According to EPA's National Emissions Inventory (NEI) (the data are included in the Appendix), livestock waste accounted for 55 percent of the 3.9 million tons of ammonia and 22 percent of the 14,458 tons of hydrogen sulfide that were emitted in the U.S. in 2014.[5]

Studies have linked proximity to animal feeding operations with elevated concentrations of ammonia and hydrogen sulfide. In Yakima Valley, Washington, a region dominated by industrial dairies, median ammonia concentrations measured outside of study participants' homes were strongly correlated with four measures of proximity to animal feeding operations.[6] A study in eastern North Carolina, where swine and poultry production is widespread, found strong associations between hydrogen sulfide concentrations measured at middle schools and the size and distance of upwind livestock facilities.[7]

Importantly, studies like these have correlated concentrations of ammonia and hydrogen sulfide near homes and schools with surrogate measures of animal feeding operation releases, like operation location and size. A direct measurement of concentrations where people live or attend school is preferable to estimates of releases, but air monitors cannot be placed at each of thousands of surrounding homes and schools. If independent experts had access to data on releases, they could use these and other data to train regression models that estimate ambient concentrations in part based on releases. These models could allow experts to assess exposure and characterize risk in far more communities than they can at present.

If EPA has determined that the data that would be generated by EPCRA reports using the methods listed in its interim guidance would be insufficient for this purpose, we would urge the agency to build upon its guidance. EPA should require animal feeding operations to report releases using current methodologies while pursuing improvements that could generate necessary data. A novel interpretation of EPCRA that exempts operations from reporting requirements, however, would limit development of these models even as methodologies advance, blocking many communities from assessing exposures and associated risks.

Health Effects of Ammonia or Hydrogen Sulfide Exposure

It is well established that exposure to ammonia and/or hydrogen sulfide can elicit adverse health effects in humans. As EPA itself has concluded, exposure to ammonia threatens the respiratory system, and exposure to hydrogen sulfide harms the respiratory and nervous systems. Specifically:

- EPA's *Toxicological Review of Ammonia* (2016) termed the respiratory system "the primary and most sensitive target of inhaled ammonia toxicity in humans and experimental animals" and concluded that "the weight of evidence of observed respiratory effects observed across multiple

[4] *See* EPA, National Emissions Inventory (NEI) Data, https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data (accessed November 14, 2017).

[5] *Id.* We have prepared tables displaying the ammonia and hydrogen sulfide data. Tab 3 of Appendix.

[6] Loftus, C.L., M. Yost, P. Sampson, et al., Ambient ammonia exposures in an agricultural community and pediatric asthma morbidity, *Epidemiology*, 2015, 26, 794-801.

[7] Guidry, V.T., A.C. Kinlaw, J. Johnston, D. Hall, S. Wing, Hydrogen sulfide concentrations at three middle schools near industrial livestock facilities, *Journal of Exposure Science and Environmental Epidemiology*, 2017, 27, 167-174.

human and animal studies identifies respiratory system effects as a hazard of human exposure."[8] These effects include asthma, asthma symptoms, and decreased lung function.[9] In addition, "[a]nimal studies provide consistent evidence of elevated bacterial growth following ammonia exposure", although these may be due to respiratory tract damage or suppressed immunity.[10]

- EPA's *Toxicological Review of Hydrogen Sulfide* (2003) concluded that at high concentrations, hydrogen sulfide "has profound effects on the respiratory system leading to unconsciousness with attendant neurologic sequelae and, sometimes, death."[11] At low concentrations, hydrogen sulfide may damage upper respiratory tract tissues, specifically nasal tissues.[12]

Health Effects of Living or Attending School Near an Animal Feeding Operation

Both ammonia and hydrogen sulfide emitted by animal feeding operations have been associated with adverse health effects in nearby communities. In the Yakima Valley, Washington, which is dominated by industrial dairies, increases in ambient ammonia measured outside the homes of study participants were associated with decreased forced expiratory volume (FEV, a measure of lung function) in school-age children with asthma.[13] In communities near swine operations in eastern North Carolina, ambient hydrogen sulfide was associated with decreased FEV and decreased peak expiratory flow rate (a second measure of lung function), respiratory symptoms such as self-reported wheezing and difficulty breathing, and nasal and eye irritation,[14] as well as increased blood pressure that may contribute to chronic hypertension.[15] The agreement between results of subjective measures like self-reported symptoms and objective measures of lung function and blood pressure strengthens the case for a relationship between exposure and outcome.

Studies that did not measure ammonia or hydrogen sulfide nonetheless reported associations between living or attending school near animal feeding operations and adverse health effects related to these gases.[16] In Iowa, exposure to swine animal feeding operations (assessed by an algorithm based on the size and distance

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[8] EPA, *Toxicological Review of Ammonia Noncancer Inhalation*, 2016, https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/0422tr.pdf (accessed November 14, 2017) at 1-33.

[9] *See id.*

[10] *Id.* at 1-34.

[11] EPA, *Toxicological Review of Hydrogen Sulfide*, 2003, https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/0061tr.pdf (accessed November 16, 2017) at 50.

[12] *See id.* at 51.

[13] Loftus, C.L., M. Yost, P. Sampson, et al., Ambient ammonia exposures in an agricultural community and pediatric asthma morbidity, *Epidemiology*, 2015, 26, 794-801.

[14] Sebinasi, L., R.A. Horton, V.T. Guidry, et al., Air pollution, lung function, and physical symptoms in communities near concentrated swine feeding operations, *Epidemiology*, 2011, 22, 208-215.

[15] Wing, S., R.A. Horton, and K.M. Rose, Air pollution from industrial swine operations and blood pressure of neighboring residents, *Environmental Health Perspectives*, 2013, 121, 92-96.

[16] For a recent review, *see* Casey, J.A., B.F. Kim, J. Larsen, L.B. Price, K.E. Nachman, Industrial food animal production and community health, *Current Environmental Health Reports*, 2015, 2, 259-271.

of the operation, and wind direction and speed) was significantly associated with self-reported prescription medication for wheeze and/or self-reported physician diagnosed asthma.[17] In the same state, the prevalence of asthma was significantly greater among students at an elementary school within 0.5 miles of an animal feeding operation than among students at a school more than 10 miles from any such operation, after adjustment for multiple potential confounding variables.[18] In North Carolina, the prevalence of wheezing was 24 percent higher among adolescents who attended schools where livestock odors were noticeable than among adolescents at schools without these odors.[19] These studies indicate that proximity to animal feeding operations may present multiple health risks. They demonstrate the need for more data on releases, not less.

Conclusion

The conclusions of EPA's toxicological reviews as well as epidemiologic evidence from populations living or attending school near animal feeding operations support the need for public access to information on ammonia, hydrogen sulfide, and other hazardous substances released by animal feeding operations. We urge EPA to continue to require reporting by these operations under EPCRA so these reports will be available to affected communities and independent researchers. Please contact us with questions.

Sincerely,

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[17] Pavilonis, B.T., W.T. Sanderson, J.A. Merchant, Relative exposure to swine animal feeding operations and childhood asthma prevalence in an agricultural cohort, *Environmental Research*, 2013, 122, 74-80.

[18] Mirabelli, M.C., S. Wing, S.W. Marshall, T.C. Wilcosky, Asthma symptoms among adolescents who attended public schools that are located near confined swine feeding operations, *Pediatrics*, 2006, 118, e66-e75.

[19] Sigurdarson, S.T. and J.N. Kline, School proximity to concentrated animal feeding operations and prevalence of asthma in students, *Chest*, 2006, 129, 1,486-1,491.

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Enclosure: Appendix

*Alliance for Arizona Animal Protection (AAAP) * Beverly Anderson * Animas Riverkeeper * Atchafalaya Basinkeeper * Black Warrior Riverkeeper * Cindy Bonnet * Boulder Creek, a Waterkeeper Alliance Affiliate * Carolyn Burton * Caraes * Center for Biological Diversity * Center for Food Safety * Coastal Carolina Riverwatch * Columbia River Estuary Action Team * Coosa River Basin Initiative * Crystal Coast Waterkeeper * Don't Waste Arizona * Food & Water Watch * Friends of Saddle Mountain * Friends of the Kaw * Hackensack Riverkeeper * Helping Others Maintain Environmental Standards (HOMES) * The Humane Society of the United States * Inland Ocean Coalition * Iowa Alliance for Responsible Agriculture * Iowa County Farmers and Neighbors * Jefferson County Farmers & Neighbors, Inc. * Connie King * Linda Kinman/Miller * Lake Erie Foundation * Fred Lillie * Little River Waterkeeper * Matanzas Riverkeeper * Midshore Riverkeeper Conservancy * Milwaukee Riverkeeper * Elaine Morgan * Gerald Morgan * Mountain Watershed Association * MountainTrue * Natural Resources Defense Council (NRDC) * NY/NJ Baykeeper * Poweshiek CARES * Public Justice * Puget Soundkeeper Alliance * Raritan Riverkeeper * Riverkeeper, Inc. * Roaring Fork Waterkeeper * Rural Residents for Responsible Agriculture * Saddle Mountain RV Park * San Antonio Bay Estuarine Waterkeeper * San Diego Coastkeeper * San Francisco Baykeeper * Seneca Lake Guardian, a Waterkeeper Affiliate * Snake River Waterkeeper * Spokane Riverkeeper * Socially Responsible Agriculture Project (SRAP) * Save Tonopah Oppose Poultry Plant (STOPP) Inc. * Sun Spiritualist Church Camp Association * Tennessee Riverkeeper * David Turner * Upper Missouri Waterkeeper * Waterkeeper Alliance * Waterkeepers Chesapeake * White-Oak New Riverkeeper Alliance * Winyah Rivers Foundation*

November 22, 2017

Via Email to CERCLA103.guidance@epa.gov

U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms

Dear U.S. EPA:

The undersigned 64 individuals, business owners, and community, health, environmental, religious, and socially responsible agriculture organizations representing over 15 million people throughout the United States submit these comments on the interim guidance concerning CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms ("Interim Guidance") of the U.S. Environmental Protection Agency ("EPA").[1]

[1] *See* https://www.epa.gov/epcra/cercla-and-epcra-reporting-requirements-air-releases-hazardous-substances-animal-waste-farms.

We appreciate EPA's long overdue guidance to animal feeding operations ("AFOs") on acceptable ways to estimate and report their emissions of toxic substances such as ammonia and hydrogen sulfide under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9601 *et seq.* Ammonia and hydrogen sulfide emissions can cause serious health impacts such as exacerbation of asthma, scarring of the respiratory tract, and even death. Many of our members live in communities near these animal factories and we know all too well the real-life meaning of these harms.

Animal waste at AFOs regularly emit these hazardous substances at levels above the 100 pounds per day reportable quantity. But because of EPA's illegal 2008 reporting exemption, most AFOs have not been reporting for almost a decade. Fortunately, the D.C. Circuit found that exemption illegal and vacated it earlier this year,[2] and it is high time that AFOs, like any other polluting industry, disclose their emissions of hazardous substances.

We strongly oppose the Interim Guidance's total exemption of AFOs from reporting under the Emergency Planning and Community Right-to Know Act ("EPCRA"), 42 U.S.C. § 11001 *et seq.* This illegal EPCRA exemption denies state and local emergency response agencies and the communities they serve basic information about polluting facilities within their jurisdictions. And EPCRA reporting would place no additional burden on the AFOs that must prepare continuous release reports or notifications of changes in releases under CERCLA anyway—a facility complies with EPCRA by forwarding the very same notification sent to a federal agency under CERCLA to state and local emergency response agencies.[3]

Congress long ago made clear that neighbors and communities deserve to know what toxic chemicals are being released nearby. They also deserve to know that their local emergency responders have that information and the reassurance that the responders can effectively protect the communities. We have waited for these protections for over a decade and beseech the EPA not to take them from us again.

The EPCRA exemption proposed in the Interim Guidance is flatly illegal, and EPA itself has previously rejected this legal theory at least three times. The exemption is contrary to the plain language of the statute and violates even the court ruling. In vacating EPA's prior attempt to exempt AFOs from release reporting, the court found that EPA had no "discretion to fashion other exemptions" from CERCLA or EPCRA reporting because those statutes contain "sweeping reporting mandate[s]" with no "language of delegation" to EPA.[4] In short, EPA does not have "carte blanche to ignore the statute whenever it decides the reporting requirements aren't worth the trouble."[5]

Not only does the EPCRA exemption violate the statute and the court's order, EPA is telling AFOs that they need not report under EPRCRA now, prior to the conclusion of a promised "rulemaking to clarify" the EPCRA exemption. In so doing, EPA is violating the Administrative

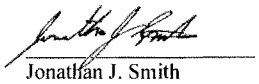
[2] *See Waterkeeper All. v. Envtl. Prot. Agency*, 853 F.3d 527, 537–38 (D.C. Cir. 2017).
[3] *See* 40 C.F.R. § 355.32.
[4] *See Waterkeeper All. v. Envtl. Prot. Agency*, 853 F.3d at 535.
[5] *Id.*

Procedure Act ("APA") and further depriving neighbors and community members the chance to object before this unfair and dangerous loophole takes effect.

When the D.C. Circuit struck down EPA's last illegal disclosure exemption, the court noted that the risk of harm from AFOs "isn't just theoretical; people have become seriously ill and even died as a result" of their emissions.[6] Our members can confirm that the harm is very real. We must close our doors and windows to keep out the stench. We get headaches and feel nauseous when we go outside. We suffer from burning airways and decreased lung capacity because of the toxic emissions that emanate from AFOs every day.

For over a decade, EPA has been trying to deny the public their rightful information about AFO emissions. The D.C. Circuit has already vacated EPA's last exemption as illegal, and EPA's newest EPCRA exemption is equally unlawful. The undersigned therefore strongly urge EPA to revise the Interim Guidance to undo the EPCRA exemption and require all AFOs to disclose their emissions under both EPCRA and CERCLA.

Sincerely,



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On behalf of signatories listed on the following pages

[6] *Id.* at 536.

FOR:

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Signing as an individual

Marcel Gaztambide
Animas Riverkeeper

Dean A. Wilson, Executive Director
Atchafalaya Basinkeeper

Charles Scribner, Executive Director
Black Warrior Riverkeeper

Cindy Bonnet
Signing as an individual

Ted Ross, Watershed Advocate
Boulder Creek, a Waterkeeper Alliance Affiliate

Carolyn Burton
Signing as an individual

Charles Routier
Caraes

Hannah Connor, Senior Attorney
Center for Biological Diversity

Paige Tomaselli, Senior Attorney
Center for Food Safety

Larry Baldwin, Executive Director
Coastal Carolina Riverwatch

Roger Rocka, Co-Facilitator
Columbia River Estuary Action Team

Jesse Demonbreun-Chapman,
Executive Director & Riverkeeper
Coosa River Basin Initiative

Larry Baldwin, Waterkeeper
Crystal Coast Waterkeeper

Stephen Brittle, President
Connie Blayney, Member
Steven Love, Member
Lorna Proper, Member
Raul Tijerina, Member
Don't Waste Arizona

Tarah Heinzen, Staff Attorney
Food & Water Watch

Paul Roetto, President
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Dawn Buehler, Kansas Riverkeeper
Friends of the Kaw

Captain Bill Sheehan,
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Hackensack Riverkeeper

Matthew Alschuler, President
Helping Others Maintain Environmental Standards (HOMES)

Danny Lutz, Staff Attorney
The Humane Society of the United States

Vicki Nichols Goldstein,
Founder & Director
Inland Ocean Coalition

Diane Rosenberg,
Steering Committee Member
Iowa Alliance for Responsible Agriculture

Rita McDonald, Member
Iowa County Farmers and Neighbors

Diane Rosenberg,
President and Executive Director
Jefferson County Farmers & Neighbors, Inc.

Connie King
Signing as an individual and a member of N.O.P.E.

Linda Kinman/Miller
Signing as an individual and concerned homeowner, and on behalf of her late husband

Sandy Bihn, Executive Director and Lake Erie Waterkeeper
Lake Erie Foundation

Fed Lillie
Signing as an individual

William Shugart, Little River Waterkeeper
Little River Waterkeeper

Jen Lomberk, Matanzas Riverkeeper
Matanzas Riverkeeper

Matt Pluta, Choptank Riverkeeper
Midshore Riverkeeper Conservancy

Elaine Morgan
Signing as an individual and member of American Legion Auxiliary Unit 53

Gerald Morgan
Signing as an individual and property owner

Cheryl Nenn, Riverkeeper
Milwaukee Riverkeeper

Eric Harder, Youghiogheny Riverkeeper
Mountain Watershed Association

Gray Jernigan, Green Riverkeeper
MountainTrue

Valerie Baron, Staff Attorney
Natural Resources Defense Council (NRDC)

Michele Langa, Staff Attorney
NY/NJ Baykeeper

Nancy Cadmus, Secretary
Poweshiek CARES

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Chris Wilke, Executive Director
Puget Soundkeeper Alliance

Bill Schultz, Riverkeeper
Raritan Riverkeeper

Michael Dulong, Staff Attorney
Riverkeeper, Inc.

Kevin Ward, Executive Director
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Ramona Cook,
Member and Illinois Resident
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Michael Wirth, Owner
Saddle Mountain RV Park

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San Antonio Bay Estuarine Waterkeeper

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San Diego Coastkeeper

Erica Maharg, Managing Attorney
San Francisco Baykeeper

Joseph Campbell, President
Seneca Lake Guardian, a Waterkeeper Affiliate

Buck Ryan, Executive Director
Snake River Waterkeeper

Jerry White, Jr., Spokane Riverkeeper
Spokane Riverkeeper

Chris Petersen,
Farmer and Regional Representative
Socially Responsible Agriculture Project
(SRAP)

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Connie Blayney, Member
David Butler, Member
Linda Butler, Member
Bonnie Diller, Member
Phillip Diller, Member
Andrea Haugen, Member
Howard Hilland, Member
Cari Huston, Member
Gordon McEwen, Member
Phyllis McEwen, Member
Rick Moreau, Member
Song Mun, Member
Lorna Proper, Member
Jack K. Reed, Member
Angela Renaud, Member
Brian Richardson, Member
Lloyd Rogers, Member
Peggy Stojan, Member
Save Tonopah Oppose Poultry Plant
(STOPP) Inc.

Leslie Saunders, Reverend
Sun Spiritualist Church Camp Association

David Whiteside, Executive Director
Tennessee Riverkeeper

David Turner
Signing as an individual

Guy Alsentzer, Executive Director
Upper Missouri Waterkeeper

Kelly Hunter Foster, Senior Attorney
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Katlyn Clark, Staff Attorney
Waterkeepers Chesapeake

Larry Baldwin, Executive Director
White-Oak New Riverkeeper Alliance

Cara Schildtknecht, Waccamaw Riverkeeper
Winyah Rivers Foundation

United States Senate
WASHINGTON, DC 20510

December 21, 2017

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

Dear Administrator Pruitt:

We are a bipartisan group of Senators representing states where poultry farming is a key part of the economy. We are writing to share our constituents' serious questions and concerns about recent guidance promulgated by the Environmental Protection Agency (EPA). This guidance seeks to implement an April 2017 ruling by the U.S. Court of Appeals for the District of Columbia (*Waterkeeper Alliance v. EPA*) regarding the duty of livestock producers to report air emissions from their facilities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). In our view, this guidance is woefully inadequate and unclear; the EPA must take immediate action to clarify the types of farming operations to which it applies and to simplify the reporting procedure for any farms that must use it.

On April 11, 2017, the D.C. Circuit Court vacated a 2008 EPA rule that exempted most farms from certain release reporting requirements under two statutes, CERCLA and the Emergency Planning and Community Right to Know Act. Following two requests from the Administration, the D.C. Circuit Court extended the effective date of its decision to January 22, 2018.[1]

With five weeks remaining before the new effective date, farmers in our states are asking us urgent questions and raising serious concerns about the applicability of the new reporting requirements and the recently issued guidance. Some are unaware of the guidance that your agency has already prepared, while others are frankly stating that they find it to be unclear and unhelpful. Many have expressed frustration trying to navigate a new process with which they have previously had no experience. Quite simply, our constituents deserve better. The EPA must take additional efforts to communicate with farmers on this matter including how to identify, measure, or calculate emissions to determine whether an operation is subject to reporting requirements.

With these concerns in mind, we ask that you review and respond to the following questions, and that you brief our offices on the matter within the next three weeks:

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[1] https://www.epa.gov/newsreleases/dc-circuit-court-grants-trump-epa-request-extend-deadline-farmers-report-emissions

1. How are you working with farmers and others in the regulated community to help them identify whether they are subject to any new reporting requirements? In light of the D.C. Circuit's ruling more than eight months ago, do you expect to take any further administrative action to clarify the size or levels of emissions produced by farming operations that might be covered by these requirements? Do you anticipate further requesting a delay in the compliance deadline in order to do so?

2. What other federal, state, and local partners are you working with to assist farmers in understanding any new reporting obligations? How are you working with the United States Department of Agriculture in this regard?

3. As we mentioned, some of our constituents have expressed to us that the current reporting process and methodology is confusing. What steps are you taking to simplify your guidance and streamline the reporting process?

4. For farmers who may have limited access to the internet, what steps are you taking to assist these individuals in meeting any new reporting requirements? For those that do have such access, what steps are your taking to simplify reporting?

Our farmers care deeply about the environment and pride themselves on being good stewards of their land. We look forward to working with you to ensure that they have the resources they need to adequately understand and determine if they must comply with the EPA's requirements, and we await your prompt response to our information and briefing requests.

For any questions regarding this request, please contact Brian Papp with Senator Carper at 202-224-5042, Leah Rubin Shen with Senator Coons at 202-224-2441, or Jack Overstreet with Senator Isakson at 202-224-3643.

Sincerely,

Thomas R. Carper
U.S. Senator

Christopher A. Coons
U.S. Senator

Johnny Isakson
U.S. Senator

David A. Perdue
U.S. Senator

Benjamin L. Cardin
U.S. Senator

Joe Donnelly
U.S. Senator

Chris Van Hollen
U.S. Senator

Joni K. Ernst
U.S. Senator

Mark R. Warner
U.S. Senator

Roger F. Wicker
U.S. Senator

Tim Kaine
U.S. Senator

CC: The Honorable Sonny Perdue
Secretary
United States Department of Agriculture

JAN 13 2017

The Honorable Tom Carper
U.S. Senate
Washington, D.C. 20510

Dear Senator Carper:

Thank you for your January 11, 2017, letter regarding the status of the U.S. Department of the Army (Army) and U.S. Environmental Protection Agency (EPA) Clean Water Rule. We share your concerns about misinformation being reported about the rule and appreciate the opportunity to respond.

The Clean Water Rule was promulgated in response to requests the agencies received from thousands of stakeholders who asked us to replace existing confusion, delay, and inconsistency with improved regulations defining the scope of the Clean Water Act (CWA) consistent with the law and the best available science. Our goals were to make the process of identifying waters covered, and not covered, by the statute more understandable, transparent, and effective and to accomplish this without changing any of our longstanding exemptions for farmers, ranchers, and foresters. After years of work involving an unprecedented level of public outreach and benefitting from the latest peer reviewed science, the final Clean Water Rule was published in the ***Federal Register*** in June 2015. The rule was subsequently challenged in federal court and its implementation temporarily stayed by the 6th Circuit Court of Appeals in October 2015.

Your letter raises important questions regarding the status of the rule and how the agencies are currently implementing the CWA. We hope you and your constituents find our answers responsive and helpful.

Question 1: Are the EPA and the Corps currently implementing the new Clean Water Rule?

Answer: No, the agencies are not now implementing the new Clean Water Rule. Implementation of the new rule was temporarily stayed by the 6th Circuit Court of Appeals in September 2015. The agencies immediately directed their field offices to stop using the new rule and instead, resume implementing regulations and interpretive guidance in place prior to the new rule.

Question 2: Are the EPA and the Corps currently pursuing enforcement actions pursuant to the new Clean Water Rule?

Answer: No, the agencies are not pursuing any enforcement actions pursuant to the new Clean Water Rule and will not enforce this rule unless and until the 6th Circuit Court of Appeals stay is lifted.

Question 3: Does anything in the Clean Water Rule revoke or otherwise modify the CWA's statutory and regulatory exemptions for farming and ranching?

Answer: No, the Clean Water Rule makes absolutely no changes to normal farming, ranching, and forestry exemptions established under the CWA and implementing regulations.

Question 4: Some have claimed that landowners will no longer be able to rely on the CWA's statutory and regulatory exemptions for farming and ranching should the Clean Water Rule go into effect because, while the statute and regulations remain unchanged, the agency has narrowed those exemptions "in practice" through their actions in the field. Is that true?

Answer: The assertion that the agencies have narrowed application of the statutory and regulatory exemptions for farming, ranching and forestry is untrue. The agencies have taken no steps intended to reduce the scope of the exemptions and we have not observed changes by field offices in the way they interpret or implement these exemptions. In fact, EPA and the Corps have reemphasized publicly that these exemptions are self-implementing. Farmers, ranchers, and foresters are not required to get approval from the agencies prior to using the exemptions.

Question 5: Several case studies related to farming practices – including examples related to plowing, discing, construction of stock ponds, and new uses of cropland – have been presented to members of Congress to suggest that the Clean Water Rule is expanding the agencies' jurisdiction under the CWA. If you are familiar with the aforementioned case studies, are any of them examples of new enforcement actions under the Clean Water Rule?

Answer: The agencies are aware of case studies being presented in support of assertions that the Corps and EPA are already using the Clean Water Rule and its principles to expand jurisdiction under the Act and to narrow the scope of farming, ranching, and forestry exemptions under CWA section 404(f). The fact is that ALL of the case studies that we have seen were initiated prior to the Clean Water Rule, and many represent decisions made in the previous administration. This means the agencies' actions were taken under the regulations and guidance (e.g., the Corps 1986 Regulatory Program regulations, and the 2008 Joint Guidance) in place prior to the Clean Water Rule. In addition, implementation of the Clean Water Rule has been temporarily stayed by the 6th Circuit Court of Appeals. The agencies have not, and will not, enforce or implement the Clean Water Rule during the stay.

Question 6: Are some or all of the cases highlighted actually federal enforcement cases conducted in accordance with agency regulations promulgated prior to the Clean Water Rule?

Answer: Yes, all the cases presented (including enforcement actions, jurisdictional determinations, and Section 404(f) exemptions) represent actions and decisions which were made using the regulations and guidance in place prior to promulgation of the Clean Water Rule. These cases reflect actions taken under agency regulations in place for as long as 30 years (e.g., Corps 1986 Regulatory Program regulations).

Question 7: Considering all of the agencies' jurisdictional determinations since the *SWANCC* (2001) and *Rapanos* (2006) cases, is it fair to characterize the Clean Water Act's current geographic scope as narrower than it was prior to those decisions?

Answer: Yes. The Supreme Court decision in SWANCC reduced the geographic scope of jurisdiction under the Clean Water Act. After SWANCC and Rapanos, consistent with guidance and Corps and EPA regulations, the agencies have asserted jurisdiction under the CWA more narrowly than was the case prior to those decisions.

Question 8: Are Prior Converted Croplands still excluded from Clean Water Act jurisdiction?

Answer: Yes. Prior Converted Croplands (PCC) remain non-jurisdictional under EPA and Corps Clean Water Act regulations. EPA and the Corps promulgated final regulations in 1993 (58 Federal Register 45008) excluding PCC from CWA jurisdiction and these rules remain in effect without change.

Question 9: Are permafrost soils considered waters under the Clean Water Act?

Answer: No. The presence of permafrost is itself NOT determinative of the existence of wetlands or waters of the United States. Permafrost is a permanently frozen layer of soil, sediment, or rock at varying depths below the surface and found in polar regions.

Thank you again for your letter. Please call us if you have any questions or your staff may contact Denis Borum in the EPA's Office of Congressional and Intergovernmental Relations at borum.denis@epa.gov or 202-564-4836; or Gib Owen in the Office of the Assistant Secretary of the Army (Civil Works) at gib.a.owen.civ@mail.mil or (703) 695-4641.

Sincerely,

Joel Beauvais
Deputy Assistant Administrator for Water
U.S. Environmental Protection Agency

Jo-Ellen Darcy
Assistant Secretary for Civil Works
U.S. Department of the Army

Case No. 15-3751/15-3799/15-3817/15-3820/15-3822/15-3823/15-3831/
15-3837/15-3839/15- 3850/15-3853/15-3858/15-3885/15-3887/15-3948/
15-4159/15-4162/15-4188/15-4211/15-4234/15-4305/15-4404

IN THE UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

MURRAY ENERGY CORPORATION et al., Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; GINA MCCARTHY; UNITED STATES ARMY CORPS OF ENGINEERS; JOHN MCHUGH; JO-ELLEN DARCY, Respondents.	)	In re: ENVIRONMENTAL PROTECTION AGENCY AND DEPARTMENT OF DEFENSE, FINAL RULE: CLEAN WATER RULE: DEFINITION OF "WATERS OF THE UNITED STATES," 80 FED. REG. 37,054 (JUNE 29, 2015)

On Petitions for Review of a Final Rule of the United States Environmental Protection Agency and the United States Army Corps of Engineers

Brief of Dr. M. Siobhan Fennessy, Dr. Carol A. Johnston, Dr. Marinus L. Otte, Dr. Margaret Palmer, Dr. James E. Perry, Professor Charles Simenstad, Dr. Benjamin R. Tanner, Dr. Dan Tufford, Dr. R. Eugene Turner, Dr. Kirsten Work, Dr. Scott C. Yaich, and Dr. Joy B. Zedler as Amici Curiae in Support of Respondents and in Support of Upholding the Clean Water Rule

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INTERESTS OF AMICI CURIAE[1]

Amici curiae are wetland and water scientists, actively involved in research and teaching about the fresh and estuarine waters of the United States. As practicing scientists who have spent our careers studying streams, wetlands, and other aquatic ecosystems, we—and many in our profession—have long explored the ways in which human activities that affect one part of a watershed can also affect—and damage—other parts of that watershed. In doing so, we have applied the basic tools of our profession: literature review, on-site observations, measurements, experimental manipulations, studies of "natural experiments," and modeling based on observations and our understanding of the physical sciences. Based upon these tools, we believe that current science provides sound support for the Clean Water Rule.

As scientists, we weigh in on the definition of "waters of the United States" under the Clean Water Act (CWA), 33 U.S.C. §1251 et seq. (1972), relying on our research and experience with tributaries and geographically proximate adjacent waters. In this brief, we elaborate on the scientific basis behind efforts to address human activities that alter the integrity of aquatic ecosystems. Damage to these systems can affect society in a number of ways, including: harming human welfare

[1] In accordance with Federal Rule of Appellate Procedure 29(a)(4)(E), this brief was not authored in whole or in part by a party's counsel, no party or party's counsel contributed money that was intended to fund preparing or submitting the brief, and no person—other than the amici curiae or their counsel—contributed money that was intended to fund preparing or submitting the brief.

and property via flooding, impairing human health via water pollution, loss of recreational opportunities, and threatening species, including commercial species harvested in fisheries, via water pollution and a loss of connectivity. Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Wetlands and Water* 1–3 (José Sarukhán et al. eds., 2005); *The Economic and Market Value of Coasts and Estuaries: What's at Stake?* (Linwood H. Pendleton ed., 2008), *available at* http://www.era.noaa.gov/pdfs/052008final_econ.pdf; *see also* David Moreno-Mateos & Margaret A. Palmer, *Watershed Processes as Drivers for Aquatic Ecosystem Restoration, in Foundations of Restoration Ecology* (Margaret A. Palmer et al. eds., 2d ed. 2016). We believe that the Clean Water Rule's definition of "waters of the United States," 80 Fed. Reg. 37,054 (June 29, 2015), is a scientifically justified approach to address these impacts.

I. The Clean Water Rule is scientifically sound.

In drafting the Clean Water Rule, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) utilized many methodologies employed by amici in our research and by others. The agencies studied key chemical, physical, and biological features of water systems and relied upon studies that used rigorous and respected methodologies in researching aquatic ecosystems.

A. Key chemical, physical, and biological features are used to study water systems.

An early major National Research Council report, *Wetlands: Characteristics and Boundaries* (1995), which amici Joy Zedler and Carol Johnston co-authored, outlined three structural components of wetlands that apply generally to all water systems: water, substrate (physical and chemical features), and biota (animal, plant, and microorganism life). *Id.* at 3–4; *see also* Figure 1. Each component interacts with the others to shape the functions (services) of water systems. In

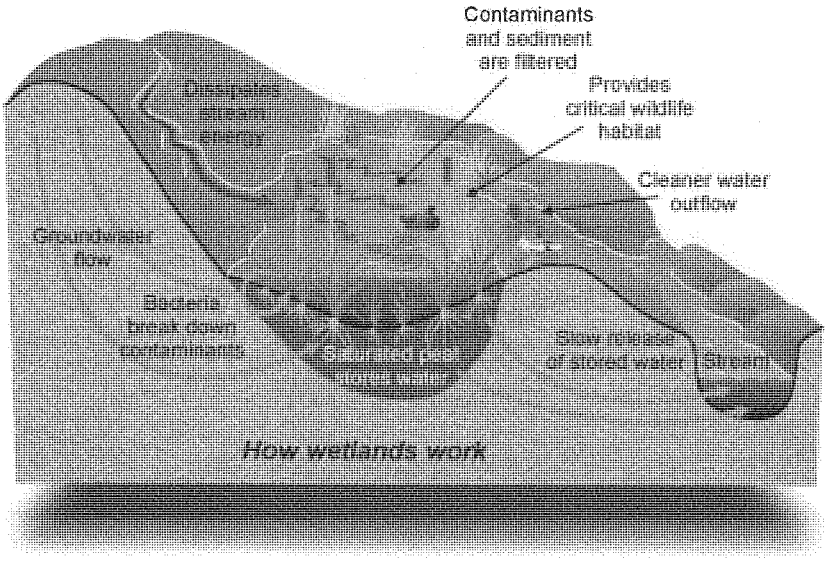

Figure 1. How Wetlands Work. Source: Delaware Wetland Monitoring and Assessment Program.

the study underlying the Clean Water Rule, the EPA and the Corps examined connections among these three factors to provide an integrated perspective on water systems. EPA Office of Research & Dev., *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence* 1-2 to 1-19 (Jan. 2015) [hereinafter *Connectivity Report*].

B. Rigorous research methods are used to study these attributes, and to study aquatic ecosystems as a whole.

The study of water systems integrates several scientific disciplines. In the context of understanding wetlands, hydrology, geology, and chemistry are used to examine how wetlands regulate stream flow, filter pollutants and sediment, incorporate excess nutrients, act to control flooding, and connect to groundwater. *See, e.g.*, Carol A. Johnston, *Sediment and Nutrient Retention by Freshwater Wetlands: Effects on Surface Water Quality*, 21 Critical Rev. Envtl. Control 491–565 (1991); Donald L. Hey & Nancy S. Philippi, *Flood Reduction Through Wetland Restoration: The Upper Mississippi River Basin as a Case History*, 3 Restoration Ecology 4–17 (2006); Peter J. Hancock et al., *Preface: Hydrogeoecology, the Interdisciplinary Study of Groundwater Dependent Ecosystems*, 17 Hydrogeology J. 1–3 (2009). Ecological research can be used to examine the role of wetlands as habitats for fish and wildlife, and their support of food webs within and among interconnected water systems. *See, e.g.*, Matthew J. Gray et al., *Management of Wetlands for Wildlife*, in 3 *Wetland Techniques:*

Applications and Management 121–80 (J.T. Anderson & C.A. Davis eds., 2013); Michael E. Sierszen et al., *Watershed and Lake Influences on the Energetic Base of Coastal Wetland Food Webs Across the Great Lakes Basin*, 38 J. Great Lakes Res. 418–28 (2012). Underlying this cross-disciplinary approach is a focus on the various methodologies noted above. We do not apply these methods independently of each other, but rather actively compare them to ensure that our results are robust and reproducible. *Cf.* David Goodstein, *How Science Works*, in Fed. Judicial Ctr., *Reference Manual on Scientific Evidence* 37, 44 (3d ed. 2011).

To study water systems, we use a wide range of sampling and analytical methods to make our on-site observations and measurements. *See* R.D. DeLaune et al., *Methods in Biogeochemistry of Wetlands* (2013). These methods include examining the chemical and physical characteristics of the waters, characterizing soil and sediment samples, and sampling plant communities. *See generally id.*; *see also Tools in Fluvial Geomorphology* (G. Mathias Kondolf & Hervé Piégay eds., 2d ed. 2016). These sampling and analytical methods are well-established, rigorous, and refined over time; we use them to enhance our understanding of the relationships between the various components of water systems.

Watershed or hydrologic studies may make use of "natural experiments" (a form of observational study), which focus on comparing a natural event or feature with areas (or times) with and without the event or feature. Fed. Judicial Ctr.,

Reference Manual on Scientific Evidence 290 (2011); *see also* Judith A. Layzer, *Natural Experiments: Ecosystem-Based Management and the Environment* (2008). In studying developed and undeveloped watersheds, for example, the assignment of subjects (e.g., watersheds) to groups (e.g., developed or not) is akin to randomization. Such natural experiments are often necessary because ethical considerations (i.e., concerns of deliberately damaging those systems), size, and cost create barriers for actual experiments on existing systems. *See* Susan Haack, *Defending Science—Within Reason: Between Scientism and Cynicism* (2003). Rather than disrupting existing systems, we look toward variations to extrapolate the effects of differences on the overall water system.

We also rely on modeling methods to enhance our understanding of the water-system relationships. *See* Nat'l Judicial Coll., *Hydrologic Modeling Benchbook* 31 (2010) (describing computer-based models as "essential" for understanding water systems). Models serve multiple purposes. First, they enable us to test our understanding of interrelationships between different components of a water system. *Id.* Second, they enable us to predict the outcomes of potential human activities that may cause damage—without modifying those systems. *Id.* Models also make it possible to study processes at scales of watersheds to continents that are too extensive to be investigated by observations alone, and to simulate scenarios of hydrologic and other wetland/watershed processes drawn

from historical record. *E.g.*, Kangsheng Wu & Carol A. Johnston, *Hydrologic Comparison Between a Forested and a Wetland/Lake Dominated Watershed Using SWAT*, 22 Hydrological Processes 1431–42 (2008).

The Connectivity Report reached its conclusions using studies that applied all of these methodologies. Indeed, the EPA, in its Connectivity Report, compiled these studies in a manner to ensure the use of high-quality, relevant research. *Connectivity Report*, *supra* at 1-17; *see also* U.S. Envtl. Prot. Agency & U.S. Dep't of Army, *Technical Support Document for the Clean Water Rule: Definition of Waters of the United States* 158–63 (May 27, 2015) [hereinafter *Technical Support Document*] (describing the extensive process of peer review of the Connectivity Report itself, including the use of a panel of 27 technical experts from an array of relevant fields, as well as other public processes). Moreover, the Connectivity Report included only studies that were peer reviewed or otherwise verified for quality assurance. *Id.* The focus on high standards and verification through peer review means that the Connectivity Report used the best available science to develop the Clean Water Rule. *See* Clean Water Rule, 80 Fed. Reg. at 37,055; *see also, e.g.*, P.J. Sullivan et al., *Report: Best Science Committee, Defining and Implementing Best Available Science for Fisheries and Environmental Science, Policy, and Management*, 31 Fisheries 460, 462 (2006) (describing assurance of data quality and use of rigorous peer review as aspects of best available science).

II. "Waters of the United States" is a legal determination informed by science.

Jurisdiction under the CWA has both legal and scientific components. The CWA defines the term "navigable waters" as "waters of the United States," which has been further refined by case law, regulation, and agency guidance. There is no question that traditional navigable waters, interstate waters, and the territorial seas (hereinafter collectively referred to as "primary waters") are "waters of the United States." For other waters, such as tributaries and waters adjacent to those tributaries, scientific research plays a critical role in determining how they affect the chemical, physical, and biological integrity of primary waters, and thus their qualifications for CWA protection.

A. As a legal matter, CWA jurisdiction requires a "significant nexus" to a primary water.

While "waters of the United States" include more than primary waters, the CWA's jurisdictional scope has limits. In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, the U.S. Supreme Court noted that the term "navigable" has some import in CWA jurisdictional determinations. 531 U.S. 159, 172 (2001). Accordingly, agencies and courts have employed the "significant nexus" analysis, endorsed by Justice Kennedy in *Rapanos v. United States*. 547 U.S. 715, 759 (2006) (Kennedy, J., concurring in the judgment). This approach

recognizes that upstream waters must be protected to ensure the integrity of primary waters. *Id.* at 774–75.

B. As a scientific matter, the Clean Water Rule's approach to "significant nexus" is sound.

The Clean Water Rule relies on the best available science to establish criteria for the requisite "significant nexus" between primary waters and other waters. Primary waters do not exist in isolation. Nat'l Research Council, *Compensating for Wetland Losses Under the Clean Water Act* 46–59 (2001). Rather, they are heavily influenced by their interactions with streams, wetlands, and open waters within their watersheds. As the Connectivity Report correctly emphasizes:

> The structure and function of downstream waters highly depend on materials—broadly defined as any physical, chemical, or biological entity—that originate outside of the downstream waters. Most of the constituent materials in rivers, for example, originate from aquatic ecosystems located upstream in the drainage network or elsewhere in the drainage basin, and are transported to the river through flowpaths[.]

Connectivity Report, *supra*, at ES-15. The Clean Water Rule appropriately defines "significant nexus" using scientifically supported functions to demonstrate strong chemical, physical, and biological connections between upstream waters and primary waters.

Scientific literature strongly supports the nine functions listed in the Clean Water Rule's "significant nexus" definition. First, each function relates to the

chemical, physical, and/or biological integrity of primary waters. For example, wetlands enhance the chemical integrity of downstream waters through trapping, transforming, and filtering pollutants. *See* Carol A. Johnston et al., *The Cumulative Effect of Wetlands on Stream Water Quality and Quantity: A Landscape Approach*, 10 Biogeochemistry 105–41 (1990). Wetlands also recycle nutrients and export organic material. *See* Michael E. McClain et al., *Biogeochemical Hot Spots and Hot Moments at the Interface of Terrestrial and Aquatic Ecosystems*, 6 Ecosystems 301–12 (2003); Nathan J. Smucker & Naomi E. Detenbeck, *Meta-Analysis of Lost Ecosystem Attributes in Urban Streams and the Effectiveness of Out-of-Channel Management Practices*, 22 Restoration Ecology 741–48 (2014).

Similarly, the functions of streams, wetlands, and open waters affect the physical integrity of downstream waters. *See, e.g.*, Tim D. Fletcher et al., *Protection of Stream Ecosystems from Urban Stormwater Runoff: The Multiple Benefits of an Ecohydrological Approach*, 38 Progress in Physical Geography 543–55 (2014). These waters contribute flow to primary waters. *See, e.g.*, Carol A. Johnston & Boris A. Shmagin, *Regionalization, Seasonality, and Trends of Streamflow in the U.S. Great Lakes Basin*, 362 J. Hydrology 69–88 (2008). Research has shown that many wetlands without a year-round surface connection to primary waters flow into perennial streams a significant amount of the time, thereby contributing water and other materials downstream. *See, e.g.*, Owen T.

McDonough et al., *Surface Hydrologic Connectivity Between Delmarva Bay Wetlands and Nearby Streams Along a Gradient of Agricultural Alteration*, 35 Wetlands 41–53 (2015); Heather E. Golden et al., *Hydrologic Connectivity Between Geographically Isolated Wetlands and Surface Water Systems: A Review of Select Modeling Methods*, 53 Envtl. Modelling & Software 190–206 (2014).

Wetlands also retain and attenuate floodwaters, as well as store runoff. *See* Hisashi Ogawa & James W. Male, *Simulating the Flood Mitigation Role of Wetlands*, 112 J. Water Resources Plan. & Mgmt. 114–28 (1986); Carol A. Johnston, *Material Fluxes Across Wetland Ecotones in Northern Landscapes*, 3 Ecological Applications 424–40 (1993). In addition, they trap sediment, thereby preventing the degradation of downstream water quality. *See* Carol A. Johnston et al., *Nutrient Trapping by Sediment Deposition in a Seasonally Flooded Lakeside Wetland*, 13 J. Envtl. Quality 283–90 (1984).

The Clean Water Rule's definition of "significant nexus" also recognizes how streams, wetlands, and open waters affect the biological integrity of downstream waters. Such waters provide important foraging, nesting, breeding, spawning, and nursery habitat for species that occur in primary waters. *See* Marcus Sheaves, *Consequences of Ecological Connectivity: The Coastal Ecosystem Mosaic*, 391 Marine Ecology Progress Series 107–15 (2009); Raymond D. Semlitsch & J. Russell Bodie, *Are Small, Isolated Wetlands Expendable?*, 12

Conservation Biology 1129–33 (1998); Shannon E. Pittman et al., *Movement Ecology of Amphibians: A Missing Component to Understanding Amphibian Declines*, 169 Biological Conservation 44–53 (2014).

Connectivity refers to "the degree to which components of a watershed are joined and interact by transport mechanisms that function across multiple spatial and temporal scales." *Connectivity Report*, *supra*, at ES-6. Whether the functions of a particular stream, wetland, or open water (or a group of "similarly situated" waters) satisfy the legal threshold of "significant nexus" depends on the extent of its connectivity with primary waters. We examine the Clean Water Rule's categorical application of the "significant nexus" test below.

III. Best available science supports the Clean Water Rule's categorical treatment of tributaries.

Our research and that of other scientists demonstrates extensive connections between tributaries and their downstream primary waters sufficient to warrant categorical inclusion under the Clean Water Rule. *See* R. Eugene Turner & Nancy N. Rabalais, *Linking Landscape and Water Quality in the Mississippi River Basin for 200 Years*, 53 BioScience 563–72 (2003). The U.S. Supreme Court has held that federal agencies may craft a categorical rule to assert CWA jurisdiction over certain waters. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 135 (1985). The Court noted that so long as "it is reasonable . . . to conclude that, in the

majority of cases" the category of waters has "significant effects on water quality and the aquatic ecosystem, its definition can stand." *Id.* at 135 n.9.

A. The Clean Water Rule's definition of tributary is scientifically sound.

The Clean Water Rule defines "tributary" in a manner consistent with our scientific understanding. At its most basic level, a tributary is simply a waterbody that flows into a larger waterbody. From a scientific perspective, "a tributary is the smaller of two intersecting channels, and the larger is the main stem." Lee Benda et al., *The Network Dynamics Hypothesis: How Channel Networks Structure Riverine Habitats*, 54 BioScience 413, 415 (2004). A standard stream ordering system classifies the smallest streams as first-order streams; when two streams meet, they form a second-order stream and so on. *See* Arthur N. Strahler, *Quantitative Analysis of Watershed Geomorphology*, 38 Transactions of American Geophysical Union 913–20 (1957). The smaller waters are intrinsically linked to primary waters both structurally and functionally. *See* Dennis F. Whigham et al., *Impacts of Freshwater Wetlands on Water Quality: A Landscape Perspective*, 12 Envtl. Mgmt. 663–71 (1988). Indeed, "[t]he great majority of the total length of river systems is comprised of lower-order or headwater systems." J. David Allan & María M. Castillo, *Stream Ecology: Structure and Function of Running Waters* 2 (2d ed. 2007); *see also* Ken M. Fritz et al., *Comparing the Extent and Permanence*

of Headwater Streams from Two Field Surveys to Values from Hydrographic Databases and Maps, 49 J. Am. Water Resources Ass'n 867–82 (2013).

Under the Clean Water Rule, a "tributary . . . contributes flow, either directly or through another water" to primary waters and is "characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark." 80 Fed. Reg. at 37,105. The Clean Water Rule notes that tributaries may be natural or human-made and include "rivers, streams, [and] canals," as well as ditches that are not otherwise excluded by the Rule. *Id.* From a scientific perspective, whether a tributary is natural or human-made is immaterial; what matters is whether the water contributes flow to another waterbody.

Under the Clean Water Rule, a water meets the definition of a tributary even if it contributes flow to a primary water through a non-jurisdictional water. This approach is also sound because the scientific definition of tributary focuses on the hydrologic connection between waters.

From a scientific perspective, the Clean Water Rule's definition of "tributary" could be considered conservative. In addition to requiring a bed and banks (channels), it also provides that a tributary must have an ordinary high water mark (OHWM). In comments to the EPA, however, the Scientific Advisory Board noted that not all tributaries have OHWMs. Ltr. from EPA Sci. Advisory Bd., to Gina McCarthy, EPA Administrator, *Science Advisory Board (SAB) Consideration*

of the Adequacy of the Scientific and Technical Basis of the EPA's Proposed Rule Titled "Definition of Waters of the United States Under the Clean Water Act" (Sept. 30, 2014) (on file with epa.gov). The OHWM requirement (which is ultimately a limitation on what constitutes a water of the United States) is not dictated by science, but we recognize that the agencies must set boundaries along gradients to apply the CWA on a national basis.

B. Compelling scientific evidence demonstrates that tributaries significantly affect the chemical, physical, and biological integrity of primary waters.

The National Academy of Sciences has extensively documented the connections between tributaries and downstream waters. *See, e.g.*, Nat'l Research Council, *Achieving Nutrient and Sediment Reduction Goals in the Chesapeake Bay: An Evaluation of Program Strategies and Implementation* (2011); Nat'l Research Council, *Missouri River Planning: Recognizing and Incorporating Sediment Management* (2011). Scientific studies demonstrate how tributaries significantly affect the functions and integrity of downstream waters through chemical, physical, and biological interrelationships, especially regarding how physical aspects (e.g., flow) can influence chemical processes (e.g., pesticide contamination), which in turn can affect the biological features (e.g., species) of a water. Below we highlight a few examples of connections between tributaries and primary waters.

We find evidence of strong chemical connections between tributaries and downstream primary waters in the movement of contaminants and pathogens. Sediment-laden waters typically transport some contaminants (such as mercury) from tributaries to downstream waters. *See* Willem Salomons & Ulrike Förtsner, *Metals in the Hydrocycle* (1984). Waterborne pathogens (such as bacteria and viruses) that originate from agricultural and municipal wastes are also transported to downstream waters through tributaries. *See* Pramod K. Pandey et al., *Contamination of Water Resources by Pathogenic Bacteria*, 4 AMB Express (2014); Cassandra C. Jokinen et al., *Spatial and Temporal Drivers of Zoonotic Pathogen Contamination of an Agricultural Watershed*, 41 J. Envtl. Quality 242–52 (2012); Isabelle Jalliffier-Verne et al., *Cumulative Effects of Fecal Contamination from Combined Sewer Overflows: Management for Source Water Protection*, 174 J. Envtl. Mgmt. 62–70 (2016). Pathogens may pose a risk to human health, highlighting the importance of regulating and protecting tributaries to ensure the integrity of primary waters.

Tributaries also have important physical connections with downstream primary waters. The water flow from tributaries helps to create and maintain river networks. Indeed, most of the water in most rivers comes from tributaries. *See, e.g.*, Richard B. Alexander et al., *The Role of Headwater Streams in Downstream Water Quality*, 43 J. Am. Water Resources Ass'n 41–59 (2007).

Furthermore, tributaries support the metabolism of river ecosystems. For example, they export organic matter (dissolved and particulate) that is incorporated into the food webs of downstream waters, and the resulting turbid water shades and protects fish and amphibians from damage by ultraviolet radiation. *E.g.*, Paul C. Frost et al., *Environmental Controls of UV-B Radiation in Forested Streams of Northern Michigan*, 82 Photochemistry & Photobiology 781–86 (2006). Other biological connections relate to the passive and active transport of living organisms. *See* Judy L. Meyer et al., *The Contribution of Headwater Streams to Biodiversity in River Networks*, 43 J. Am. Water Resources Ass'n 86 (2007) (discussing how organisms rely on streams); Moreno-Mateos & Palmer, *supra*; Carol A. Johnston, *Beaver Wetlands*, in *Wetland Habitats of North America: Ecology and Conservation Concerns* 161–72 (Darold P. Batzer & Andrew H. Baldwin eds., 2012).

Accordingly, the Clean Water Rule's categorical treatment of tributaries reflects scientific reality.

IV. Best available science supports the Clean Water Rule's categorical treatment of adjacent waters based on geographic proximity.

Our research demonstrates that adjacent waters warrant regulation under the Clean Water Rule because of their chemical, physical, and biological connections to downstream primary waters.

A. Compelling scientific evidence demonstrates that waters within 100 feet of an OHWM significantly affect the chemical, physical, and biological integrity of primary waters.

Waters, including wetlands, ponds, oxbows, and impoundments, within 100 feet of an OHWM are "hotspots" of ecological function/processes and species diversity affecting the flux of materials (water, sediment, energy, organic matter, pollutants, and organisms) to primary waters. *See* Peter M. Groffman et al., *Down by the Riverside: Urban Riparian Ecology*, 1 Frontiers Ecology & Env't 315–21 (2003). These adjacent waters affect the movement of pollutants from uplands into streams and rivers; regulate stream temperatures, light, and flow regimes; reduce downstream flooding; and provide nursery areas and critical habitat for aquatic biota, including threatened and endangered species. *See* J. V. Ward et al., *Riverine Landscape Diversity*, 47 Freshwater Biology 517–39 (2002). Riparian wetlands act as buffers, effectively reducing concentrations of nutrients and other pollutants. For example, riparian wetlands may remove up to 100% of the nitrate-nitrogen that enters them. *See* M. S. Fennessy & J. Cronk, *The Effectiveness and Restoration Potential of Riparian Ecotones for the Management of Nonpoint Source Pollution, Particularly Nitrate*, 27 Critical Revs. Envtl. Sci. & Tech. 285–317 (1997). Nitrate is a serious water pollutant and a major contributor to coastal algal blooms, as in the Gulf of Mexico's hypoxic "dead zone," as well

as nuisance algal blooms in many other surface waters. *See* William J. Mitsch et al., *Nitrate-Nitrogen Retention in the Mississippi River Basin*, 24 Ecological Engineering 267–78 (2005).

These adjacent waters can act as sources, sinks, or transformers of materials from upland habitats. As sources, adjacent waters contribute organic materials, such as leaf litter, that provide food (energy) for many in-stream species. *See* Robin L. Vannote et al., *The River Continuum Concept*, 37 Canadian J. Fisheries & Aquatic Sci. 130–37 (1980). They also carry woody debris, which increases habitat complexity and biodiversity. *See* J. David Allan, *Stream Ecology: Structure and Function of Running Waters* (1st ed. 1995); J. V. Ward et al., *Riverine Landscape Diversity*, 47 Freshwater Biology 517–39 (2002).

Adjacent waters are also major sinks for materials. By capturing and storing sediment eroded from nearby uplands, they reduce downstream sediment transport and its negative effects on fish feeding and spawning, macroinvertebrate communities, and overall habitat quality. *See* C. P. Newcombe & D. D. MacDonald, *Effects of Suspended Sediments on Aquatic Ecosystems*, 11 N. Am. J. Fisheries Mgmt. 72–82 (1991). These adjacent waters convert materials from one form to another; plants and algae can consume nutrients and bind them in their tissues, reducing the risk of downstream eutrophication. Wetlands in particular mitigate nonpoint source pollution, such as insecticides and fertilizers, thus

protecting stream water quality and drinking water supplies. *E.g.*, Robert Everich et al., *Efficacy of a Vegetative Buffer for Reducing the Potential Runoff of the Insect Growth Regulator Novaluron*, in *Pesticide Mitigation Strategies for Surface Water Quality* 175–88 (2011); Mitsch et al., *supra*. Adjacent waters also slow the movement of materials and biota, by providing temporary storage of excess water during times of high precipitation to dissipate the energy of flows (reducing erosion and soil loss) and attenuate flood peaks. *See* William J. Mitsch & J. Gosselink, *Wetlands* (5th ed. 2015).

Hydrologic connections do not need to be continuous to have a substantial effect on downstream primary waters. Hydrologic connectivity involves longitudinal, lateral, and vertical exchange, and adjacent waters are intimately linked to streams and rivers both in space (i.e., proximity to the OHWM), and time (e.g., by means of high water and flood events). Seasonal high water levels increase connectivity, promoting the lateral movement of animals between lakes, wetlands, stream channels, and their adjacent waters. This facilitates use of critical spawning and nursery habitats by fish, and supports the biological integrity of the system. Many fish are sustained by varied habitats dispersed throughout the watershed for spawning, nurseries, growth, and maturation. *See* Kurt D. Fausch et al., *Landscapes to Riverscapes: Bridging the Gap Between Research and Conservation of Stream Fishes*, 52 BioScience 483–98 (2002).

Overall, the benefits of protecting waters within 100 feet of an OHWM accrue both locally (at that point on the river system) and cumulatively (at the watershed scale). The Clean Water Rule's categorical inclusion of these adjacent waters reflects scientific reality.

B. Compelling scientific evidence demonstrates that waters within 100-year floodplains significantly affect the chemical, physical, and biological integrity of primary waters.

The Clean Water Rule's coverage of waters within 100-year floodplains is based on scientific understanding of watershed dynamics. These dynamics include not only surface expressions of connectivity (floods), but also underlying hydrologic conditions.

Every primary water has a watershed, which can be described as the land area that drains into that primary water and its tributaries. *See* Paul R. Bierman & David R. Montgomery, *Key Concepts in Geomorphology* (2014). During any flood event, primary waters and their tributaries may overflow their banks. *Id.* The proportion of land that becomes obviously flooded (the "floodplain") depends upon rate and total amount of rainfall. The geographic extent of the floodplain also depends upon the watershed's topography, soil saturation, and geological characteristics. *See* W. R. Osterkamp & J.M. Friedman, *The Disparity Between Extreme Rainfall Events and Rare Floods—With Emphasis on the Semi-Arid American West*, 14 Hydrological Processes 2817–29 (2000). A landscape with

more topographic relief (steeper) will have a smaller floodplain than a flatter landscape where floodwaters more readily spread outward. *See* A.D. Howard, *Modelling Channel Evolution and Floodplain Morphology*, in *Floodplain Processes* 15–62 (Malcolm G. Anderson et al. eds., 1996).

Although every flood is unique in extent and duration, we describe floodplains statistically to characterize other hydrologic (non-flooding) features. *See* G. R. Pandy & V.-T.-V. Nguyen, *A Comparative Study of Regression Based Methods in Regional Flood Frequency Analysis*, 225 J. Hydrology 92–101 (1999). For example, the "100-year floodplain" represents the land area covered by floodwaters that have a 1% chance of occurring in any given year (1/100 likelihood). This definition is entirely statistical; such floods can occur more often in a 100-year floodplain, even two years or more in a row. It is incorrect to conclude that waters on a 100-year floodplain have a connection with a primary water only once in a century because the actual hydrologic connections extend beyond surface flooding alone.

Furthermore, changes in land use can affect flood dynamics. Increasing the proportion of the landscape that is covered with impermeable surfaces (such as streets and roofs) may increase flood intensity and duration. *See* E. S. Bedan & J.C. Clausen, *Stormwater Runoff Quality and Quantity from Traditional and Low*

Impact Development Watersheds, 4 J. Am. Water Resources Ass'n 998–1008 (2009).

Floodwaters are only the surface expressions of a flood. Rainfall permeates into the soil and often moves underground toward open waterbodies, such as primary waters. *See* William M. Alley et al., *Flow and Storage in Groundwater Systems*, 296 Sci. 1985–90 (2002); Florian Malard et al., *A Landscape Perspective of Surface-Subsurface Hydrological Exchanges in River Corridors*, 47 Freshwater Biology 621–40 (2002). Groundwater movement occurs in the absence of a 100-year flood. The results from tracing techniques demonstrate how large proportions of streamflow are derived from groundwater. *E.g.*, Alley et al., *supra*.

We in the water science community understand that factors other than surface flooding determine the actual extent of hydrologic connections between waters in a floodplain. The direction of movement and the rate at which the water moves depends upon topography, geology, and rainfall. *See* Jack A. Stanford & J.V. Ward, *An Ecosystem Perspective of Alluvial Rivers: Connectivity and the Hyporheic Corridor*, 12 J. N. Am. Benthological Soc'y 48–60 (1993); Alley et al., *supra*. Impermeable subsurface layers, like clay layers under sand and/or limestone in Florida, can reduce the downward movement of water and force it to move laterally. *See* Peter W. Bush & Richard H. Johnston, *Ground-Water Hydraulics, Regional Flow, and Ground-Water Development of the Floridan Aquifer System in*

Florida and in Parts of Georgia, South Carolina, and Alabama: Regional Aquifer-System Analysis (U.S. Geological Survey, Professional Paper 1403-C, 1988), *available at* https://pubs.usgs.gov/pp/1403c/report.pdf. Often subsurface impermeable (or semi-permeable) layers are not level; they may slope toward waterbodies, and this subsurface lateral flow may re-emerge in a surface waterbody, such as a primary water. However, subsurface lateral flow can occur even without sloping impermeable layers; when more water pools in a particular subsurface location, lateral flow will occur from areas of higher pressure to areas of lower pressure, which may be river channels, wetlands, or lakes. *See* Jacob Bear, *Hydraulics of Groundwater* (2012).

Many different types of waterbodies can occur in 100-year floodplains. Tributaries and other waters can be connected to a primary river in more than one way. *See* C. Amoros & G. Bornette, *Connectivity and Biocomplexity in Waterbodies of Riverine Floodplains*, 47 Freshwater Biology 761–76 (2002). Headwaters and tributaries may flow directly into primary waters, adding organic matter and constituents that create unique water chemistry in the primary water. *See* Takashi Gomi et al., *Understanding Processes and Downstream Linkages of Headwater Systems: Headwaters Differ from Downstream Reaches by Their Close Coupling to Hillslope Processes, More Temporal and Spatial Variation, and Their Need for Different Means of Protection from Land Use*, 52 BioScience 905–16

(2002). Wetlands may border primary waters, buffering the input of floodwaters, altering the water chemistry of floodwaters and the primary water itself, and providing habitat and resources for local biota. *See* Joy B. Zedler, *Wetlands at Your Service: Reducing Impacts of Agriculture at the Watershed Scale*, 1 Frontiers in Ecology & Env't 65–72 (2003).

Even other waterbodies with no obvious surface connections to primary waters may still be hydrologically connected to them. Lakes, ponds, wetlands, and streams that flow into these apparently isolated waterbodies may have no surface connections to the primary water but, in addition to storing water as previously described, can have subsurface connections through groundwater. Bear, *supra*. These subsurface connections can carry water to primary waters; for example, water seeping down out of an apparently isolated waterbody may hit an impermeable layer and move laterally until it emerges in the primary waterbody. *See* Geoffrey C. Poole, *Fluvial Landscape Ecology: Addressing Uniqueness Within the River Discontinuum*, 41 Freshwater Biology 641–60 (2002). Therefore, loss of an apparently isolated waterbody can reduce water volume and alter flow characteristics of a primary water.

Evidence for these connections can be observed in the physical and chemical properties of primary waters. *See* Malard et al., *supra*. Temperature, alkalinity, salinity, nitrate, other chemicals and pollutants, and dyes have been used as tracers

to show the impact of groundwater connections to surface waters. *See* C. Soulsby et al., *Inferring Groundwater Influences on Surface Water in Montane Catchments from Hydrochemical Surveys of Springs and Streamwaters*, 333 J. Hydrology 199–213 (2007). Furthermore, additions of pollutants into apparently isolated waterbodies or disparate areas of the watershed can affect primary waters. *See* David N. Lerner & Bob Harris, *The Relationship Between Land Use and Groundwater Resources and Quality*, 26 Land Use Pol'y S265–S273 (2009). Tracer and stable isotope studies have established the path and rate of water movements in Florida, substantiating that a distant source can pollute primary waters. *See* M. Badruzzaman et al., *Sources of Nutrients Impacting Surface Waters in Florida: A Review*, 109 J. Envtl. Mgmt. 80–92 (2012). These studies highlight the chemical, physical, and biological connections between a primary water and other waterbodies that are located within its 100-year floodplain, thus justifying the inclusion of these adjacent waters in the Clean Water Rule.

C. Compelling scientific evidence demonstrates that waters within 1500 feet of high tide lines of tidally influenced primary waters or OHWMs of the Great Lakes significantly affect the integrity of these primary waters.

Scientific evidence strongly supports protecting waters located within 1500 feet of such primary waters. These waters have the same types of connections and functions as the tributaries and other adjacent waters discussed *supra*. Adjacent waters within 1500 feet of primary waters have important chemical connections to

those waters. Adjacent waters that were thought to be isolated have become more saline, providing empirical data regarding the groundwater connection between adjacent waters and primary waters. *See, e.g.*, Cameron Wood & Glenn A. Harrington, *Influence of Seasonal Variations in Sea Level on the Salinity Regime of a Coastal Groundwater-Fed Wetland*, 53 Groundwater 90–98 (2014). In addition, adjacent waters in the 1500-foot zone may release freshwater into coastal waters, thereby reducing the salinity of these waters. *See, e.g.*, Fred H. Sklar & Joan A. Browder, *Coastal Environmental Impacts Brought About by Alterations to Freshwater Flow in the Gulf of Mexico*, 22 Envtl. Mgmt. 547–62 (1998).

Indeed, the inputs of groundwater into coastal waters are quite large, and groundwater can contain high levels of dissolved solids and nutrients. *See, e.g.*, Willard S. Moore, *Large Groundwater Inputs to Coastal Waters Revealed by 226-Ra Enrichments*, 380 Nature 612–614 (1996); Matthew A. Charette et al., *Utility of Radium Isotopes for Evaluating the Input and Transport of Groundwater-Derived Nitrogen to a Cape Cod Estuary*, 46 Limnology & Oceanography 465–70 (2001); J. M. Krest et al., *Marsh Nutrient Export Supplied by Groundwater Discharge: Evidence from Radium Measurements*, 14 Global Biogeochemical Cycles 167–76 (2000). As in inland systems, coastal wetlands remove nutrients, such as nitrate, thereby reducing down-gradient eutrophication in primary waters. *See* Marcelo Ardón et al., *Drought-Induced Saltwater Incursion Leads to Increased Wetland*

Nitrogen Export, 19 Global Change Biology 2976–85 (2013). Thus, adjacent waters protect and improve the quality of primary waters by removing harmful contaminants or transforming and transporting nutrients to primary waters. *See* Clifford N. Dahm, *Nutrient Dynamics of the Delta: Effects on Primary Producers*, 14 S.F. Estuary & Watershed Sci. Art. 4 (2016).

Adjacent waters also physically influence primary waters through surface and subsurface connections. *See* Figure 2. Adjacent waters contribute flow to

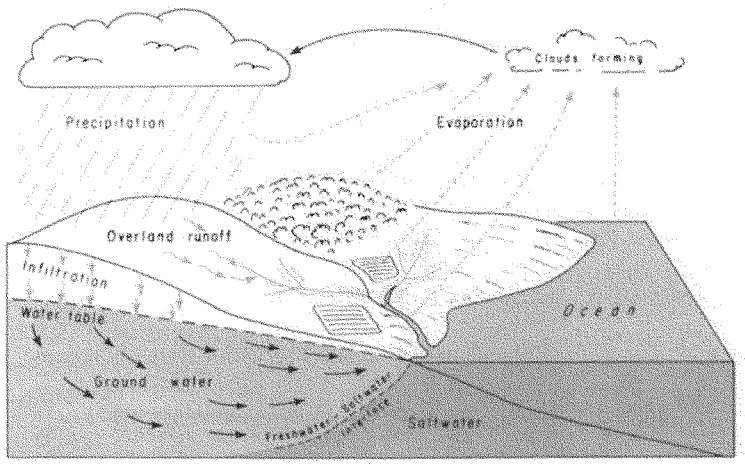

Figure 2. Freshwater-Saltwater Interface. Adapted from Ralph C. Heath, *Basic Ground-Water Hydrology* (U.S. Geological Survey, Water-Supply Paper 2220, 1998), *available* at http://pubs.er.usgs.gov/pubs/wsp/wsp2220.

nearby primary waters and retain floodwaters and sediments. *See, e.g.*, Paul M. Barlow, *Ground Water in Freshwater-Saltwater Environments of the Atlantic*

Coast (U.S. Geological Survey, Circular 1262, 2003), *available at* https://pubs.usgs.gov/circ/2003/circ1262/pdf/circ1262.pdf. Further, adjacent waters have a significant impact on the biological integrity of primary waters. Wetlands near tidally influenced primary waters can serve as a critical source of freshwater for some species that use wetlands and coastal waters. *See Technical Support Document*, *supra*, at 292–93. Adjacent wetlands, lakes, ponds, and other waters also provide important foraging and breeding habitat for coastal species. *See, e.g.*, David J. Jude & Janice Pappas, *Fish Utilization of Great Lakes Coastal Wetlands*, 18 J. Great Lakes Res. 651–72 (1992); Michael E. Sierszen et al., *A Review of Selected Ecosystem Services Provided by Coastal Wetlands of the Laurentian Great Lakes*, 15 Aquatic Ecosystem Health & Mgmt. 92–106 (2012).

Distance is but one factor that affects the connectivity between waters, and as with the other geographical distance limitations discussed *supra*, the agencies' selection of 1500 feet as the distance limitation is conservative from a scientific perspective. Indeed, waters located beyond this threshold can be chemically, physically, and biologically connected to tidally influenced primary waters or the Great Lakes. While the categorical jurisdictional line could have been drawn farther from high tide lines, we find strong scientific support connecting the majority of lakes, wetlands, ponds, and other waters located within this 1500-foot area to primary waters.

Once again, the Clean Water Rule's categorical inclusion of these adjacent waters reflects scientific reality.

V. Conclusion

The U.S. Supreme Court has held that federal agencies may protect waters on a categorical basis if most waters in that category have a significant effect on primary waters. The best available science overwhelmingly demonstrates that the waters treated categorically in the Clean Water Rule have significant chemical, physical, and biological connections to primary waters. Accordingly, we write in support of upholding the Clean Water Rule.

Date: January 20, 2017

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT

This document complies with the word limit of Fed. R. App. P. 32(a)(7)(B)(ii) because, excluding the parts of the document exempted by Fed. R. App. P. 32(f), this document contains 6,352 words. This document complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman size 14-point font.

Date: January 20, 2017

/s/ Royal C. Gardner
Royal C. Gardner

CERTIFICATE OF SERVICE

I hereby certify that on January 20, 2017, I electronically filed a true and correct copy of the foregoing Brief of Dr. M. Siobhan Fennessy, Dr. Carol A. Johnston, Dr. Marinus L. Otte, Dr. Margaret Palmer, Dr. James E. Perry, Professor Charles Simenstad, Dr. Benjamin R. Tanner, Dr. Dan Tufford, Dr. R. Eugene Turner, Dr. Kirsten Work, Dr. Scott C. Yaich, and Dr. Joy B. Zedler as Amici Curiae in Support of Respondents and in Support of Upholding the Clean Water Rule with the Clerk of the Court for the United States Court of Appeals for the Sixth Circuit using the Court's appellate CM/ECF system, which will send notification of this filing to the attorneys of record.

Date: January 20, 2017

/s/ Royal C. Gardner
Royal C. Gardner

ADDENDUM

Amici Curiae Biographies[2]

Dr. M. Siobhan Fennessy is the Jordan Professor of Biology and Environmental Studies at Kenyon College where she teaches and conducts research on wetland ecosystems. She serves on the National Research Council's Water Science and Technology Board, and had been appointed to two NRC committees. A Fulbright Fellow, she was recently appointed to the Intergovernmental Platform on Biodiversity and Ecosystem Services for the global assessment of land degradation and restoration, and to the Ramsar Convention's Scientific and Technical and Review Panel.

Dr. Carol A. Johnston is a Professor at South Dakota State University, where she teaches ecology and environmental science. She served on the National Research Council's Water Science and Technology Board and on NRC committees studying wetland mitigation, wetland delineation, and watershed management. She is a Fellow of the Society of Wetland Scientists, and received the National Wetlands Award for Science Research from the Environmental Law Institute in 2009.

Dr. Marinus L. Otte is a Professor in the Department of Biological Sciences at North Dakota State University, and has been specializing in many aspects of wetland science for more than 25 years. He has worked on both coastal and inland wetlands in the United States (Minnesota, North Dakota, and South Carolina), China, Ireland, and the Netherlands. He teaches Wetland Science, Ecotoxicology, Environmental Science, and Plant Systematics. He has served as Editor-in-Chief of the scientific journal *Wetlands* since 2012.

Dr. Margaret Palmer is Director of the National Socio-Environmental Synthesis Center, a National Science Foundation and University of Maryland supported research center. A Distinguished University Professor at the University of Maryland, she oversees a research group focused on watershed science and restoration ecology. Having worked on streams, wetlands, and estuaries for more than 30 years, she is past Director of the Chesapeake Biological Laboratory, currently serves on the editorial boards of the journals *Restoration Ecology* and *Science*, and is an elected fellow of the Society for Freshwater Science.

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[2] Affiliations of amici curiae and their counsel are provided for identification purposes only.

Dr. James E. Perry is a Professor of Marine Science at the College of William and Mary's Virginia Institute of Marine Science. A past president of the Society of Wetland Scientists (SWS), he has overseen its Professional Certification Program and its Ethics Committee. He is also a member of the Coastal and Estuarine Research Federation, Ecological Society of America, and Society of Ecological Restoration. He has published over 50 peer-reviewed journal articles and book chapters.

Charles Simenstad is a Research Professor in the School of Aquatic and Fishery Sciences, at the University of Washington, where he focuses on the structure and function of tidal wetlands within the broader landscape context of estuarine and coastal ecosystems. He is Co-Editor-in-Chief of the scientific journal *Estuaries and Coasts*, serves on the Environmental Advisory Board to the Chief of the U.S. Army Corps of Engineers, and contributed to the NRC Committee on Compensating for Wetland Losses.

Dr. Benjamin R. Tanner is an Assistant Professor of Environmental Science and Studies at Stetson University, where his research focuses on wetland sediment records of environmental change. He has worked on both tidal saline and inland freshwater wetlands at multiple sites in Florida, the Carolinas, and Maine. He teaches advanced courses on wetland systems, soils and hydrology, and wetland identification and delineation.

Dr. Dan Tufford focuses his research on watershed ecology and water resources management. His work ranges from field studies to simulation modeling and includes water quality, hydrology, and landscape interactions. His recent projects include integrating climate science and water management, and watershed modeling for the North Inlet-Winyah Bay National Estuarine Research Reserve. He is currently a member of the Board of Directors for the Columbia Audubon Society and on the state Advisory Board for Audubon South Carolina.

Dr. R. Eugene Turner is the 71st Boyd Professor in the Louisiana State University System where he teaches restoration and wetland ecology courses and maintains a healthy research program. He has been Chair or Co-Chair of the INTECOL Wetlands Working Group (WWG) since 1976, Executive Board Member of INTECOL and of the non-profit Green Lands, Blue Waters, and serves on various national scientific committees, and two editorial boards. He has been on NRC committees including the Committee on Compensating for Wetland Losses.

Dr. Kirsten Work is a Professor in the Stetson University Biology Department. Over the course of her career, she has studied a broad range of freshwater systems, from lakes in the upper Midwest and Alaska to streams, rivers, and reservoirs in the Great Plains to springs, lakes, and wetlands in Florida. She is particularly interested in the role of disturbance aquatic on ecosystem function. Her current studies focus on fish diversity in Florida springs.

Dr. Scott C. Yaich has worked in the field of wetland conservation for over 30 years, has been a Certified Wetland Scientist, and is a Certified Wildlife Biologist. He worked as the Wetlands and Waterfowl Program Coordinator, Chief of Wildlife Management, and Assistant Director of Conservation for the Arkansas Game and Fish Commission, and as a specialist in wetland habitat conservation for the U.S. Fish and Wildlife Service. He also served as staff and Council member of the North American Wetlands Conservation Council.

Dr. Joy B. Zedler is Professor Emerita (Botany and Aldo Leopold Professor of Restoration Ecology) at the University of Wisconsin-Madison. She continues to publish her wetland ecology research, to advise on Adaptive Restoration, and to help edit two journals, *Restoration Ecology* and *Ecosystem Health and Sustainability*. She is a member of the California Delta's Independent Science Board and a Trustee of the Wisconsin Chapter of The Nature Conservancy. She served on four NRC committees and chaired its Committee on Mitigating Wetland Losses.

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

STATES OF NEW YORK, CALIFORNIA, CONNECTICUT, MARYLAND, NEW JERSEY, OREGON, RHODE ISLAND, VERMONT, and WASHINGTON; COMMONWEALTH OF MASSACHUSETTS; and the DISTRICT OF COLUMBIA,

Plaintiffs,

v.

E. SCOTT PRUITT, as Administrator of the United States Environmental Protection Agency; UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; RYAN A. FISHER, as Acting Assistant Secretary of the Army for Civil Works; and UNITED STATES ARMY CORPS OF ENGINEERS,

Defendants.

COMPLAINT

Case No. 1:18-cv-1030

Plaintiffs, the States of New York, California, Connecticut, Maryland, New Jersey, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, and the District of Columbia (the States), each represented by its Attorney General, allege as follows against defendants E. Scott Pruitt, as Administrator of the United States Environmental Protection Agency (EPA); EPA; Ryan A. Fisher, as Acting Assistant Secretary for the United States Army Corps of Engineers (Army Corps); and the Army Corps (collectively, the agencies):

INTRODUCTION

1. In 2015, following a multi-year comment process and extensive scientific analysis, the agencies promulgated the Clean Water Rule to clarify which waters are protected by the Clean Water Act (CWA or Act), streamline and strengthen enforcement of antipollution laws, and protect the health and safety of this country's natural resources and drinking water supply.

2. The agencies have now suspended the Clean Water Rule—without consideration of the extensive scientific record that supported it or the environmental and public health consequences of doing so—by adding a new "applicability date" that delays the rule's applicability for two years and reinstates the definition of "waters of the United States" from the 1980s (Suspension Rule).

3. Reverting to the definition that pre-dated the 2015 Clean Water Rule is a wholesale, substantive redefinition of "waters of the United States" under the Act. The agencies have undertaken this redefinition with inadequate public notice and opportunity for comment, insufficient record support, and outside their statutory authority, illegally suspending a rule that became effective more than two years ago. And the agencies have codified this expansive redefinition under the guise of merely "preserving the status quo."

4. Accordingly, the States seek a declaration that the Suspension Rule is unlawful and an order vacating it.

NATURE OF THE ACTION

5. On February 6, 2018, the agencies issued the Suspension Rule, effectively repealing the agencies' 2015 Clean Water Rule by suspending the applicability of the Clean Water Rule for two years and replacing it with pre-existing regulations. *Definition of "Waters of the United States"—Addition of an Applicability Date to 2015 Clean Water Rule,* 83 Fed. Reg. 5200 (Feb. 6, 2018) (Suspension Rule). The agencies promulgated the Suspension Rule in violation of the Administrative Procedure Act, 5 U.S.C. § 551 *et seq.* (APA) by failing to provide an opportunity for the States and general public to comment on the merits of either the Clean Water Rule or the preexisting regulations replacing it, by failing to consider the merits of either the Clean Water Rule or the preexisting regulations, and by failing to consider the substantive environmental and public health effects of their actions.

6. The CWA prohibits the discharge of pollutants, including dredged or fill material, into "the waters of the United States" unless authorized by a permit issued by EPA or the Army Corps. 33 U.S.C. §§ 1311(a), 1342, 1344, 1362(6),(12), 1362(7).

7. The Clean Water Rule, which took effect on August 28, 2015, defined "waters of the United States" to include both navigable waters and waters that impact the chemical, physical and biological integrity of navigable waters. *Clean Water Rule: Definition of "Waters of the United States,"* 80 Fed. Reg. 37,054 (June 29, 2015). The definition was intended to address ambiguities in preexisting

regulations (1980s regulations) by establishing a "clearer, more consistent, and easily implementable" definition of protected waters, thus reducing the need for burdensome, case-specific jurisdictional determinations. *Id.* at 37,054, 37,056-57.

8. The definition of waters of the United States is of fundamental importance to achieving the Act's overarching objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," 33 U.S.C. §1251(a), because it establishes which waters are protected by the Act and are therefore subject to the Act's prohibition against discharges of pollutants, including dredge and fill material, without a permit.

9. The Clean Water Rule protected the States' environmental interests by strengthening and clarifying CWA protections of waters within the States' jurisdictions and by helping to ensure that polluted water from other states did not flow into their waters. The Suspension Rule harms the States' waters by limiting the Act's protections and by making implementation of the Act more difficult. The Suspension Rule also imposes economic burdens and costs upon the States and harms their proprietary interests.

10. The Clean Water Rule rests upon a massive factual record. It was developed with an extensive multi-year public outreach that elicited over one million public comments. 80 Fed. Reg. at 37,056-57. Consistent with the Act, the Clean Water Rule is based on the best peer-reviewed science and protects waters that if polluted are likely to have significant adverse impacts on the integrity of downstream waters.

11. The Suspension Rule adds an "applicability date" of February 6, 2020 to the Clean Water Rule, thus suspending the Clean Water Rule. *See* 83 Fed. Reg. at 5208. It replaces the Clean Water Rule with the 1980s regulations. *Id.* at 5201.

12. In promulgating the Suspension Rule, the agencies have violated the APA. The agencies' promulgation of the Suspension Rule exceeds the agencies' statutory jurisdiction, authority, and limitations, and is short of statutory right (5 U.S.C. § 706(2)(C)); violates the APA's procedural requirements (5 U.S.C. § 706(2)(D)); and is otherwise arbitrary, capricious, an abuse of discretion and not in accordance with law (5 U.S.C. § 706(2)(A)) because:

a) neither the CWA nor the APA, 5 U.S.C. § 705, authorized the agencies to suspend the Clean Water Rule for at least two years;

b) the agencies denied the public a meaningful opportunity to comment on the Suspension Rule by (i) instructing the public not to comment on the law and the facts justifying the Clean Water Rule or the 1980s regulations that replace it, and (ii) providing a comment period that was too short for an important and complex rule;

c) the agencies acted arbitrarily and capriciously and without a rational basis because (i) they failed to consider whether or how the Suspension Rule would meet the Act's objective of restoring and maintaining the integrity of the Nation's waters; (ii) they failed to consider the law and facts justifying the Clean Water Rule or its replacement with the 1980s regulations; (iii) they ignored or countermanded, without reasoned explanation, key factual and scientific findings

that they themselves reached just a few years earlier when they promulgated the Clean Water Rule to replace the 1980s regulations; (iv) they failed to reasonably discuss or consider alternatives; and (v) they failed to articulate a rational explanation for the Suspension Rule.

JURISDICTION AND VENUE

13. This action raises federal questions, and the Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1331 and 5 U.S.C. § 702. The States seek declaratory and injunctive relief pursuant to 28 U.S.C. §§ 2201, 2202, and 5 U.S.C. § 701 *et seq.*

14. Venue is proper within this federal district, pursuant to 28 U.S.C. §§ 1391(b) and 1391(e), because plaintiff State of New York resides within the district and defendants reside or may be found there.

THE PARTIES

15. Plaintiffs are sovereign states of the United States of America, except for the District of Columbia, which is a municipal corporation. Plaintiffs bring this action as *parens patriae* on behalf of their citizens and residents to protect public health, safety, welfare, their waters and environment, and their general economies. Each plaintiff also brings this action in its own sovereign and proprietary capacities.

16. Defendant E. Scott Pruitt is sued in his official capacity as Administrator of EPA.

17. Defendant EPA is the federal agency with primary regulatory authority under the CWA Act.

18. Defendant Ryan A. Fisher is sued in his official capacity as Acting Assistant Secretary of the Army for Civil Works within the Army Corps.

19. Defendant Army Corps has primary regulatory authority over the Act's Section 404 permit program for dredge and fill permits, codified at 33 U.S.C. § 1344.

STATUTORY AND REGULATORY FRAMEWORK

Suspension of a Final Regulation

20. Federal agencies may only act in accordance with specific statutory authority granted to them by Congress.

21. The CWA does not grant EPA or the Army Corps authority to suspend a final regulation.

The Administrative Procedure Act

22. Federal agencies are required to comply with the APA's rulemaking requirements.

23. Under the APA, a federal agency must publish notice of a proposed rulemaking in the Federal Register and "shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments." 5 U.S.C. § 553(b), (c).

24. "[R]ule making" means "agency process for formulating, amending, or repealing a rule." *Id.* § 551(5).

25. The opportunity for public comment under 5 U.S.C. § 553(c) must be meaningful, which means that the agency must allow comment on the relevant issues and provide adequate time for comment. A short comment period for an important and complex rule is insufficient.

26. An agency may only issue a rule after "consideration of the relevant matter presented" in public comments. 5 U.S.C. §§ 553(c).

27. An agency must publish a rule in the Federal Register "not less than 30 days before its effective date" except pursuant to certain exceptions, including good cause shown. 5 U.S.C § 553(d).

28. The APA does not authorize an agency to delay the effective date of a rule after the effective date has passed. *See* 5 U.S.C. § 705.

29. The APA does not require a rule to have an "applicability date."

30. The APA authorizes this Court to "hold unlawful and set aside agency, findings and conclusions" it finds to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

31. The APA also authorizes this Court to "hold unlawful and set aside agency" rules adopted "without observation of procedure required by law." 5 U.S.C. § 706(2)(D).

The Clean Water Act

32. The Act's "objective . . . is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a).

33. The Act's central requirement is that pollutants, including dredged and fill materials, may not be discharged from point sources into "navigable waters" without a permit. *Id.* §§ 1311(a), 1342, 1344, 1362(12). "Navigable waters" are defined as "the waters of the United States, including the territorial seas." *Id.* §1362(7). The Act does not define "waters of the United States." Permits control pollution at its source, and discharges of pollutants, including dredged and fill materials, into waters of the United States are prohibited unless they are in compliance with permit requirements. *See id.* § 1311(a); S. Rep. No. 92-414 at 77 (1972) ("[I]t is essential that discharge of pollutants be controlled at the source.").

34. Permits for the discharge of dredged and fill materials into waters of the United States are issued by the Army Corps under Section 404 of the Act, unless a state is authorized by EPA to operate this permit program for discharges within its borders. 33 U.S.C. § 1344(a), (h). Permits for the discharge of other pollutants are issued by EPA under Section 402 of the Act, unless EPA authorizes a state to operate this permit program for such discharges within its borders. 33 U.S.C. § 1342(a), (b).

35. Before the CWA was amended in 1972 to require that point sources have permits, water pollution controls targeted the pollution in receiving water bodies without specifically regulating the pollution sources. That made it difficult for the agencies and states to take action against polluters. Without the permit program agencies had to "work backward from an overpolluted body of water to determine which point sources are responsible and which should be abated."

Environmental Protection Agency v. State Water Resources Control Bd., 426 U.S. 200, 204 (1976).

36. The Act's permitting programs make enforcement simpler, only requiring proof that pollutants are discharged to a water of the United States from a point source in violation of a permit's terms (or without a permit).

37. The Act also establishes minimum pollution controls that are applicable nationwide, creating a uniform "national floor" of protective measures against water pollution. 33 U.S.C.. §§ 1344(h)(1), 1370. Under the CWA, states are free to rise above this nationwide floor by implementing their own more stringent controls. *See id.* § 1370(1).

38. Because many of the Nation's waters cross state boundaries, and it is difficult for downstream states to control pollution sources in upstream states, the Act's nationwide controls are crucial for protecting downstream states from pollution originating outside their borders. Without those nationwide controls, upstream states can impose less stringent standards on point sources in their states. Those less stringent controls would harm the environmental and proprietary interests of downstream states. In addition, downstream states would be at a competitive disadvantage if they must impose more stringent controls than upstream states to protect the downstream states' waters and safeguard public health and welfare.

The 1980s Regulations

39. The agencies have defined "the waters of the United States" through regulation.

40. In 1977, the Army Corps issued regulations defining "waters of the United States." 42 Fed. Reg. 37,144 (July 19, 1977). EPA promulgated a revised definition in 1980, 45 Fed. Reg. 85,336, 85,346 (Dec. 24, 1980), and the Army Corps promulgated the very same definition in 1982, 47 Fed. Reg. 31,794 (July 22, 1982).

41. The 1980s regulations defined the "waters of the United States" to cover (1) waters used or susceptible of use in interstate or foreign commerce (*i.e.*, for transportation by vessels), commonly referred to as navigable-in-fact or "traditionally navigable" waters, (2) interstate waters, (3) the territorial seas, and (4) impoundments of jurisdictional waters, as well as other waters having a nexus with interstate commerce.

42. The regulatory definition remained essentially unchanged until 2015, when the agencies promulgated the Clean Water Rule.

43. Stakeholders have long criticized the 1980s regulations, as applied by the agencies, for their lack of clarity and consistency. *See* 82 Fed. Reg. 34,899, 34,901; 80 Fed. Reg. at 37,054. The regulations resulted in many complex case-by-case determinations by the agencies throughout the country, and led to confusing and inconsistent interpretations by the agencies and the federal courts as to which waters are "waters of the United States," and therefore within the Act's protections.

44. The Supreme Court interpreted "waters of the United States" in *Rapanos v. United States*, 547 U.S. 715 (2006) (*Rapanos*), where a property owner challenged the Army Corps' determination that he improperly filled wetlands without a permit. Justice Scalia, writing for a plurality of the Court, defined waters covered by the statute to include relatively permanent, standing or continuously flowing bodies of water connected to traditional navigable waters (*i.e.*, navigable-in-fact waters), as well as wetlands with a continuous surface connection to traditional navigable waters. 547 U.S. at 739. Justice Kennedy's concurring opinion set forth the "significant nexus" standard: if a wetland or water significantly affects the integrity of other waters "more readily understood as 'navigable,'" it is protected by the Act. *Id.* at 780.

45. After *Rapanos*, the lower federal courts continued to grapple with how to apply the 1980s regulations.

THE CLEAN WATER RULE

46. To remedy the ambiguity of the 1980s regulations, the agencies promulgated the Clean Water Rule, which defined "waters of the United States" under the Act based on "the text of the statute, Supreme Court decisions, the best available peer-reviewed science, public input, and the agencies' technical expertise and experience." 80 Fed. Reg. at 37,055. The Clean Water Rule became effective on August 28, 2015. *Id.* at 37,054.

47. When the agencies promulgated the Clean Water Rule, they found that the 1980s regulations:

> did not provide the public or agency staff with the kind of information needed to ensure timely, consistent, and predictable jurisdictional determinations. Many waters are currently subject to case specific jurisdictional analysis to determine whether a "significant nexus" exists, and this time and resource intensive process can result in inconsistent interpretation of CWA jurisdiction and perpetuate ambiguity over where the CWA applies. As a result of the ambiguity that exists under current regulations and practice following these recent [court] decisions, almost all waters and wetlands across the country theoretically could be subject to a case-specific jurisdictional determination.

Id. at 37,056.

48. The agencies explained that:

> The purposes of the [Clean Water Rule] are to ensure protection of our nation's aquatic resources and make the process of identifying 'waters of the United States' less complicated and more efficient. The rule achieves these goals by increasing CWA program transparency, predictability, and consistency . . . with increased certainty and less litigation.

79 Fed. Reg. at 22,190.

49. The Clean Water Rule establishes clear categories of waters within the CWA's jurisdiction as well as categories that are excluded from the CWA's jurisdiction, thereby reducing the need for case-specific jurisdictional determinations. 80 Fed. Reg. at 37,056.

50. The Clean Water Rule employs the "significant nexus" standard, consistent with Justice Kennedy's concurrence in *Rapanos*.

51. The agencies performed rigorous scientific review in crafting the Clean Water Rule to define jurisdictional waters as those waters that have a "significant

nexus" with the integrity of downstream navigable-in-fact waters. *See id.* at 37,057. In particular, they relied on a comprehensive report prepared by EPA's Office of Research and Development, entitled "Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence" (Science Report),[1] which reviewed more than 1200 peer-reviewed publications. The agencies also relied on EPA's Science Advisory Board's independent review of the Science Report. *Id.*

52. In developing the Clean Water Rule, the agencies also prepared an economic analysis of their proposed action. *See id.* at 37,101.

53. In developing the Clean Water Rule, the agencies clarified and tightened the definition of waters of the United States to cover waters with significant effects on the integrity of downstream waters and to exclude others lacking such effects.

54. The Clean Water Rule, reflecting longstanding consensus views of the agencies and stakeholders, retained several categories of protected waters from the 1980s regulations: (1) waters used or susceptible of use in interstate or foreign commerce (*i.e.*, for transportation by vessels), commonly referred to as navigable-in-fact or "traditionally navigable" waters, (2) interstate waters, (3) the territorial seas, and (4) impoundments of jurisdictional waters.

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[1] U.S. EPA, *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence (Final Report)*, EPA/600/R-14/475F (Washington, D.C. 2015), *available at* https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=296414.

55. The agencies found that many waters not specifically listed in the 1980s regulations have a significant nexus to downstream waters, including headwater stream tributaries and certain waters in floodplains. In reliance on their scientific findings, the agencies expressly included such waters within the Clean Water Rule's protections.

56. The agencies explained that "wetlands and open waters in floodplains of streams and rivers and in riparian areas . . . have a strong influence on downstream waters," 79 Fed. Reg. at 22,196, and "[t]he body of literature documenting connectivity and downstream effects was most abundant for riparian/floodplain wetlands," Technical Support Document for the Clean Water Rule; Definition of Waters of the United States, May 27, 2015, Docket Id. No. EPA-HQ-OW-2011-0880, at 104.

57. In applying the significant nexus test, the Clean Water Rule also supplied precise definitions missing from the 1980s regulations for "tributaries" and "adjacent" waters protected by the Act, and definitions of waters not protected, thereby reducing the need for complex case-by-case administrative decisions and judicial review. The Clean Water Rule protected "adjacent waters," including those found within 100 feet of certain other covered waters or within specified portions of 100-year floodplains.

58. States, trade associations, environmental organizations, and others challenged the Clean Water Rule in several federal district courts and federal courts of appeals. Before becoming EPA Administrator, defendant E. Scott Pruitt, as

Oklahoma Attorney General, brought challenges to the Clean Water Rule, claiming that it exceeded the agencies' statutory and constitutional authority.

59. The petitions in circuit courts were consolidated in the Sixth Circuit, which issued a nationwide stay of the Clean Water Rule pending resolution of the merits. *Ohio v. United States Army Corps of Eng'rs (In re EPA & DOD Final Rule)*, 803 F.3d 804 (6th Cir. 2015). In a ruling *sub nom. Murray Energy Corp. v. United States Dep't of Def.*, 817 F.3d 261 (6th Cir. 2016), the Sixth Circuit subsequently determined that it had jurisdiction over the petitions rather than the district courts.

60. The district court actions challenging the Clean Water Rule were dismissed or stayed pending resolution of proceedings in the Sixth Circuit and Supreme Court.

61. On January 22, 2018, the Supreme Court held unanimously that the Sixth Circuit lacked jurisdiction over the petitions for review challenging the Clean Water Rule and remanded the case to that court to dismiss the petitions for lack of jurisdiction. *Nat'l Ass'n of Manufacturers v. Department of Defense*, No. 16-299, 2018 U.S. LEXIS 761, at *31-*32 (Jan. 22, 2018).

THE PROPOSED REPEAL RULE

62. In July 2017, the agencies published a proposed rule to rescind the definition of "waters of the United States" contained in the 2015 Clean Water Rule, and replace it with the pre-existing definition contained in the 1980s regulations. *See Proposed Rule, Definition of "Waters of the United States" – Recodification of Pre-Existing Rules*, 82 Fed. Reg. 34,899 (July 27, 2017) (the Proposed Repeal Rule).

The agencies characterized this proposal as the first step in a two-step process, with the second step to be a subsequent notice-and-comment rulemaking to re-evaluate the substantive definition of "waters of the United States." *Id.* at 34,901. The agencies called this proposal an "interim measure pending substantive rulemaking," and indicated that they were not seeking public comments concerning the pre-2015 definition of "waters of the United States, *id.* at 34,903 (agencies "are not soliciting comment on the specific content of those longstanding regulations") or "issues related to the 2015 [Clean Water] Rule," *id.* They also made clear that the Proposed Repeal Rule was not based on a substantive review of the definition of waters of the United States. *Id.*

63. The agencies stated that they were proposing to rescind the 2015 definition because, in the event that the Supreme Court ruled that the Sixth Circuit did not have original jurisdiction to review the Clean Water Rule, the Sixth Circuit's nationwide stay of the Clean Water Rule would be dissolved, leading to "inconsistencies, uncertainty, and confusion." *Id.* at 34,902. The agencies indicated that the Clean Water Rule would still be preliminarily enjoined in thirteen states pursuant to an order of the district court for North Dakota, but would apply in the rest of the nation. *Id.* at 34,902-03. They also expressed concern that other district court actions "would likely be reactivated." *Id.* at 34,903.

64. The agencies invited comments for the Proposed Repeal Rule through August 28, 2017. *Id.* at 34,899. They subsequently extended the comment period through September 27, 2017. *See "Definition of 'Waters of the United States'—*

Recodification of Pre-Existing Rules; Extension of Comment Period," 82 Fed. Reg. 39,712 (Aug. 22, 2017).

65. The agencies received over 680,000 comments on the Proposed Repeal Rule. They have not yet issued a final rule as part of the Proposed Repeal Rule rulemaking process.

THE SUSPENSION RULE

66. After the comment period closed on the Proposed Repeal Rule, and without further action on that proposal, the agencies published a different proposal to modify the 2015 Clean Water Rule—this time, by proposing to add an "applicability date" to the 2015 Clean Water Rule of "two years from the date of final action on this proposal." *Proposed Rule, Definition of "Waters of the United States" – Addition of an Applicability Date to 2015 Clean Water Rule*, 82 Fed. Reg. at 55,542 (Nov. 22, 2017) (the Proposed Suspension Rule).

67. An earlier version of the Proposed Suspension Rule announced by the agencies sought to delay the effective date of the Clean Water Rule—which was August 28, 2015—to a date two years from finalizing the proposed rule. The published version of the Proposed Suspension Rule instead characterized the delay as an "addition of an applicability date" to the Clean Water Rule.

68. The agencies did not withdraw the Proposed Repeal Rule upon publication of the Proposed Suspension Rule; rather, they stated that the Proposed Repeal Rule "remains under active consideration." *Id.* at 55,543.

69. As with the Proposed Repeal Rule, the agencies characterized the Proposed Suspension Rule as an interim measure prior to their anticipated "Step Two" rulemaking for developing a new substantive definition of the "waters of the United States." *Id.* at 55,542.

70. Like the Proposed Repeal Rule, the Proposed Suspension Rule also stated that the 1980s regulations would replace the Clean Water Rule during the suspension of the Clean Water Rule. *Id.* at 55,542-43.

71. The rationale for the Proposed Suspension Rule was similar to the rationale for the Proposed Repeal Rule. The agencies expressed concern that, if the Supreme Court held that the Sixth Circuit lacks original jurisdiction over challenges to the Clean Water Rule, the temporary nationwide stay of that rule "would expire, leading to possible inconsistencies, uncertainty, and confusion as to the regulatory regime that could be in effect pending substantive rulemaking." *Id.* at 55,543. They expressed concern about the district courts having control over whether the Clean Water Rule is stayed: "control over which regulatory definition of 'waters of the United States' is in effect while the agencies engage in deliberations on the ultimate regulation could remain outside of the agencies." *Id.* at 55,544. They also justified adding an applicability date on the ground that the Clean Water Rule did not have one. *Id.* at 55,543.

72. As with the Proposed Repeal Rule, the Proposed Suspension Rule did not include a substantive analysis of the objectives of the Clean Water Act, the law and facts justifying the Clean Water Rule, the merits of the 1980s regulations, or

the potential environmental and public health effects and foregone benefits of repealing the Clean Water Rule for two years.

73. The Proposed Suspension Rule also ignored or countermanded key factual and scientific findings reached by the agencies when they promulgated the Clean Water Rule without any explanation for doing so.

74. Also like the Proposed Repeal Rule, the Proposed Suspension Rule made clear that the agencies were not seeking substantive comment on either the Clean Water Rule or the 1980s regulations that would replace it. Instead, the agencies stated that they were deferring substantive comments until their "Step Two" rulemaking. *Id.* at 55,544-45.

75. The agencies provided only a twenty-one day comment period (which included the Thanksgiving holiday) for the Proposed Suspension Rule, a much shorter period than the sixty-day comment period provided for the Proposed Repeal Rule.

76. The agencies justified that brief comment period on the ground that the Suspension Rule is a "narrowly targeted and focused interim rule" and "the request for comment is on such a narrow topic." *Id.* at 55,544.

77. During the short 21-day comment period, the agencies received 4,600 comments as compared to 680,000 comments on the Proposed Repeal Rule.

78. On December 13, 2017, many of the States filed comments with the agencies on the Proposed Suspension Rule, objecting to the proposal and requesting that the agencies withdraw it.

79. On February 6, 2018, the agencies published the Suspension Rule in essentially the same form as it was proposed. 83 Fed. Reg. 5200. The Suspension Rule adds an applicability date of February 6, 2020 to the Clean Water Rule. *Id.* at 5208.

80. In issuing the final Suspension Rule, the agencies relied principally on the rationale articulated in the Proposed Suspension Rule. They indicated that the lifting of the Sixth Circuit's nationwide stay of the Clean Water Rule as a result of the Supreme Court's January 22 ruling is "likely to lead to uncertainty and confusion as to the regulatory regime applicable, and to inconsistencies between the regulatory regimes applicable in different States pending further rulemaking by the agencies." *Id.* at 5202.

81. The final Suspension Rule took effect upon publication in the Federal Register on February 6, 2018. The agencies assert that the impending lifting of the Sixth Circuit stay constitutes "good cause" to dispense with the requirement under 5 U.S.C § 553(d) that a final rule may take effect no earlier than 30 days after its publication. *Id.* at 5203.

82. The Suspension Rule results in a wholesale substantive replacement of the Clean Water Rule, rendering the Clean Water Rule ineffective for two years.

THE SUSPENSION RULE HARMS THE STATES

83. The Suspension Rule irreparably harms the States' waters and the States' environmental, economic, and proprietary interests.

84. As the agencies themselves recognized when they adopted the Clean Water Rule, the 1980s regulations employed a limited, unclear, and difficult-to-administer definition of protected waters. As a result, the 1980s regulations do not provide the protection to the States' water quality that is provided by the Clean Water Rule.

85. The States are situated along the shores of the Atlantic and Pacific Oceans, the Chesapeake Bay and its tributaries, the Great Lakes, and Lake Champlain, and are downstream from and/or otherwise hydrologically connected with many of the Nation's waters. The States have authority to control water pollution generated by sources within their borders but are also impacted by water pollution from sources outside their borders over which they lack jurisdiction. The States rely on the Act and its uniform nationwide floor of pollution controls as the primary mechanisms for protecting them from the effects of out-of-state pollution. The Suspension Rule injures the States' waters by replacing the Clean Water Rule, which protected them from pollution occurring in upstream states, with the inadequate and ambiguous 1980s regulations.

86. The States rely on the Army Corps to operate the Act's Section 404 permitting program that regulates dredging and filling of waters within their borders. The less protective definition of waters of the United States under the 1980s regulations means there will be more dredging and filling of waters within the States without the protections of the CWA's Section 404 permitting program, to the detriment of the physical, chemical and biological integrity of the States' waters.

87. The Suspension Rule puts the States at an unfair economic disadvantage in competition with other states. To mitigate out-of-state pollution, under the 1980s regulations the States face having to impose disproportionately strict controls on pollution generated within their borders, thereby raising the costs to States and the costs of doing business in them.

88. The Suspension Rule impairs the States' proprietary interests. The States own, operate, finance, or manage property within their borders, including lands, roads, bridges, universities, office buildings, drinking water systems, sewage and stormwater treatment or conveyance systems, and other infrastructure and improvements. The Suspension Rule results in inadequate and ineffective protection of waters under the Act, and is likely to cause damage to State properties as well as increase costs of operating and managing them.

89. The requested relief, if granted, will redress the injuries to the States' interests caused by the Suspension Rule.

FIRST CLAIM FOR RELIEF

(Administrative Procedure Act – Not in Accordance With Law and Beyond Statutory Authority)

90. The States incorporate by reference in this claim the allegations in all preceding paragraphs of the complaint.

91. Under the APA, courts must "compel agency action unlawfully withheld or unreasonably delayed," and "hold unlawful and set aside" agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance

with law," or that is "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right." 5 U.S.C. § 706.

92. The Clean Water Act does not give the agencies authority to suspend the Clean Water Rule.

93. The APA, 5 U.S.C. § 705, did not give the agencies authority to suspend the Clean Water Rule after its effective date passed.

94. The agencies' promulgation of the Suspension Rule is in excess of statutory jurisdiction, authority, or limitations, or is short of statutory right.

95. The Suspension Rule is unlawful and must be set aside. 5 U.S.C. § 706(2)(C).

SECOND CLAIM FOR RELIEF

(Administrative Procedure Act –
Without Observance of Procedure
Required by Law)

96. The States incorporate by reference in this claim the allegations in all preceding paragraphs of the complaint.

97. Under the APA, a federal agency must publish notice of a proposed rulemaking in the Federal Register and "shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments" 5 U.S.C. §§ 553(b), (c). A federal agency must provide this opportunity for public comment when it seeks to formulate, amend, or repeal a rule. *See* 5 U.S.C. § 551(5).

98. The Suspension Rule effectively repeals the 2015 Clean Water Rule by reinstating the pre-2015 regulatory definitions for a two-year period.

99. The opportunity for public comment under 5 U.S.C. § 553(c) must be meaningful, which means that the agency must allow comment on the relevant issues and provide adequate time for comment. A short comment period for an important and complex rule is insufficient.

100. When an agency suspends a rule, the law and facts justifying the rule and the effects of doing so are relevant issues.

101. When an agency proposes to replace a rule with prior regulations, the effectiveness and conformance to law of the prior regulations is a relevant issue.

102. The agencies failed to provide a meaningful opportunity for public comment on the Suspension Rule by instructing the public not to comment substantively on any matters regarding the definition of waters of the United States, including issues related to the 1980s regulations and the Clean Water Rule.

103. The definition of "waters of the United States" is a complex matter of great importance to the public.

104. The agencies failed to provide a meaningful opportunity for public comment on the Suspension Rule by allowing only a short, ill-timed comment period.

105. A final rule must be published in the Federal Register not less than thirty days before its effective date except pursuant to certain exceptions, including good cause. 5 U.S.C § 553(d).

106. The agencies did not have good cause to make the Suspension Rule effective upon publication in the Federal Register.

107. The Suspension Rule is unlawful and must be set aside because it is without observance of procedure required by law and not in accordance with law. 5 U.S.C. §§ 553(b), (c); 706(2)(A), (2)(D).

THIRD CLAIM FOR RELIEF

(Administrative Procedure Act – Arbitrary and Capricious Action)

108. The States incorporate by reference in this claim the allegations in all preceding paragraphs of the complaint.

109. Promulgation of a regulation is arbitrary and capricious if the agency fails to consider relevant issues or fails to articulate a rational explanation for the rule.

110. Where an agency proposes to suspend a rule and replace it with prior regulations, the agency must consider the objectives of the statute under which the rule was promulgated, the law and facts justifying the proposal, and the effectiveness of the prior regulations.

111. When an agency proposes to suspend a rule, the agency may not ignore or countermand its earlier factual and scientific findings without a reasoned explanation for doing so.

112. When the agencies promulgated the Suspension Rule, they did not consider whether or how the Suspension Rule would meet the Act's objective of restoring and maintaining the integrity of the Nation's waters.

113. When the agencies promulgated the Suspension Rule, they did not consider the law and facts justifying the Clean Water Rule or the 1980s regulations that would replace it.

114. When the agencies promulgated the Suspension Rule, they ignored or countermanded key factual and scientific findings reached by them when they promulgated the Clean Water Rule without a reasoned explanation for doing so.

115. When the agencies promulgated the Suspension Rule, they did not reasonably consider or discuss alternatives.

116. When the agencies promulgated the Suspension Rule, they failed to articulate a rational explanation for it.

117. Because, among other things, the agencies failed to consider all of the relevant issues and offer a rational explanation for the Suspension Rule, the Suspension Rule is unlawful and must be set aside because it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. 5 U.S.C. § 706(2)(A).

PRAYER FOR RELIEF

WHEREFORE, the States respectfully request that the Court issue a judgment and order:

a) holding the Suspension Rule unlawful, setting it aside, and vacating it;

b) declaring that the Suspension Rule is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; in excess of statutory

jurisdiction, authority, or limitations, or short of statutory right; and without observance of procedure required by law;

c) awarding the States their reasonable fees, costs, expenses, and disbursements, including attorneys' fees, associated with this litigation under the Equal Access to Justice Act, 28 U.S.C. §2412(d); and

d) awarding the States such additional and further relief as the Court may deem just, proper, and necessary.

DATED: February 6, 2018

Respectfully submitted,

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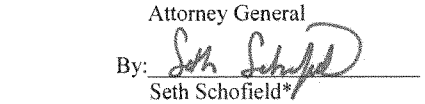
By: 
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Senator CARPER. And again to say to our friends and witnesses, thank you so much for joining us today.

Senator BARRASSO. Thank you all.

Other members may submit questions for the record, and we ask that you respond quickly. The record of this hearing will stay open for the next 2 weeks. I want to thank all the witnesses for your time, your testimony on this very important issue.

The hearing is adjourned.

[Whereupon, at 11:50 a.m. the Committee was adjourned.]

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