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LEGISLATIVE HEARING TO CONSIDER THE FOLLOWING ITEMS: S. 571, GREAT LAKES WATER PROTECTION ACT; S. 1153, INVASIVE FISH AND WILDLIFE PREVENTION ACT; S. 1175, INFRASTRUCTURE FACILITATION AND HABITAT CONSERVATION ACT OF 2013; S. 1202, SAFE ACT; S. 1232, GREAT LAKES ECOLOGICAL AND ECONOMIC PROTECTION ACT OF 2013; H.R. 1300, TO AMEND THE FISH AND WILDLIFE ACT OF 1956 TO REAUTHORIZE THE VOLUNTEER PROGRAMS AND COMMUNITY PARTNERSHIPS FOR THE BENEFIT OF NATIONAL WILDLIFE REFUGES, AND FOR OTHER PURPOSES; S. 1381, BIG CATS AND PUBLIC SAFETY PROTECTION ACT; S. 1650, A BILL TO AMEND THE MIGRATORY BIRD TREATY ACT TO EXEMPT CERTAIN ALASKA NATIVE ARTICLES FROM PROHIBITIONS AGAINST SALE OF ITEMS CONTAINING NONEDIBLE MIGRATORY BIRD PARTS, AND FOR OTHER PURPOSES; S. 2225, SMART WATER RESOURCE MANAGEMENT CONSERVATION AND EFFICIENCY ACT OF 2014; S. 2530, A BILL TO AMEND TITLE 18, UNITED STATES CODE, TO PROHIBIT THE IMPORTATION OR EXPORTATION OF MUSSELS OF CERTAIN GENUS, AND FOR OTHER PURPOSES; AND S. 2560, UNITED STATES FISH AND WILDLIFE SERVICE RESOURCE PROTECTION ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND WILDLIFE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

JULY 16, 2014

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SECOND SESSION

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WEDNESDAY, JULY 16, 2014

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

The subcommittee met, pursuant to notice, at 3 p.m. in room 406, Dirksen Senate Building, Hon. Benjamin L. Cardin (chairman of the subcommittee) presiding.

Present: Senators Cardin, Boozman, Gillibrand, and Whitehouse.

OPENING STATEMENT OF HON. BENJAMIN L. CARDIN, U.S. SENATOR FROM THE STATE OF MARYLAND

Senator CARDIN. Good afternoon, and welcome to the Subcommittee on Water and Wildlife of the Environment and Public Works Committee.

I thank Senator Boozman for his help in putting together today's hearing and thank the Chair and Ranking Member for their cooperation.

We have 11 bills that we are going to hear today that are under the jurisdiction of our subcommittee. We will have an opportunity for the sponsors to explain their bills and make their statements. We then have representatives of the Administration who are here

and also outside interest groups who are interested in some of these bills.

We welcome all of your comments. We would ask, without objection, that your written statements will all be made a part of the record.

Let me first state this is the way we should proceed on legislation pending before the Congress. We should have an opportunity for a full hearing and hope the committee can take advantage of the information that is made available. I know in a couple cases we have received written comments, and all that will be extremely helpful.

I want to use my time to explain one of the 11 bills before the committee, S. 2560, the Service Resource Protection Act that I have sponsored at the suggestion of the agency.

Currently, the U.S. Fish and Wildlife Service does not have explicit statutory authority to seek compensation from responsible parties that injure or destroy national wildlife refuge system or other Service resources. This is in contrast to the authority that the National Park Service has and exercises under the Park System Resource Protection Act and a similar authority to NOAA that it uses under the National Marine Sanctuaries Act.

In other words, if someone causes harm, we can hold them responsible up to the amount of damage they have caused and that can be used to compensate and fix the damage that has been caused without additional burdens to the taxpayers of this country or the budgets of the different agencies.

The Service Resource Protection Act gives similar authority to the U.S. Fish and Wildlife Service in regards to damages caused to our national wildlife refuge system. I know the U.S. Fish and Wildlife Service is going to be testifying so we will have an opportunity to get their views in that regard.

Let me also point out that we have received, I believe, statements from two of the sponsors who will not be testifying personally, Senator Levin in regard to the Great Lakes Ecological and Economic Protection Act and Senator Murkowski in regard to a bill that amends the Migratory Bird Treaty Act.

[The prepared statement of Senator Murkowski was not received at time of print. The prepared statement of Senator Levin follows:]

STATEMENT OF HON. CARL LEVIN,
U.S. SENATOR FROM THE STATE OF MICHIGAN

Thank you, Chairman Cardin and Ranking Member Boozman, for holding this hearing on the Great Lakes Ecological and Economic Protection Act of 2013 (S. 1232), which would help restore and protect the Great Lakes, the largest source of surface freshwater on the planet. Senator Kirk and I, as co-chairs of the Senate Great Lakes Task Force, introduced this bill to target the most significant problems facing the Great Lakes and ensure that we implement these projects cost effectively. I want to thank the other eight Senators who cosponsored the bill, in particular Senator Gillibrand, who is a member of this subcommittee. I am also pleased that Congressman Joyce is the sponsor of a companion measure in the House of Representatives, which has 23 bipartisan cosponsors.

The Great Lakes are one of the world's great treasures, providing drinking water to more than 40 million people; supporting 1.5 million U.S. jobs and $62 billion in wages; transporting critical supplies for manufacturing, electricity generation and food for the world; and supporting the region's $4.6 trillion economy.

The Great Lakes brought industrial and natural resource development to the region which resulted in tremendous economic development and population growth. This development, however, also resulted in toxic substances polluting the waters

and sediments, untreated wastewater threatening public health, and polluted runoff choking habitats and killing aquatic life.

The Great Lakes Ecological and Economic Protection Act (S. 1232), also known as GLEEPA, would tackle problems from past pollution and protect the lakes from current and future threats. GLEEPA would formally authorize the Great Lakes Restoration Initiative (GLRI), an inter-agency program that President Obama launched in 2009 to implement a regional collaboration strategy developed in 2005 by about 1,500 stakeholder participants. This collaborative process was formed through an Executive Order by President Bush. The history of the restoration strategy clearly shows the work of restoring and protecting the Great Lakes is founded on a plan that reflects a broad range of viewpoints and has strong bipartisan support. It is critical that this collaborative strategy guide restoration of the Great Lakes because the region encompasses not only eight States, but also two countries. This process will also help ensure that progress can be made over the long term, as clean up of decades of pollution will take time.

GLEEPA would focus Federal resources on the areas of highest priority identified in the collaborative plan, which would be further refined as new science and information become available. While the GLRI is broadly authorized in the Clean Water Act, passing this legislation would help ensure the program has clear congressional direction and goals, is results driven and transparent, and implements the most cost effective solutions. The bill would also formally establish the Great Lakes Advisory Board to provide advice and recommendations concerning restoration and protection. The board would reflect many different viewpoints, including from local, State and tribal governments; environmental, agricultural, and business organizations; hunters and anglers; and academia. Finally, the bill would formally establish a 10-member interagency task force to coordinate restoration efforts, ensure projects are not duplicated and that they use existing successful programs. GLEEPA also would accelerate progress toward the goals of the Great Lakes Water Quality Agreement, a formal agreement between the U.S. and Canadian governments establishing shared goals for protecting and improving water quality of the Great Lakes.

The GLRI has achieved real progress: clean up of more than 1.3 million cubic yards of contaminated sediment; control of the destructive sea lamprey and restoration of sturgeon, trout and other important fish species; construction of barriers to prevent an invasion by destructive Asian carp and planning for additional measures to keep these fish out of the Lakes; and prevention of precious Great Lakes water diversions through the Great Lakes Compact. GLEEPA would help ensure that progress continues to be made using a solid framework for achieving measurable and outcome-based results.

The Great Lakes are precious and irreplaceable. As temporary stewards of this invaluable resource, we must do all we can to restore and protect the Great Lakes for the millions of people who depend on them today and the millions more who will in the future. Thank you for holding this hearing, and I hope you will soon advance this bill to the full Senate.

Senator CARDIN. With that, let me recognize Senator Boozman.

Senator BOOZMAN. Thank you, Mr. Chairman. Thank you for holding this very, very important hearing as we discuss these various bills. I agree with you totally that this is the right way to do it, to have the witnesses so that we can discuss and see how we can improve the ideas being brought forward.

I ask unanimous consent that my full statement be placed in the record.

Senator CARDIN. Without objection.

Senator BOOZMAN. I am so excited about this first panel that in the interest of time, I will do that. I yield back.

[The prepared statement of Senator Boozman was not received at time of print.]

Senator CARDIN. We are very pleased to have three of our colleagues here today, all who have brought forward legislation we are hearing today. We will start with Senator Blumenthal, the principal sponsor of S. 1381, the Big Cats and Public Safety Protection Act.

Senator Blumenthal.

OPENING STATEMENT OF HON. RICHARD BLUMENTHAL, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Senator BLUMENTHAL. Thank you very much, Senator Cardin.

Mr. Chairman and members of the subcommittee here today, I want to thank you for the opportunity to address the subcommittee and speak about the Big Cats and Public Safety Protection Act and thank the co-sponsors who have introduced this bill with me.

It is really a common sense solution to the serious dangers associated with private ownership of wild animals such as lions, tigers, leopards, cheetahs and more.

Incredibly, even in the 21st century, even in the United States of America, this problem is real and serious. There are at least 10,000 big cats currently in private ownership around the country. In fact, there are more captive tigers in the United States than there are in the wild. Think about it: more captive tigers in the United States than in the wild.

Some people buy them as wild animals, as cubs, thinking it would be fun to own an exotic pet like a tiger or a lion or a leopard but as soon as they begin to mature, private owners quickly find themselves in over their heads, literally and figuratively, and frequently subject these animals to utterly inhumane living conditions.

Other people purchase big cats to use in traveling roadside zoos which charge fees to allow unwitting members of the public to take pictures with the animals, they are literally side by side with the animals, dangerously so. The exhibitors of these roadside zoos often use abusive training techniques in an attempt to prevent the animals from attacking any of the customers.

No matter what the setting, private ownership of big cats poses gravely serious safety threats for anyone who happens to live in the surrounding community.

Over the last two decades, captive big cats have killed 24 people in the United States, 24 people killed by these big cats including 5 children. In addition, these cats have mauled and injured over 200 people.

In short, private ownership and breeding of big cats has been a very, very serious problem for law enforcement officers and first responders. Brave men and women who go to the scene of a big cat incident have to put their lives on the line. They are not always trained to deal with them and they often lack the equipment necessary to properly deal with them.

In fact, I have talked to members of the firefighting community as well as the law enforcement community who frequently go to homes that may be on fire or dealing with the threat of fire and find these animals there without even knowing what they are going to encounter.

Conservation experts overwhelmingly agree that breeding and possessing an animal outside of its natural environment is not an example of conservation. These wild animals are just what are called, wild. They are wild and people should respect the expertise that is required to deal with them and they should not be allowed to own them.

My legislation would prohibit private possession and breeding of big cats, but it is all too common sense which requires this bill and

also requires reasonable exceptions for properly accredited zoos, State colleges and universities and traveling circuses that do not allow public handling of these wild animals.

The bill would also allow those who currently own big cats to keep them as long as they register the animals with the United States Department of Agriculture. In other words, there is a kind of grandfather clause.

I urge the members of this subcommittee to support this legislation so that we can put an end to inhumane, dangerous and wasteful private ownership of big cats.

Thank you, Mr. Chairman.

Senator CARDIN. Thank you very much,

I am going to recognize Senator Gillibrand. I apologize for overlooking you for your opening statement.

OPENING STATEMENT OF HON. KIRSTEN GILLIBRAND, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator GILLIBRAND. I was grateful to hear Senator Blumenthal's very interesting legislation that I will support.

Chairman Cardin, Ranking Member Boozman, thank you for holding this hearing and for including several pieces of legislation that are vital not just to New York but all across our country.

I am particularly pleased that our subcommittee was able to include S. 1153, the Invasive Fish and Wildlife Prevention Act, on the list of legislation to be discussed today. I have worked closely on this legislation with Congresswoman Louise Slaughter in response to the real and severe threats that my State of New York faces with regard to invasive species as well as Senator Nelson who knows all too well the harm that invasives can cause through Florida's recent experiences battling the Burmese python in the Everglades.

Whether it is the Asian clam in Lake George, zebra mussels in the Finger Lakes or the imminent danger of Asian carp in the Great Lakes, New York's water bodies are affected by aquatic invasive species that threaten our regional economies, disrupt the balance of our ecosystems and cost our local communities scarce resources to control their spread.

Across the United States, invasive species cost more than $120 billion each year and result in more than $13 billion in damage to agriculture annually. Those numbers will only continue to grow if additional species that could cause harm are allowed to be imported into the United States.

Currently, 236 species of animals are listed as injurious under the Lacey Act, including zebra mussels. However, despite the fact that since 2010, the Asian clam has caused harm to Lake George, that species is not listed. It makes no sense, and we have to improve the Federal Government's ability to quickly respond to these threats.

Once a species is listed as injurious, it cannot be imported into the United States. However, the current process can take 4 years to complete, giving an invasive species more time to establish itself and damage our ecosystems.

To fix this problem, I have introduced the Invasive Fish and Wildlife Prevention Act to strengthen the U.S. Fish and Wildlife

Service's ability to proactively address the threat of invasive species by requiring an analysis to determine whether any non-native animal species have the potential to become invasive and harmful to the U.S. before they can be imported or enter interstate commerce.

Specifically, the bill would establish an injurious species listing process based on the clear risk assessment and risk determination process. It would also allow the Fish and Wildlife Service to take emergency actions to ban non-native wildlife like the Asian clam and others that pose an imminent threat to our waterways and other ecosystems.

I believe this is a common sense approach to prevent the further spread of invasive species and look forward to continuing to work with my colleagues in the Senate to advance the legislation.

I would also like to briefly speak on another piece of legislation I have co-sponsored, the Great Lakes Ecological and Economic Protection Action of 2014. As the only Senator on the EPW who represents a Great Lakes State, I know firsthand how important the Great Lakes restoration initiative has been to my State and the entire region.

The Great Lakes face a number of challenges from Asian carp to blue-green algae. Ensuring that we have a long term Federal commitment to restoring and protecting the environmental quality of the Great Lakes is critical to regional economies that rely on the lakes for fishing, tourism and other economic activity.

Thank you, Mr. Chairman. I look forward to the testimony of our other witnesses today.

Senator CARDIN. Thank you.

Senator Kirk. I believe you are here in regard to S. 571.

OPENING STATEMENT OF HON. MARK KIRK, U.S. SENATOR FROM THE STATE OF ILLINOIS

Senator KIRK. S. 571, that would propose a total ban on sewage dumping in the Great Lakes is already backed by Stabenow, Levin, Durbin and Kirk.

This chart shows the dirty dozen dumpers in the Great Lakes area. Let me point to some of the details. The worse dumper in the Great Lakes area is the city of Detroit which far eclipses most of the other cities.

Just to get further support from my colleagues for Buffalo, this legislation also has a fining mechanism that would refund to the publicly owned sewage treatment systems so that they can clean up their act, a virtual cycle of stopping.

The reason why Senators from various States should care about this is the Great Lakes are the source of 95 percent of the fresh water in the United States, and 30 million Americans will pull their drinking water from the Great Lakes, including a few Canucks in Canada. That is why I think we should treat this ecosystem with the reverence that it should enjoy and make sure we ban sewage dumping in the Great Lakes.

I would say it is really good bipartisan legislation which we have put together with several members of the current Senate onboard. I introduced this in the House when I was a House member. We

had the current Mayor of Chicago, Rahm Emanuel, when he was a Congressman, onboard.

With that, I would conclude my remarks and urge your support to rapidly pass this legislation out of the subcommittee to make sure we protect this central ecosystem of the United States.

Thank you, Mr. Chairman.

[The prepared statement of Senator Kirk follows:]

STATEMENT OF HON. MARK KIRK,
U.S. SENATOR FROM THE STATE OF ILLINOIS

Chairman Cardin, Ranking Member Boozman, and members of the subcommittee, thank you for allowing me to testify this afternoon on critical legislation that would improve water quality and protect the Great Lakes. As the largest source of surface fresh water in the world, the Great Lakes provide food, recreation, and drinking water for more than 30 million Americans. Yet year after year, our most precious natural resource continues to be harmed by billions of gallons of sewage that are discharged into the lakes, degrading water quality, threatening public health and safety, and causing beach closures across the Great Lakes.

Home to more than 200 globally unique species of plants and animals, the Great Lakes are an invaluable ecological treasure that account for 84 percent of the surface fresh water in North America. With more than 10,000 miles of coastline, the Great Lakes offer unmatched recreational and tourism opportunities, attracting businesses and families looking to relocate and drawing millions of tourists to their shores every year. The Great Lakes support an estimated 1.5 million American jobs, generate $62 billion in annual wages and transport approximately 145 million tons of commodities across the system's channels.

Yet despite their great size and numerous benefits, the lakes are under siege. More than 24 billion gallons of untreated waste and stormwater are diverted into the Great Lakes each year, contaminating the water supply with harmful toxins and pathogens, like E. coli. While cities across the Great Lakes have taken strides to reduce the amount of sewage discharged into the lakes and their tributaries, not enough is being done to put an end to this harmful practice. For example, in 2011, Detroit, Michigan, dumped 6.9 billion gallons of untreated and partially treated sewage into the lakes, and Fort Wayne, Indiana, dumped another 7.5 billion gallons of combined sewage into the tributaries of Lake Erie. Closer to my home in Illinois, 2.3 billion gallons were discharged into Lake Michigan from the Chicagoland area.

Sewage pollution is devastating to the region's tourism sector. It contributes to hundreds of beach closures and advisories across the Great Lakes annually and negatively impacts the cash strapped budgets of our local communities. According to the Illinois Department of Public Health, the number of beach advisories and closings on the Lake Michigan shoreline in Illinois alone has remained between 300–600 a year over the last 5 years. In addition to the negative impacts on the environment and public health, a University of Chicago study showed swim bans at Chicago's beaches due to E. coli levels cost the local economy $2.4 million in lost revenue every year. This is unacceptable.

The path forward is clear. To protect the source of drinking water for millions of Americans and the economic vitality of the region, we must work together to put an end to the billions of gallons of municipal sewage that are discharged into our lakes. For these reasons, I urge this committee to consider S. 571, The Great Lakes Water Protection Act, bipartisan legislation which I introduced with Senator Richard Durbin (D–IL). This legislation would set a date certain to end sewage dumping in the Great Lakes and would increase the fines for dumping to $100,000 per violation, per day, which are currently capped at $37,500. S. 571 gives municipalities 20 years to make the necessary upgrades to their sewer systems and creates a level playing field for all communities throughout the Great Lakes region. The fines collected would be funneled into a new Great Lakes clean up fund within the Clean Water State Revolving Fund to generate financial resources for the Great Lakes States to improve wastewater treatment options, habitat protection and wastewater treatment systems.

This bill also enhances transparency and public awareness requirements surrounding overflow events, requiring rapid public notification about when an overflow event occurs, the total volume that was released, and where it took place. This gives individuals, businesses, and local municipal planners the tools they need to protect public health and ensure that beach closures and advisories reflect the most accurate and up-to-date information.

I am committed to helping improve water quality, wastewater infrastructure, and ensuring our existing Federal policies effectively prevent the negative impacts of sewage pollution on the Great Lakes ecosystem. I appreciate the committee's attention to this issue, and I hope my colleagues will support me in ensuring this important resource becomes free from the threat of sewage pollution and is preserved for future generations.

Senator CARDIN. Thank you very much, Senator Kirk.

Senator Heller on S. 2530.

OPENING STATEMENT OF HON. DEAN HELLER, U.S. SENATOR FROM THE STATE OF NEVADA

Senator HELLER. Thank you, Chairman Cardin, Ranking Member Boozman and the rest of the committee. Thank you very much for having this hearing today and allowing me to testify on this particular bill, the Protecting Lakes Against Quaggas Act. I was looking for a sexier name for this but I couldn't come up with one so we will stick with the Protecting Lakes Against Quaggas Act.

I appreciate the opportunity to discuss Nevada's quagga mussel efforts and my bill which can be an important part of a nationwide solution.

Quagga mussels are freshwater mollusks with razor sharp shells. Each mussel is usually no bigger than a man's thumbnail, but they wreak havoc on water bodies and infiltrate by multiplying at an alarming rate clogging water pipelines, powerplant cooling systems, marine equipment, damaging boats, water infrastructure and native wildlife.

They were first introduced to the Great Lakes in the mid-1980s and have since spread through a boat to Lake Mead in southern Nevada, a heavily recreated reservoir on the Nevada-Arizona border that also provides over 90 percent of the southern Nevada water supply.

Until January 2007, when they first turned up at Lake Mead, quaggas had never been found west of the Mississippi River. Since, they have been detected at Lahontan Reservoir, Rye Patch Reservoir, Lake Tahoe and many other western lakes and reservoirs.

The only way for these mussels to spread from lake to lake is by hitchhiking on recreational boats. Preventing their spread sounds easy. All it takes are boat inspections to make sure they are not attached to boat holds or hidden in the bilge water.

That work is difficult and expensive. Quagga and zebra mussels have cost more in prevention and control than any other aquatic species to invade the United States, costing an estimated $5 billion in prevention and control efforts since 1987. The Bureau of Reclamation alone spends $1 million annually on quagga mussel control just at Hoover Dam.

A lot of great work is currently being done on the ground to prevent the spread of quagga but the problem is not going away. Just last week, a Lake Tahoe watercraft inspector inspected a boat with quagga mussels and had an unidentified snail species hidden in the anchor locker.

The boat, coming from Lake Mead, was inspected at the Spooner Summit Inspection Station on Highway 50 in Nevada, fully decontaminated and ultimately cleared to launch on Lake Tahoe.

Since the start of the summer boating season May 2014, inspectors have intercepted 24 boats containing invasive species bound

for the waters of Lake Tahoe. Eight of these boats contained invasive mussels, and another four boats were carrying several different types of snail species.

Over the 4th of July holiday, more than 725 boats were screened for invasive species at four inspection stations surrounding the lake, a 17 percent increase from 2013.

The Protecting Lakes Against Quaggas Act is a straightforward, common sense proposal that will assist ongoing efforts to stop the spread of these destructive invasive species. It adds the quagga mussel to the National List of Invasive Species covered under the Lacey Act. Currently the zebra mussel is listed, but the quagga is not.

A listing will allow for increased inspection of boats crossing State lines and entering Federal lands to further prevent quagga hitchhiking.

My bill garners support from a diverse range of stakeholders including, but not limited to, the Western Governors Association, the Colorado River Energy Distributors Association, Tahoe Regional Planning Agency, National Parks Conservation Association and the National Wildlife Federation.

Additionally, friend and fellow Nevadan, Dr. Joe Heck introduced similar legislation last year in the House that has garnered 22 Republican and Democrat co-sponsors across the political spectrum, many from the affected States.

Before I conclude, I would like to thank the Nevada Department of Wildlife Director, Tony Wasley, for being here today. Tony is a qualified leader with a distinguished 17-year NDW career.

He was appointed by Governor Brian Sandoval last April. Since, he has done a tremendous job leading our State's efforts to eliminate aquatic invasive species as well as managing Nevada's statewide game and conservation projects for species such as sage grouse, mule deer, elk and bighorn sheep.

Nevada is fortunate to have Tony's leadership at NDW, and I am greatly appreciative of his coming to DC to testify in support of this bill. He and I know firsthand that providing our local authorities more tools to prevent aquatic travel will help stop the spread of these pests and potentially save billions of dollars in future maintenance costs.

Thank you again for the opportunity to testify before the subcommittee today on this important Nevada priority.

Thank you, Mr. Chairman.

Senator CARDIN. Thank you. I thank all of our colleagues for being here today.

Senator KIRK. Thank you, Mr. Chairman. Sorry I didn't bring any charts.

Senator CARDIN. You did just fine.

You all are excused to carry on your business.

Let me recognize Senator Whitehouse.

Senator WHITEHOUSE. With all those wild cats, it would have been quite a good chart.

Senator KIRK. I thought about it.

Senator CARDIN. Senator Whitehouse will discuss S. 1202.

OPENING STATEMENT OF HON. SHELDON WHITEHOUSE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator WHITEHOUSE. I would be delighted.

The acronym is the SAFE Act, which stands for Safeguarding America's Future and the Environment. This was a piece of legislation developed in an east-west-coastal-mountain coalition with Senator Max Baucus when he was here.

As we prepared it, we asked the Government Accountability Office for a report on the adaptation efforts by the Federal Government within our natural resource agencies. The report was pretty stark and explained the vulnerability of some of these vital natural resources from rising temperatures from worsening drought, wildfire, rising sea levels, shrinking snow coverage and flow.

GAO previously noted that as the manager of vast lands and natural resources, the Federal Government has real fiscal risk from climate change through these properties and manages nearly 30 percent of land in the United States, in addition to the marine resources that run 200 miles from our shore.

The GAO report found that the status quo management and planning will not be good enough: "Natural resource management has historically been based on the idea of maintaining current environmental conditions or restoring species and habitats to some desired former condition."

As the climate continues to change, this approach will become increasingly more difficult, if not impossible, to maintain. The SAFE Act requires implementation of the National Fish, Wildlife and Plants Adaptation Strategy and asks that the Federal national resource agencies, NOAA, the National Park Service, U.S. Fish and Wildlife Service, BLM, to complete coordinated climate change adaptation plans.

This is something the Administration is already moving forward on, so the SAFE Act would codify these efforts and also support smart actions taking place at the local level.

We had an Oversight Subcommittee hearing, Mr. Chairman, on natural resource adaptation in February. One of the witnesses was Rhode Island Commercial Fisherman's Association President Chris Brown, who testified about the toll that climate change is already taking on his industry: "I fish on a much different ocean today than when I first started fishing with my grandfather as a boy in the mid-1960s. Regularly caught now in Rhode Island are the species of croaker, grouper, cobia, drum and tarpon. My grandfather never saw a single one of these in his entire life as a fisherman."

The wild-caught fisheries of the northeast may ultimately prove to be the coal miner's canary for this Nation as we grapple with the issue of climate change. A reconsideration of strategy is called for given the enormous chasm between what we have endured and what we have gained.

Our oceans remain ground zero for damage from carbon pollution. They are warming. That is easily measurable with things like thermometers, and you don't have to be a theoretician to understand that. They are rising, also easily measurable at tide gauges with something that is not much more complicated than a yardstick, not much room for dissent about that, I would think.

They are becoming more acidic, something that children measure in their aquariums. It is not that complicated. Without a doubt, the changes we are seeing put the jobs and livelihoods of our fishing community at risk.

Those same changes we also see affecting forest health, wildlife habitat and species migration which in turn affects the outdoor recreation and hunting industries which account for nearly $650 billion in consumer spending each year.

To protect these vital natural resources and help them adapt in the face of climate change, I would hope we can move this bill forward. It would be a step toward protecting our economy and our outdoors way of life.

Thank you.

[The prepared statement of Senator Whitehouse follows:]

STATEMENT OF HON. SHELDON WHITEHOUSE,
U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Thank you, Chairman Cardin, for holding this legislative hearing to discuss a number of bills on which the committee may have the opportunity to vote in the weeks and months ahead.

One of the bills on the agenda today is S. 1202, the Safeguarding America's Future and the Environment Act—the SAFE Act, for short. This bill provides local communities with better tools to help our natural resources adapt to climate change. These resources help keep our air and water clean, sustain our economy, and provide a deep-seated sense of place.

I introduced this bill with then-Senator and now-Ambassador Max Baucus from Montana, with whom I was proud to work on this issue. He and I also requested a GAO report on adaptation efforts at our natural resource management agencies. The report explains just how vulnerable America's natural resources are to the changes we're seeing in the Earth's climate, including rising temperatures, worsening drought and wildfire, rising sea levels, and shrinking snow cover.

GAO previously noted that as the manager of vast lands and natural resources, the Federal Government is at great fiscal risk from climate change. The Federal Government manages nearly 30 percent of land in the United States as well as marine resources, like fisheries, in our exclusive economic zone that extends 200 miles from our shore.

The GAO report found that status quo management and planning will not be good enough: it says, "natural resource management has historically been based on the idea of maintaining current environmental conditions or restoring species and habitats to some desired former condition. As the climate continues to change, this approach . . . will become increasingly more difficult if not impossible to maintain."

So, the SAFE Act requires implementation of the National Fish, Wildlife, and Plants Adaptation strategy and asks Federal natural resource agencies—such as the National Oceanic and Atmospheric Administration, National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management—to complete coordinated climate change adaptation plans.

The Administration is already moving forward on this front. The President's Climate Action Plan includes sensible steps to prepare us for the effects of climate change. An Executive Order issued in November further focused the Administration's adaptation strategy. The SAFE Act would codify these efforts and support smart actions at the local level.

At an Oversight Subcommittee hearing I chaired on natural resource adaptation in February, witnesses discussed the need for strategic adaptation planning in the face of climate change. Rhode Island Commercial Fishermen's Association President Chris Brown testified about the toll climate change is already taking on his industry. He put it like this: "I fish on a much different ocean today than when I first started fishing with my grandfather as a boy in the mid-1960s . . . Regularly caught now in Rhode Island are the species of croaker, grouper, cobia, drum, and tarpon. My grandfather never saw a single one of these in his entire life as a fisherman."

He continued: "The wild caught fisheries of the Northeast may ultimately prove to be the 'coal miner's canary' for this Nation as we grapple with the issue of climate change. A reconsideration of strategy is called for given the enormous chasm between what we have endured and what we have gained."

Our oceans are ground zero for damage from carbon pollution. They are warming, they are rising, and they are becoming more acidic. These are measurements, not theories or projections. Without a doubt, these drastic changes put the jobs and livelihoods of fishermen at risk.

Likewise, the changes we are seeing in forest health, wildlife habitat, and species migration patterns affect the outdoor recreation and hunting industries, which account for nearly $650 billion in consumer spending each year.

America's natural resources—our rivers and bays, our forests and marshes, our fish and animals—are our birthright and our legacy. To protect them and help them adapt in the face of climate change is to protect our economy and way of life. I appreciate the committee's consideration of this important legislation.

Thank you.

Senator CARDIN. Thank you, Senator Whitehouse. We appreciate your leadership on this issue. You have been a strong leader in the areas of adaptation. We appreciate this legislation.

Senator WHITEHOUSE. If I may ask unanimous consent to have a letter from the groups that support this legislation added to the record.

I would point out that Senator Kirk's display of Lake Erie omitted one salient fact which was the Battle of Lake Erie was won by a Rhode Islander, Oliver Hazzard Perry, in the War of 1812.

Senator KIRK. I am sure it was an oversight.

Senator CARDIN. Without objection, the statements will be made a part of the record but not the correction of the record. We need Senator Kirk here in order to approve that.

[The referenced information follows:]

American Forests * American Rivers * Conservation Hawks
Defenders of Wildlife * Earthjustice * Endangered Species Coalition
League of Conservation Voters * National Parks Conservation Association
National Wildlife Federation * Outdoor Alliance
Outdoor Industry Association * Restore America's Estuaries * Sierra Club
The Trust for Public Land * The Wilderness Society * The Wildlife Society
Trout Unlimited * Wildlife Conservation Society * Winter Wildlands Alliance

The Honorable Sheldon Whitehouse
Subcommittee on Water and Wildlife
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

July 16, 2014

RE: Support for the Safeguarding America's Future and Environment (SAFE) Act (S. 1202/H.R. 5065)

Dear Senator Whitehouse:

The undersigned organizations represent a broad and diverse coalition of conservation, recreation, sportsmen's, and science-based organizations with a shared commitment to conserving our nation's natural resources by preparing for the impacts of climate change. On behalf of our millions of members and activists across the country, we write in strong support of S. 1202/H.R 5065, the Safeguarding America's Future and Environment (SAFE) Act. This legislation recognizes the countless benefits that healthy natural resources provide to our country's safety, economy, health and well-being, underscores the urgent need to help them adapt to a more rapidly changing climate, and provides a road map to do so.

From the devastating impacts of Hurricane Sandy along the East Coast to intense wildfires and drought in the West, the effects of a changing climate are being felt in every region of the country. In 2012 alone, the United States sustained 11 weather-related disasters in which overall damages reached or exceeded $1 billion, for a total cost in excess of $114 billion.[1] Over the past 50 years, sea level rose along most of the U.S. coastline and is already eroding shorelines and inundating wetlands, increasing the risk of flooding and threatening coastal communities. The range of many species is starting to shift and shrink in response to warming temperatures, disrupting ecosystems processes and presenting new challenges for fish and wildlife managers as well as commercial industry.

Natural resources provide countless benefits to the nation and are a powerful economic driver. Healthy natural systems provide us with clean air and water, pollinate our crops, provide recreation and scenic beauty, protect our communities, and provide numerous other services. According to the Outdoor Industry Association, outdoor recreation alone - including camping, wildlife viewing, and

[1] National Oceanic and Atmospheric Administration, Billion-Dollar U.S. Weather/Climate Disasters 1980-2013. Available at http://www.ncdc.noaa.gov/billions/events.pdf.

hunting- supports over 6 million jobs and is a $646 billion industry, double the spending on pharmaceuticals ($331 billion).[2] Natural resource conservation supports over 660,000 jobs and stimulates $93 billion in direct economic activity.[3] A changing climate, however, puts all of these activities at risk, imperiling our natural ecosystems, our communities, our livelihoods, and our health and safety.

As you know, the SAFE Act was first introduced by you and Sen. Max Baucus (D-MT) in the Senate, and is a bill designed to make American communities, wildlife and natural habitat more resilient to the increasingly destructive effects of climate change. A companion bill was introduced in the House just last week, by Rep. Matt Cartwright (D-PA).

The SAFE Act is a non-regulatory bill which builds on existing federal initiatives to set forth a framework for federal, state, and tribal coordination on natural resource adaptation planning. Specifically, this legislation:

- codifies the National Fish, Wildlife and Plants Climate Adaptation Strategy into law and encourages full agency implementation;
- legislatively authorizes the National Climate Change and Wildlife Science Center, within the U.S. Geological Survey;
- includes strategies to reduce costs and maximize efficiency for natural resource protection;
- provides context for directing future resources Congress allocates to the states to address climate adaptation challenges;
- ensures continuity of natural resources climate adaptation programs through changing administrations.

The SAFE Act is an important step forward in the effort to prepare our nation's wildlife and natural resources for the impacts of climate change. By protecting, restoring, and conserving our natural resources now, we can make them less vulnerable to extreme weather events and more resilient in the face of a changing future. We strongly encourage all members of the Subcommittee on Water and Wildlife to support this important piece of legislation.

Sincerely,

American Forests
American Rivers
Conservation Hawks
Defenders of Wildlife
Earthjustice
Endangered Species Coalition
League of Conservation Voters
National Parks Conservation Association
National Wildlife Federation
Outdoor Alliance
Outdoor Industry Association
Restore America's Estuaries
Sierra Club
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The Wilderness Society
The Wildlife Society
Trout Unlimited
Wildlife Conservation Society
Winter Wildlands Alliance

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[2] Outdoor Industry Association. The Outdoor Recreation Economy. 2012. Available at http://www.outdoorindustry.org/advocacy/recreation/resources.php

[3] Southwick Associations. The Conservation Economy: Direct investments and contributions. 2013. Prepared for the National Fish and Wildlife Foundation. Available at http://www.avcrp.org/wp-content/uploads/2013/04/NFWF-Conservation-Economy-Rpt-Southwick-3-11-2013.pdf

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The Honorable Benjamin L. Cardin, Chairman
Subcommittee on Water and Wildlife
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

July 16, 2014

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First introduced by Senators Sheldon Whitehouse (D-RI) and Max Baucus (D-MT) in the Senate, the SAFE Act is a bill designed to make American communities, wildlife and natural habitat more resilient to the increasingly destructive effects of climate change. A companion bill was introduced in the House just last week, by Representative Matt Cartwright (D-PA).

The SAFE Act is a non-regulatory bill which builds on existing federal initiatives to set forth a framework for federal, state, and tribal coordination on natural resource adaptation planning. Specifically, this legislation:

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The SAFE Act is an important step forward in the effort to prepare our nation's wildlife and natural resources for the impacts of climate change. By protecting, restoring, and conserving our natural resources now, we can make them less vulnerable to extreme weather events and more resilient in the face of a changing future. We strongly encourage all members of the Subcommittee on Water and Wildlife to support this important piece of legislation.

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Senator CARDIN. We will now go to our panel. Mike Shapiro is the Principal Deputy Assistant Administrator for the Office of Water at the Environmental Protection Agency. Mr. Shapiro has been at the EPA since 1980 working and surviving through Democrat and Republican administrations. He has served as Deputy Assistant Administrator since 2002.

Steve Guertin is the Policy Director of the U.S. Fish and Wildlife Service. Steve is a long-time public servant with the Service, playing key leadership roles in the Service's efforts to help fish, wildlife and plants adapt to the effects of landscape scale challenges, including climate change, energy development, water scarcity, fire and invasive species.

Welcome to both of you. As is the custom of our committee, your full statements, without objection, will be made a part of the record. You may proceed as you wish, starting with Mr. Shapiro.

STATEMENT OF MIKE SHAPIRO, PRINCIPAL DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. SHAPIRO. Thank you very much. Good afternoon, Chairman Cardin, Ranking Member Boozman and members of the subcommittee.

Thank you for the opportunity to discuss EPA's work to protect our Nation's waters and several pieces of proposed legislation that would impact our agency's programs.

The Administration has not taken a position on these pieces of legislation, but I am pleased to briefly describe EPA's current work relevant to the issues that four of these bills would address. I have provided additional detail in my written testimony.

Addressing the Great Lakes first, it is tempting to think that protecting and restoring the Great Lakes is a regional issue. It is anything but that. With some 95 percent of the Nation's and 20 percent of the Earth's fresh water, protecting and restoring the Great Lakes is a national and even an international imperative.

The EPA manages the Great Lakes Interagency Task Force of 11 Federal departments per Presidential Executive Order. Chaired by EPA Administrator McCarthy, the task force coordinates the Great Lakes Restoration Initiative, GLRI.

In its most recent report to the President and Congress, the GLRI is meeting or exceeding most of its annual measures of progress for Great Lakes restoration. EPA strongly supports the goals of S. 1232, the Great Lakes Ecological and Economic Protection Act which would specifically authorize GLRI.

We also agree with the purpose of S. 571, the Great Lakes Water Protection Act, but would be interested to work with committee staff on technical issues as they move forward with this bill.

Second, dealing with water and energy efficiency, too often we take for granted a system that provides clean and safe water from the drinking water that automatically appears when we turn on our taps or take a shower to the water found in our local watersheds where we live, work and play.

Water is not a limitless resource. As we all know, many communities across the Nation are facing difficult challenges in meeting their water resource needs. The EPA is working to raise awareness

and foster the understanding that water is a valuable resource that should be used wisely.

For example, in 2006, we launched the Water Sense Program, an innovative partnership that helps American consumers, businesses and governments make smart water choices by looking for the water sense label. Through 2013, we estimate the program has saved more than 757 billion gallons of water, an amount equal to the water needed to supply all the homes in the United States for 26 days.

S. 2225 would create a Smart Water Resource Management Pilot Program managed by the Department of Energy. This program would award grants for innovative solutions to increase water and energy efficiency.

The EPA generally supports further efforts to promote energy and water efficiency and we have collaborated with the Department of Energy in examining this issue. We would defer to DOE on the specifics of the legislation.

Third is climate adaptation and water. Water resources are important to both society and ecosystems. We depend on a reliable, clean supply of drinking water to sustain our health. We also need water for agriculture, navigation, recreation and manufacturing.

A changing climate may result in water shortages in some areas and increased runoff, flooding or sea level rises, as Senator Whitehouse described, and other areas.

The EPA recently released a policy statement on climate change adaptation and each of the major EPA programs and regional offices have developed more detailed climate change adaptation implementation plans. In 2012, the EPA's National Water Program developed a climate change strategy to guide our ongoing work in coordination with our State, tribal and local partners.

S. 1202 would create an Interagency Natural Resources Climate Change Adaptation Panel which would include the EPA Administrator to help coordinate development and implementation of the National Fish, Wildlife and Plants Climate Adaptation Strategy.

If this bill were enacted, the EPA would continue its work with other Federal agencies on the strategy's implementation. We would look forward to doing so.

Thank you again for the opportunity to discuss the EPA's work in these areas and the potential impacts of the legislation you are considering today. I look forward to answering any questions you may have.

[The prepared statement of Mr. Shapiro follows:]

TESTIMONY OF
MICHAEL H. SHAPIRO
PRINCIPAL DEPUTY ASSISTANT ADMINISTRATOR
OFFICE OF WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON WATER AND WILDLIFE, REGARDING
S. 571, GREAT LAKES WATER PROTECTION ACT;
S. 1202, SAFEGUARDING AMERICA'S FUTURE AND ENVIRONMENT ACT;
S. 1232, GREAT LAKES ECOLOGICAL AND ECONOMIC PROTECTION ACT; AND
S. 2225, THE SMART WATER RESOURCE MANAGEMENT CONSERVATION AND EFFICIENCY ACT

July 16, 2014

Good morning, Chairman Cardin, Ranking Member Boozman, and members of the Subcommittee. I am Michael H. Shapiro, the Principal Deputy Assistant Administrator of the Office of Water at the U.S. Environmental Protection Agency (EPA). Thank you for the opportunity to discuss the EPA's work to protect our nation's waters and several pieces of proposed legislation that would impact the agency's programs. The Administration has not taken a position on these pieces of legislation, but I am pleased to describe the EPA's current work relevant to the overall issues that these bills would address.

My testimony today will focus on three primary themes. First, I will describe the EPA's collaborative work to restore the Great Lakes, and how that work would be affected by S. 571 (the Great Lakes Water Protection Act) and S. 1232 (the Great Lakes Ecological and Economic Protection Act). Second, I will describe our work to promote water efficiency through the WaterSense program, and how it relates to S. 2225, the Smart Water Resource Management Conservation and Efficiency Act. Third, I will describe the EPA's work on climate change adaptation and water, and the potential effects of S. 1202,

Safeguarding America's Future and Environment Act, on the agency's programs.

Great Lakes: S. 571 and S. 1232

Interagency Great Lakes Restoration Initiative

The EPA is in a unique position in providing testimony on S. 571, the Great Lakes Water Protection Act and S. 1232, the Great Lakes Ecological and Economic Protection Act, because the agency manages the Great Lakes Interagency Task Force of 11 federal departments per presidential executive order.[1] Chaired by EPA Administrator McCarthy, the Task Force coordinates the Great Lakes Restoration Initiative (GLRI). As of its most recent Report to Congress and the President, the Task Force is meeting or exceeding most of its annual measures of progress for Great Lakes restoration.[2]

It is tempting to think of protecting and restoring the Great Lakes as a regional issue. But it is anything but that. With some 95 percent of the nation's and 20 percent of the Earth's fresh surface water, protecting and restoring the Great Lakes is a national and even international imperative. The Great Lakes are one of the key reasons why so much of the nation's industry is concentrated in the Midwest, represent a significant tourist attraction, and provide basic drinking water needs to a significant fraction of the U.S. population. As such, Congress has always helped lead the way on policy to ensure the nation takes care of the Great Lakes so the Great Lakes can continue to take care of the nation.

S. 571 – Great Lakes Water Protection Act

The EPA agrees with the purpose of the legislation to reduce wastewater overflows to the Great Lakes. However, fully eliminating such overflows may be challenging for Great Lakes communities that are

[1] See http://www.epa.gov/greatlakes/iatf/eo.html.
[2] See http://greatlakesrestoration.us/pdfs/glri-fy2012-report-to-congress.pdf.

already facing extensive water and wastewater infrastructure challenges. The EPA has previously reviewed similar legislative language and provided technical assistance that we believe would have accomplished the intent of using the money collected from fines to help fund treatment plant upgrades for plants that discharge into the Great Lakes. This language was not incorporated into S. 571 (or the 2013 House bill, H.R. 1185). We would also be interested in working with the Committee to clarify some of the provisions of S. 571 to ensure that, if enacted, these provisions would be fully consistent with the EPA's existing bypass regulations.

S. 1232 – Great Lakes Ecological and Economic Protection Act

The EPA strongly supports the goals of the legislation, to specifically authorize the Great Lakes Restoration Initiative, which has helped accelerate greatly the restoration and protection of the Great Lakes ecosystem. One important factor in the success of the GLRI has been the ability to adapt to changing needs and priorities. EPA believes it is advisable for the legislation to direct the agencies to re-assess the focus areas on a five-year basis to ensure they are updated to reflect the most pressing needs of the Great Lakes. The legislation would provide statutory recognition for the Interagency Task Force.[3] It would also create a statutory foundation for the Great Lakes Advisory Board,[4] an independent panel of experts to provide advice to the Task Force on priority-setting and implementation of the GLRI. This independent assessment of the effectiveness of the GLRI is an important assurance that states, cities, tribes, academia, civic organizations, and businesses are engaged and helping to ensure the effective management of the GLRI. The bill also recognizes that the Great Lakes are shared with Canada by acknowledging the U.S.-Canada Great Lakes Water Quality Agreement and the Great Lakes

[3] See footnote 1.

[4] See http://glri.us/advisory/index.html. The Board has only been established administratively by EPA under the Federal Advisory Committee Act at this time.

Regional Collaboration Strategy, a plan adopted by dozens of government, academic, business and civic leaders in 2005. The bill prohibits the GLRI from funding any water infrastructure activity (other than certain green infrastructure projects) implemented using SRF funds. The bill also authorizes appropriations for remediation of sediment contamination in areas of concern in the Great Lakes, and the Great Lakes National Program Office. These purposes are consistent with the EPA's ongoing work.

Water Efficiency: S. 2225

Too often we take for granted a system that provides clean and safe water: from the drinking water that automatically appears when we turn on our taps or take a shower, to the water found in our local watersheds where we live, work, and play. But water is not a limitless resource. A May 2014 report from the Government Accountability Office noted that 40 out of 50 state water managers expect water shortages under average conditions in some portion of their state over the next decade.[5] Many communities across the nation are facing difficult challenges in meeting their water resource needs, whether it is due to aging infrastructure, population growth, or the serious drought we are currently seeing in California and other parts of the southwest.

The EPA is working to raise awareness and foster the understanding that water is a valuable resource that should be used wisely. In 2006, we launched WaterSense, an innovative partnership program that helps American consumers, businesses, and governments make smart water choices that save water, energy, and money, without compromising performance, by looking for the WaterSense label. Products with the WaterSense label use at least 20 percent less water and perform as well as—or better

[5] See http://www.gao.gov/products/GAO-14-430

than—conventional models. To earn the label, products must be independently certified by a third party to meet EPA's criteria for efficiency and performance. WaterSense has promoted innovation in manufacturing and its distinctive approach has been identified as a key strength by many stakeholders.

Through 2013, we estimate the program has saved more than 757 billion gallons of water, an amount equal to the water needed to supply all the homes in the United States for 26 days. Every gallon saved also saves energy associated with pumping, treating and heating water. The program also estimates that it has saved consumers $14.2 billion in water and energy bills.[6] Ever since the first WaterSense labeled toilets hit store shelves in 2007, more and more product types have earned the WaterSense label, and the total number of WaterSense labeled models has continued to grow. Currently, more than 12,900 products have earned the WaterSense label, including toilets, faucets, showerheads, and irrigation controllers. The WaterSense program has more than 1,550 partners, which include manufacturers, retailers, water utilities, government and non-profit groups across the country, who are helping the program spread the word about water efficiency.

The EPA's WaterSense program is not the only program focused on managing our water resources more efficiently. The EPA's sustainable infrastructure efforts look more broadly at water efficiency and asset management and many states and utility managers are stepping forward to identify innovative strategies and promote tools for water efficiency on the supply side. Making water distribution more efficient will not only save water and reduce costs, but it will save energy and significantly improve sustainability and increase capital available for infrastructure investment.

[6] See http://www.epa.gov/watersense/about_us/index.html#accomp

S. 2225 would create a smart water resource management pilot program managed by the Department of Energy, which would award grants for innovative solutions to increase water and energy efficiency. WaterSense and our other programs are also looking towards innovative solutions and we are currently coordinating with the Department of Energy on water and energy efficiency program efforts. The legislation would not create any new responsibilities for the EPA, and the Administration is still reviewing the bill.

Climate Adaptation and Water: S. 1202

Water resources are important to both society and ecosystems. We depend on a reliable, clean supply of drinking water to sustain our health. We also need water for agriculture, energy production, navigation, recreation, and manufacturing. Many of these uses put pressure on water resources, stresses that are likely to be exacerbated by a changing climate. In many areas, climate change is likely to increase water demand while shrinking water supplies. This shifting balance would challenge water resource managers to simultaneously meet the needs of growing communities, sensitive aquatic and terrestrial ecosystems, farmers, ranchers, energy producers, and manufacturers. In some areas, water shortages will be less of a problem than increases in runoff, flooding, or sea level rise. These effects can reduce the quality of water and can damage the infrastructure that we use to transport and deliver water.

Climate change is challenging our assumptions about water resources. As climate change warms the atmosphere and alters the hydrological cycle, we will continue to witness changes to the amount, timing, form, and intensity of precipitation and the flow of water in watersheds, as well as the quality of aquatic, marine, and terrestrial environments. These changes are also likely to affect how we manage natural resources, including the programs designed to protect the quality of water resources

and public health and safety.

The EPA recently released a *Policy Statement on Climate Change Adaptation* and each of the major EPA programs and regional offices have drafted more detailed climate change adaptation implementation plans.[7] For the National Water Program, our climate change adaptation actions build on the strategic directions outlined in the *National Water Program 2012 Strategy: Response to Climate Change*, which sets out long-term goals and specific actions that are the EPA's contributions to national efforts to prepare for, and build resilience to, the impacts of a changing climate on water resources.[8] The EPA National Water Program is working with state, tribal, and local governments, as well as other partners to implement actions that address the challenges posed by a changing climate.

S. 1202 would create an Interagency Natural Resources Climate Change Adaptation Panel, which would include the EPA Administrator, to help coordinate development and implementation of the *National Fish, Wildlife, and Plants Climate Adaptation Strategy*. The EPA would also be required, along with other agencies included on the Panel, to develop and update a natural resources adaptation plan in support of the *Strategy*. Water quality and watersheds are essential components of protecting not only aquatic ecosystems, but terrestrial systems as well. With this understanding, the National Water Program worked with other Federal agencies to develop the *Strategy* and is participating in its implementation.

Conclusion

Once again, Chairman Cardin, Ranking Member Boozman, and Members of the Subcommittee, thank

[7] See http://www.epa.gov/climatechange/impacts-adaptation/fed-programs.html
[8] See http://water.epa.gov/scitech/climatechange/2012-National-Water-Program-Strategy.cfm

you for the opportunity to discuss the EPA's work in these areas and the potential impacts of the legislation you are considering today. I look forward to answering any questions you may have.

Environment and Public Works Committee Hearing
July 16, 2014
Follow-Up Questions for Written Submission
Michael H. Shapiro

Questions from: Senator David Vitter

1. **S. 571, the Great Lakes Water Protection Act, would prohibit publicly owned treatment works (POTW) from blending partially and fully treated wastewater during wet weather events, except in limited circumstances. Can you please explain how this prohibition would affect and impact POTW's which are currently permitted to blend? What costs would local communities incur if they are no longer able to use blending to manage wet weather events?**

   In EPA's view, some of the provisions of S.571 are ambiguous and/or, in some cases, may be less stringent than EPA's existing bypass regulation. EPA has not analyzed how this bill would affect costs to local communities.

Senator CARDIN. Thank you, Mr. Shapiro.
Mr. Guertin.

STATEMENT OF STEVE GUERTIN, DEPUTY DIRECTOR FOR POLICY, U.S. FISH AND WILDLIFE SERVICE

Mr. GUERTIN. Chairman Cardin, Ranking Member Boozman and members of the subcommittee, I am Steve Guertin, Deputy Director for the U.S. Fish and Wildlife Service. Thank you for the opportunity to testify on bills that address a range of service responsibilities to conserve and protect America's fish and wildlife for the benefit of our citizens.

The hearing today comes at a time when the Nation's living resources are impacted by forces acting upon larger landscapes and ecosystems such as habit fragmentation or loss due to land use changes, invasive species, fish and wildlife disease, contamination, wildfires, floods and drought, all exacerbated by climate change.

Mr. Chairman, the Service greatly appreciates your leadership on the United States Fish and Wildlife Resource Protection Act. We strongly support this legislation which mirrors the Administration's proposed draft bill.

When national wildlife refuge lands and national fish hatcheries are damaged or injured, the taxpayer bears the cost of restoration. We currently do not have statutory authority to seek compensation from responsible parties who injure or destroy Service resources and we are unable to then apply compensation to directly address those damages.

Therefore, the cost of restoration either comes from appropriated dollars or is added to the operations and maintenance project list to be addressed when funds are available down the road.

The Resource and Protection Act provides a much needed remedy to this situation. It would authorize the Service to seek compensation from responsible parties that injure or destroy national wildlife refuge system or other Service resources. This legislation is one of the Service's top legislative priorities and we look forward to working with you, Mr. Chairman, and the subcommittee to enact this bill.

Senator Whitehouse, the Service applauds your efforts in introducing the SAFE Act. We are very supportive of the need for and intent of this legislation and greatly appreciate the subcommittee's continued work to highlight the impacts of climate change on natural resources and the need for adaptation measures.

We also recognize Senator Gillibrand's efforts, and we support the purpose of the Invasive Fish and Wildlife Protection Act. Adverse impacts from invasive species are among the most significant challenges facing the conservation of native fish and wildlife. Preventing the introduction and spread of these invasive species is the most cost effective approach to eliminating or reducing these threats.

Our written testimony provides additional information on these and other bills you are considering today. Many of the bills that are the subject of the hearing today are important steps in natural resource conservation.

In addition to these efforts already underway, the Fish and Wildlife Service believes there is much work to be accomplished on the

legislative front in the conservation of our Nation's fish and wildlife.

Among the Service's other top priorities are the Administration's proposal for full and permanent funding of the Land and Water Conservation Fund, the authority to increase the price of the Federal Migratory Bird Hunting and Conservation Stamp, known as the Duck Stamp, and reauthorization of the North American Wetlands Conservation Act to leverage funds for projects that conserve and protect water fowl habitat.

These legislative actions are critically important to conserving, protecting and restoring habitat for trust species. These actions would also support the U.S. economy because of Nation's natural resources are among our most valuable economic assets.

We are happy to answer any questions you have today and look forward to working with the subcommittee on these bills.

Thank you.

[The prepared statement of Mr. Guertin follows:]

**TESTIMONY OF STEVE GUERTIN, DEPUTY DIRECTOR,
U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR,
BEFORE THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON WATER AND WILDLIFE, REGARDING S. 1153, S. 1175,
S. 1202, S. 1232, H.R. 1300, S. 1381, S. 1650, S. 2530, and S. 2560**

July 16, 2014

Introduction

Chairman Cardin, Ranking Member Boozman, and Members of the Subcommittee, I am Steve Guertin, Deputy Director of the U.S. Fish and Wildlife Service (Service) within the Department of the Interior (Department). Thank you for the opportunity to testify on bills that address a range of Service responsibilities and the conservation of our nation's fish and wildlife for the benefit of our citizens.

In addition to these efforts already underway in the Senate, there remains much work to be accomplished on the legislative front for the conservation of our nation's fish and wildlife. Among the Department's top priorities are the Administration's proposal to achieve full and permanent funding of the Land and Water Conservation Fund, reauthorization of the North American Wetlands Conservation Act to leverage funds for projects that conserve and restore waterfowl habitat, and authority to increase the price of the Federal Migratory Bird Hunting and Conservation Stamp (Duck Stamp) to restore its purchasing power. The price of the Duck Stamp has not changed since 1991, while the cost of purchasing land has tripled. Increasing the price of the Duck Stamp is critical to ensuring migratory waterfowl populations thrive in the future, maintaining our hunting tradition and a linchpin for the economies of many states. We look forward to working with Congress to pass Duck Stamp legislation during the 113th Congress.

The hearing today comes at a time when the nation's living resources are impacted by forces acting upon large landscapes and ecosystems such as: habitat fragmentation or loss due to land use changes; invasive species; fish and wildlife disease; contamination; wildfire; floods; and drought—all exacerbated by climate change. These legislative actions are critically important to conserving, protecting, and restoring habitat for trust species. Strategic efforts to provide quality habitat is essential to the persistence, recovery, and success of species. The legislative progress we seek would also support the U.S. economy because the nation's natural resources—including water, fish, wildlife, and forests—are among our most valuable economic assets.

The Department appreciates the support and leadership of the Subcommittee across many conservation issues as well as this opportunity to discuss the legislation that you are considering.

S. 2560, the United States Fish and Wildlife Service Resource Protection Act

Thank you for the opportunity to provide the Department's views on S. 2560, "The United States Fish and Wildlife Service Resource Protection Act." The Department strongly supports this bill, which mirrors the Administration's proposed draft bill language and intent. Mr. Chairman, the Department greatly appreciates your leadership on this important bill.

The Service manages over 150 million acres of Refuges and 71 National Fish Hatcheries. Refuges welcome over 47 million visitors each year, who participate in a wide variety of recreational activities including: hunting, fishing, wildlife observation, photography, interpretation, and education. Refuges and the visitors they draw are vital to local economies, generating nearly $2.4 billion each year. These visitors come to enjoy the world's premier network of public lands devoted solely to the conservation of wildlife and habitat and it is the responsibility of the Service to manage these lands and their associated facilities for conservation purposes and to support safe and rewarding visitor experiences.

When Refuge lands are damaged or injured, the taxpayer bears the cost of restoration. The Service does not have sufficient statutory authority to seek compensation from responsible parties who injure or destroy Service resources, and then apply the compensation to directly address the damages. Therefore the cost of restoration either comes from appropriated dollars or is added to the operations and maintenance project list to be addressed when funds are available. Damages could include: illegal cutting of vegetation, destruction of real property and facilities (e.g., kiosks, visitor centers), fires, and abandoned debris. This is a more frequent concern for Refuges but also National Fish Hatcheries.

In contrast, the National Park Service exercises authority under the Park System Resource Protection Act (PSRP A - 16 USC 19jj) to recover compensation and repair damages, and the National Oceanic and Atmospheric Administration uses similar authority under the National Marine Sanctuaries Act.

As an example, in 2012, 336 burglary and theft offenses and 54 arson offenses were reported on Service lands. Criminal fines recovered from these cases totaled over $220,000, but no restoration funds resulted from these investigations. Similarly, over 3,200 vandalism offenses, totaling over $270,000 in fines were documented. To repair the damages caused by these offenses, the Service must use tax-payer funded, base allocations to pay for assessing, repairing, replacing or restoring structures, habitat and other resources injured by the responsible party. Alternatively, the repair needs would be added to the existing substantial list of operational and maintenance needs.

S. 2560 provides a much needed remedy to this issue. The bill would provide civil and administrative authority for seeking compensation from responsible parties that injure or destroy National Wildlife Refuge System or other Service Resources. It would allow the Service to recover costs for assessing injury and to restore, replace or acquire equivalent resources without further congressional appropriations. Under this authority, damages would be used to reimburse assessment costs; prevent or minimize resource loss; abate or minimize the risk of loss; monitor ongoing effects, and/or restore, replace, or acquire resources equivalent to those injured or destroyed.

This legislation is one of the Service's top legislative priorities and we look forward to working with you, Mr. Chairman, and the Subcommittee to enact S. 2560 during the 113th Congress.

H.R. 1300, to amend the Fish and Wildlife Act of 1956 to reauthorize the volunteer programs and community partnerships for the benefit of national wildlife refuges, and for other purposes.

The Department strongly supports H.R. 1300, which would reauthorize the National Wildlife Refuge System Volunteer and Community Partnerships Enhancement Act of 1998 (Act). H.R. 1300 would reauthorize volunteer programs and community partnerships for the benefit of Refuges for 2014 through 2018.

The Act, as amended, has enabled the Refuge System to expand its volunteer programs and encourage environmental education efforts. The Act also helps the Service develop and grow community-based partnerships with refuge Friends organizations. These locally established, nonprofit citizen organizations have many different names, but they all share a passion for wildlife and wild places. They are some of the Service's best ambassadors to local communities—sharing their knowledge, information, and enthusiasm with their neighbors. They help conservation happen at the local level.

The Act also helps the Service meet mandates of the National Wildlife Refuge System Improvement Act of 1997 by strengthening public involvement and partnerships that support the six priority wildlife-dependent public uses, which include hunting, fishing, wildlife observation, photography, environmental education, and interpretation.

A fundamental concept of the Service's mission is to work with others to conserve wildlife for future generations. We recognize that to be successful, we must inspire the American people to connect with their wildlife heritage and participate as stewards of our system of lands. Volunteers play a vital role in helping communities establish this connection with nature. They are individuals who are inspired to serve their communities and the nation, parents who want to be good stewards of the land and set examples for their children, retired people willing to share their wealth of knowledge, concerned citizens of all ages who want to learn more about conservation and how they can make a difference, and passionate people who enjoy the outdoors and want to conserve these resources for future generations. They help implement conservation measures, provide environmental education and recreational opportunities to the American people, organize and carry out special events, and perform many other valuable services for fish and wildlife conservation and for the Refuge System and its visitors.

Volunteers donate millions of hours of their time each year and those volunteer hours continue to increase. In Fiscal Year 2011, 46,880 volunteers contributed over 1.7 million hours of work to benefit Service programs. This is equivalent to 826 full-time employees. In dollars, the value of their vital work in Fiscal Year 2011 alone was nearly $37 million. In Fiscal Year 2012, the volunteer program skyrocketed with over 56,000 individuals, nearly 43,000 of which volunteered for the Refuge System alone. These volunteers donated over 2.15 million hours of their time, equivalent to over 1,000 full-time employees. Their donated time is valued at almost $47 million, leveraging appropriated volunteer funding at a ratio of $10 of volunteer services for each dollar appropriated to coordinate volunteers.

S. 1202, the Safeguarding America's Future and Environment Act (SAFE Act)

The Department applauds the leadership of Senator Whitehouse and former Senator Baucus for introducing S. 1202, the Safeguarding America's Future and Environment Act. We are very supportive of the need for and intent of this legislation, and greatly appreciate this Subcommittee's continued work to highlight the impacts of climate change on natural resources and the need for adaptation measures.

S. 1202 calls for the development of a National Fish, Wildlife, and Plants Climate Adaptation Strategy (Strategy). As the Department has testified in prior Committee hearings, such a strategy was released publicly on March 26, 2013. The Strategy was developed through a unique partnership led by the Service, the National Oceanic and Atmospheric Administration, and the New York Division of Fish, Wildlife, and Marine Resources (representing state fish and wildlife agencies more broadly), and involving a wide variety of other federal, state, and tribal partners. The Strategy is a framework for coordinated, unified, nation-wide action to facilitate the conservation of the nation's natural resources and the protection of the important services they provide in a changing climate. It provides recommendations, goals, and actions to be implemented across the federal government, states, and other entities. The Strategy was initiated not to direct individual agency adaptation plans, but to provide an accepted set of priority considerations for all stakeholders to guide their efforts and facilitate cooperation across jurisdictional boundaries.

Working closely with partners, the Service is continuing to lead a Joint Implementation Working Group formed to promote interagency implementation of the Strategy and report on implementation progress. Agencies at all levels of government are now working collaboratively to implement the Strategy, and act as a forum for coordination between federal, state, and tribal agencies and other stakeholders. This Working Group will help engage stakeholders and conservation partners in implementation of the Strategy, develop a process and tools to evaluate implementation and progress, facilitate communication and coordination on climate change adaptation activities among federal, state and tribal governments, and oversee future revisions of the Strategy.

The impacts of climate change pose a serious, systemic threat to the wildlife and ecosystems that help support human society, and we appreciate the role of this legislation in the growing national policy discussion about how to sustain our natural and public trust resources as they adjust to the impacts of climate change. We would be happy to provide working group recommendations on how S. 1202 might be made even more effective and efficient, and we would be pleased to work with the Subcommittee on this legislation.

S. 1153, the Invasive Fish and Wildlife Prevention Act

Adverse impacts from invasive species are among the most significant challenges facing the conservation of native fish and wildlife populations, and the economic impact of invasive species in the United States has been estimated to range well into the tens of billions of dollars each year. The introduction into the wild of harmful, nonnative species can become a long-term, expensive burden to public and private sectors alike. With the increasingly global nature of our economy

and transportation systems, the importation of potentially invasive species into the United States will continue, as will the risks—and costly impacts—they impose on our economy, environment, and public health. Preventing the introduction and spread of harmful species is the most cost-effective approach to eliminating or reducing these threats.

The Department supports the intent and purpose of S. 1153, the Invasive Fish and Wildlife Prevention Act to prevent the introduction of non-native, invasive species into the United States or, once introduced into the country, to prevent their introduction into new ecosystems within the country. The Department has concerns with certain provisions of the bill and we would like to work with the Subcommittee and the bill's sponsor, Senator Gillibrand, to address them.

First, we would like to describe some provisions in S. 1153 that the Department believes would improve our ability to list species as injurious. We support the bill's risk screening concept for unregulated "non-native wildlife taxa novel to the United States" and believe this approach is more protective of U.S. environments and economies than the current approach under the Lacey Act. We have developed risk screening approaches that we believe can be used for assessing the risk of these species prior to importation and can be implemented within the timeframe identified by the bill and with only modest increases in resources. Other aspects of the bill that we believe would help streamline and expedite the listing process include statute-specific temporary emergency listing authority and providing the Secretary with discretion to forego certain time-consuming economic analyses. However, other provisions of the bill would appear to actually increase the administrative burden for listing species as injurious wildlife, which would be inconsistent with the stated purpose to establish an improved regulatory process for injurious wildlife.

The Department has concerns about several provisions of S.1153. Under current authorities, any individual or institution must obtain a permit from the Service when importing or transporting injurious wildlife across state lines for authorized purposes. In contrast, the bill would create two categories of injurious wildlife and establish broad exemptions from permitting requirements for taxa listed as either Injurious I or Injurious II. Although the permit exemption for Injurious I taxa is more narrow, restricted to qualified zoos and aquarium institutions, this exemption extends to all qualified institutions for Injurious II taxa. Moreover, the bill would allow any person to transport an individual animal across state lines for noncommercial purposes without a permit, if that animal was lawfully owned prior to the taxa being regulated as Injurious II. We are concerned that movement of prohibited species without a permit will undermine the effectiveness of the current injurious wildlife prohibitions and create significant law enforcement challenges.

In addition, current declaration regulations would need to be changed under S. 1153 to require all imports of live wildlife to be declared electronically, using species-specific data elements. The Service acknowledges the conservation and invasive species management benefits of collecting the import information as described in S. 1153. Although this could be accomplished under the Service's current declaration process, we cannot guarantee a public database as envisioned under the bill can be created once the Service's data is collected by U.S. Customs and Border Protection under the International Trade Data System (ITDS). We would be happy to work with the Subcommittee to address some uncertainties under ITDS, such as how wildlife trade data will

be collected, the role the Service will play in oversight of the data and its collection, who owns the data, and what ability the Service will have to obtain the data and provide it in a public database. The Department also has concerns with the bill's sections covering penalties and sanctions, and we would appreciate the opportunity to provide the Subcommittee with technical assistance on revised language associated with civil and criminal penalties.

Although the Department believes S. 1153 includes elements that could enhance our efforts to reduce or eliminate the impact of harmful species, we are concerned that the bill also includes provisions that would undermine our ability to implement and enforce the law's prohibitions on importation and interstate transport of injurious wildlife. We look forward to working with the Subcommittee to address these concerns to craft a more robust and effective approach to the prevention and containment of injurious species.

S. 2530, A bill to amend title 18, United States Code, to prohibit the importation or exportation of mussels of certain genus, and for other purposes

The Department opposes S. 2530 as drafted. S. 2530 proposes to: (1) add quagga mussel (*Dreissena rostriformis bugensis*) as "injurious wildlife" under 18 U.S.C. 42(a); and (2) exempt public water systems or associated water conveyances, storage or distribution facility or operators from the statute's prohibition on importation and interstate transport of all injurious wildlife.

Both the zebra mussel (*Dreissena polymorpha*), listed as injurious wildlife by Congressional action, and the quagga mussel are invasive freshwater mollusks that negatively affect the natural environment, as well as electric power generation, irrigation, recreation, and other economic sectors. The nonnative mussels also outcompete native mussel species, including threatened or endangered species. In the Great Lakes alone, zebra mussels have overwhelmed municipal and industrial water system infrastructure, and the cost to clean affected pipes and machinery is estimated by the Sea Grant Program at the University of Wisconsin to be $250 million a year. The zebra and quagga mussels are carried by recreational or commercial boats and other equipment from one waterbody to another. Despite the cooperative action of the Service, states, tribes and other partners, these mussels have crossed the 100th Meridian and have been documented in several western states.

The Department does not object to the inclusion of quagga mussel on the list of "injurious wildlife," as proposed by S. 2530. However, the Department opposes the proposed statutory exemption of any public water system or associated water conveyance, distribution, or storage facility or operator from the 18 U.S.C. 42 prohibitions against the importation and interstate transport of any "injurious wildlife." Such a broad statutory exemption would not only limit our ability to respond to evolving challenges and to work with operators of these systems to implement new control technologies, it would set a deleterious precedent for other injurious wildlife. The Service is aware of the concern about the impact of this statute on public water distribution systems and would welcome the opportunity to work with the Subcommittee on an approach to address this concern while upholding the purposes and value of this important conservation law.

S. 1175, the Infrastructure Facilitation and Habitat Conservation Act of 2013

S. 1175, the Infrastructure Facilitation and Habitat Conservation Act of 2013, would require the Secretary of the Treasury to create a direct loan and loan guarantee program to enable eligible public entities the ability to acquire interests in real property pursuant to habitat conservation plans (HCPs) approved by the Secretary of the Interior under the Endangered Species Act. S. 1175 would require the Secretary of the Interior, through the Service, to review applications submitted to the U.S. Department of Treasury to ensure that the applicant is implementing an HCP that has been approved by the Service; the acquisition would likely be completed, and the applicant has a complementary plan for sustainable infrastructure development that provides for the mitigation of environmental impacts. The Department appreciates Senator Feinstein's leadership on this issue and interest in accelerating implementation of approved Habitat Conservation plans; however, the Administration is still reviewing this legislation and will provide the Administration's views to the Committee after completing an in-depth analysis.

S. 1232, the Great Lakes Ecological and Economic Protection Act of 2013

S. 1232, the Great Lakes Ecological and Economic Protection Act of 2013, would amend the Clean Water Act to achieve the goals established in the Great Lakes Restoration Initiative Action Plan, the Great Lakes Regional Collaboration Strategy, and the Great Lakes Water Quality Agreement of 1978. The legislation would establish the Great Lakes Interagency Task Force and specifies its membership, including the Administrator of the Environmental Protection Agency (EPA), the Chair of the Council on Environmental Quality, and the Secretaries of State, Agriculture, Commerce, Housing and Urban Development, Transportation, Homeland Security, Army, and Health and Human Services.

EPA would have a lead role in carrying out S. 1232, and we defer to them to provide the Administration's overall views on this legislation. We would note for the Subcommittee's information, however, that the Service recommends amending S. 1232 to include the Secretary of the Interior as a member of the Great Lakes Interagency Task Force. The Service, along with other DOI bureaus, is actively involved in Great Lakes conservation, protection, and restoration and would make key contributions to the efforts of such a task force. We would be happy to further discuss DOI activities, programs, and authorities that contribute to Great Lakes conservation and work with the Subcommittee as you consider this legislation.

S. 1381, the Big Cats and Public Safety Protection Act

The Department supports the intent of S. 1381, the Big Cats and Public Safety Protection Act. Amending the Lacey Act Amendments of 1981 by clarifying provisions of the Captive Wildlife Safety Act to prohibit individuals from breeding or possessing prohibited wildlife species would significantly address the current public safety concerns with large cats. While we support the intent and purpose of S. 1381, there are several aspects of the bill that raise concerns and may limit or eliminate the beneficial aspects that the bill could provide, and we would like to work with the Subcommittee to address these concerns.

The prohibitions under S. 1381 would not apply to certain individuals or institutions. One of the entities that would be exempt from the prohibitions is a wildlife sanctuary that meets certain requirements. The bill amends the requirements that a wildlife sanctuary must meet, and the Service supports this additional requirement. However, the bill does not modify the current exemption in the Captive Wildlife Safety Act that applies to State colleges, universities, or agencies, State-licensed wildlife rehabilitators, and State-licensed veterinarians. This exemption is overly broad and would allow individuals who may have little experience or conservation expertise, such as an individual licensed as native wildlife rehabilitator, to breed and sell big cats. Although we recognize the benefit of allowing some individuals or State institutions to breed, acquire, and transfer big cats, the Service recommends amending S. 1381 to tighten up this exemption and we would be happy to work with the Subcommittee to provide technical drafting assistance.

The Department also has concerns with the enforceability of S. 1381. Both the Captive Wildlife Safety Act and this bill, which amends that Act, are drafted in a way that would pose enforcement challenges and result in the Service being unable to complete a civil or criminal prosecution if an individual were to violate the provisions of this legislation. The Service would only be able to enforce strict liability forfeiture. We would appreciate the opportunity to provide the Subcommittee with technical assistance on revised language associated with civil and criminal penalties.

S. 1650, A bill to amend the Migratory Bird Treaty Act to exempt certain Alaska Native articles from prohibitions against sale of items containing nonedible migratory bird parts, and for other purposes.

The Department recognizes the economic and cultural need in Alaska Native communities to improve their quality of life with opportunities to benefit from their unique handicrafts and other traditional items. However, the Department does not support S. 1650. This bill would amend the Migratory Bird Treaty Act (MBTA) to provide statutory authority for activities that may be in violation of current international migratory bird conservation treaty obligations.

The MBTA implements four international treaties the United States holds with Canada, Mexico, Japan, and Russia. These treaties protect a wide range of avian families and species that migrate through or stopover in the United States and the treaty nations. The MBTA prohibits "take," possession, sale, barter, purchase, shipment, or transport of birds, feathers, eggs or other such products, and it is in part designed to protect bird populations from vulnerability to the demands of commercial use. For example, in 1886, 5 million birds were estimated to be killed for their feathers. When Congress passed the MBTA in 1918, it sought to put an end to the commercial trade in birds and their feathers that, by the early years of the 20th century, had devastated populations of many native bird species.

S. 1650 would allow Alaskan Natives to make and sell any handicraft or clothing made from the nonedible parts of federally protected bird species from birds taken in a manner that is not wasteful, provided these are made without the use of mass copying devices. Our understanding is that migratory bird treaty obligations greatly limit such activities. The Service is working closely with the Alaska Migratory Bird Co-Management Council to more clearly define these

limitations, but this review is not complete. We would be pleased to keep your Subcommittee apprised of these efforts and to continue to work with you to address this very important issue.

Conclusion

Thank you for the opportunity to provide testimony on this range of legislation that addresses multiple responsibilities of the Service for the conservation of our nation's fish and wildlife for the benefit of our citizens. In particular, Mr. Chairman, thank you for your leadership on S. 2560, "The United States Fish and Wildlife Service Resource Protection Act." The Department also appreciates the Subcommittee's interest in considering bills that would address the threats of climate change and invasive species to our nation's wildlife. I am happy to answer any questions the Subcommittee may have and we look forward to working with the Subcommittee members as you consider these bills.

Questions for the Record
Environment and Public Works Committee Hearing
July 16, 2014

Questions from Senator Ben Cardin

Question 1: Would the Service Resource Protection Act apply to someone who illegally poaches wildlife on lands adjacent to USFWS lands, but not on Refuge lands?

Response: No. S. 2560, the U.S. Fish and Wildlife Service Resource Protection Act, would authorize the U.S. Fish and Wildlife Service (Service) to seek damages for injury caused to wildlife and resources on Service managed lands from those who illegally cause the injury. This legislation only applies to Federal lands administered by the Service, and does not apply to private or State managed lands or lands under local government.

Question 2: What recourse does the USFWS currently have when they catch a perpetrator harming resources or property on USFWS lands or property?

Response: Currently, criminal penalties (fines) and, in some cases, civil and criminal restitution, are available for injuries occurring on Service lands. The fines levied are limited, and rarely provide for the recovery of the injured resources or destroyed property. This is unlike other federal land management agencies, which have specific authorities to recover damages -- the National Park Service (NPS) exercises a similar authority under the Park System Resource Protection Act (PSRPA - 16 U.S.C. 19jj-l), and the National Oceanic and Atmospheric Administration (NOAA) exercises a similar authority under the National Marine Sanctuaries Act (16 U.S.C. 1443). The Service uses 16 U.S.C. 668dd (National Wildlife Refuge System Administration Act (and all amendments)) to enforce criminal violations on Service managed land.

Question 3: Is there a limit (maximum) on the fines that the USFWS may levy against a perpetrator who damages or destroys USFWS property or resources?

Response: In general, for criminal violations by statute, up to $100,000 in fines can be levied for knowing violations, and $5,000 can be levied for strict liability violations. In most cases, the imposed fines for violations of the Refuge Act are remitted to the U.S. Treasury and do not go toward the restoration of injured resources. Often, the injuries far exceed any fines recovered by the United States Government, and as a result, the taxpayer, through the appropriated operations and maintenance budget, bears the burden. There are no civil provisions to the National Wildlife Refuge System Administration Act. The criminal penalty provisions found in the Act differentiate between knowing violations (class A) and strict liability offences (class B).

Question 4: What guarantee does the USFWS have that these fines will come back to the Service to help restore or repair the resource that was damaged or destroyed?

Response: There is currently no way to guarantee criminal fines will come back to the Service for restoration or repair of injury to a system resource. In general, criminal fines collected for

violations of the Refuge Act are sent to the U.S. Treasury. The Service does not have the authority to collect civil damages if injury is caused to a system resource. Under this legislation, the recovery of damages for injury to Service resources is not intended to be a punitive action, such as a fine. The recovered damages will be used only to repair, replace or acquire the equivalent resources for those injuries that were caused by the responsible party. In other words, a third party will be responsible for fixing the problem that they created, not American taxpayers. Recovered damages do not add to the Service budget. By using the DOI Natural Resource Damage Assessment and Restoration (DOI NRDAR) account as a place to house the money until restoration projects can begin, the Service will be able to track, account for, and expend the money under tight fiscal constraints. The DOI NRDAR program is responsible for tracking expenditures for several agencies' restoration programs, which have recovered monies under the Oil Pollution Act of 1990 and Comprehensive Environmental Response, Compensation, and Liability Act. The National Park Service uses this account for their program which has been in place since 1991, and the Service would use this program as a model.

Question 5: Even if the fines did come back to USFWS, would these fines be adequate to cover the restoration costs?

Response: Current criminal penalties/fines do not cover the costs or are dramatically insufficient to cover the assessments and restoration costs of most injuries. In many cases, particularly related to our easement agreements, the profit gained by engaging in the injury, (e.g. draining of the wetlands to facilitate commercial farming) far exceed the fines that can be levied against the offender. The offender views these fines as the cost of doing business.

Question 6: Do these fines sufficiently deter bad actors from repeatedly destroying or degrading USFWS lands?

Response: The criminal fines rarely provide deterrence of large scale destruction of resources and property. In many cases, the commercial gain of the illegal commercial activity far exceeds the fine amount. For example, in a large scale arson case, the farmer faced minimal criminal fines yet had the opportunity to gain commercially by burning protected habitat in order to increase drainage of his farm lands. This case occurred in south Texas. A local land owner made the decision to burn protected ocelot habitat on a National Wildlife Refuge. The farmer stated that he felt burning the habitat would assist with his agricultural practices. The financial benefit from burning the land exceeded the amount of the criminal fine he paid (i.e., 'the cost of doing business'). The Service had no civil remedies to restore the lost habitat.

Question 7: Without the authority to sue, how does the Service budget for the restorative activities?

Response: Currently, the Service must rely on appropriated operations and maintenance budgets to assess and restore injuries caused by third party, illegal activity. Whereas illegal injuries are unpredictable, they often exceed the operational capacity of the Service to address them.

Question 8: Does this take appropriated resources away from other regular Operations and Maintenance activities?

Response: Yes, the Service must use operations and maintenance funding to address assessment and restoration of injuries caused by third parties and illegal activities. This places a strain on operations and maintenance activities, often causing a backlog effect on other needs.

Question 9: Is the inability to sue for adequate damages adding to the USFWS maintenance backlog and increases the service's budget deficit?

Response: Yes, the inability to recover damages for injuries to the Service's resources impacts our operations and maintenance funds. Currently, these operations and maintenance funds are used to pay for assessment and restoration of injuries caused by third parties and illegal activities.

Question 10: Please explain how damages awarded under the Resource Protection Act would be legally limited to cover the expense or reimbursement of activities necessary to restore or replace damaged resources?

Response: The bill, in Section 3, limits the liability of a person who injures or destroys system resources to the cost of responding to or recovering from that action. Accordingly, the Service would have no authority to seek recovery of amounts in excess of those costs. Based on the proposed legislation, recovered funds would be directed specifically to the assessment and restoration of injuries incurred at a specific site and could not be used as another general source of income. This would decrease the use of operations and maintenance funds to restore or replace any damage and would relieve the impact on the taxpayer generated budget.

Question 11: How are the awards sought under this legislation guaranteed to be expended towards restoring or replacing the specific damaged or destroyed resources?

Response: The legislation requires that funds be only used for restoring or replacing the specific injured or destroyed resource. Additionally, in order to use the funds, a Refuge would develop a restoration plan that outlines how the money will be spent. This plan would enable the DOI NRDAR fund managers to track how the money is spent and ensure the proper use of the funds.

Questions from Senator David Vitter

Question 1: As you may know, LSU's mascot is Mike the Tiger, a live Bengal-Siberian tiger. Mike lives in a specially constructed tiger habitat that is approximately 13,000 square feet. Recognizing that there is an exception for universities in the underlying Captive Wildlife Safety Act, I want to better understand the potential impacts of S. 1381, the Big Cats and Public Safety Protection Act. Please provide me with specific answers to the following questions:

a. Would S. 1381 have any impact on LSU's ability to maintain its current tiger?

Response: No. It is our understanding that as currently drafted, S. 1381 would not impact LSU's ability to maintain its current mascot.

b. Would S. 1381 have any impact on LSU's ability to acquire a new tiger in the future?

Response: As the legislation is currently drafted, LSU, as well as any university or state college, would be exempt from the prohibitions of the Captive Wildlife Safety Act and S. 1381, and would therefore be able to obtain additional tigers (provided that the tigers were obtained from someone who was also exempt from the prohibitions).

c. Are there any rulemakings that FWS would do associated with the legislation that would have an impact on LSU's ability to maintain its current tiger or to acquire a new tiger in the future?

Response: On August 22, 2011, the Service published a proposed rule that would remove the current exemption for generic tigers (crosses between different subspecies or unknown genetic origin) under the Captive-bred Wildlife Registration program (50 C.F.R. 17.21(g)). The final determination has not been published yet. This exemption would require anyone buying or selling generic tigers across state lines to obtain either an interstate commerce permit or register under the Captive-bred Wildlife (CBW) program. For FWS to issue an interstate commerce permit, or approve of a registrant under the CBW program, the applicant must use the tiger in a manner that enhances the survival of tigers in the wild. This revision to Service regulations would not affect LSU's ability to maintain their current tiger, but could affect them if they were attempting to obtain a new tiger from outside Louisiana.

d. The current LSU Tiger was acquired from Great Cats of Indiana. Would this type of acquisition be possible under S. 1381?

Response: Without more information about Great Cats of Indiana, it is not be possible to determine if that facility would be exempt from the prohibitions of S. 1381. However, given the limited scope of the exemptions provided in S. 1381, it is possible that they would not qualify for an exemption and LSU would be unable to obtain another tiger from them.

e. How would S. 1381 impact a facility similar to Great Cats of Indiana (recognizing that some reports suggest that Great Cats of Indiana has closed) in its ability to house tigers like the one it donated to LSU?

Response: S. 1381 would prohibit the possession or breeding of tigers at facilities that are not exempted from the prohibitions of the bill. If Great Cats of Indiana or a similar institution did not qualify for an exemption under S. 1381, they would be unable to house tigers.

Senator CARDIN. Let me thank both of you for your service.

Mr. Guertin, let me start in regard to the legislation I have authored. I fully recognize the need for you to have the authority to go after those who have damaged our refuges and to be able to get the compensation you need in order to restore and repair what has been done.

We do allow legitimate use of our refuges for hunting and recreation and so forth, and there is at least some concern that this authority could be used in a way that would be intimidating to lawful users of the services.

Can you give us some assurance as to how this authority would be screened to make sure it is only used where there is culpable activity that would warrant such action?

Mr. GUERTIN. We can fully assure you that if enacted, we would only use this legislation to seek restitution from responsible parties who injured natural resources. There is no intention to use this to do anything to detract or take away the right of Americans to hunt and fish on open national wildlife refuges and otherwise enjoy public access to these lands.

Senator CARDIN. Thank you for that.

Let me address invasive species for one moment because there are several bills that deal with that. Senator Gillibrand's proposal that would set up a reviewing process where you could deal with changing what is permitted to be imported into the United States, do you have comments in regard to that specific approach in regard to adding additional species that could be subject to import restrictions?

Mr. GUERTIN. We are supportive of the overall policy intent of the Senator's proposed legislation. We think that the idea of putting in place some risk screening concept or methodology to identify in Tier Category 1 and 2 threats to the U.S. would be critically important to an overall strategy.

We are very interested right now in focusing our resources on further species coming to the North American continent and then our ongoing efforts to contain species once they do come into the North American continent.

We are very interested in partnering with the Senator, her staff and your staff, Mr. Chairman, on some program implementation aspects of the bill which we think would make it easier for the Service and the State Fish and Wildlife agencies to implement.

That would include stepping down some of the implementation ideas as well as looking at some of the exceptions that might be envisioned in the current version of the legislation.

Senator CARDIN. It would be helpful if you could get specific comments to us as soon as possible as far as legislative changes because I cannot speak for the Chairman of the committee, but I know the calendar is moving. There might be efforts made to move legislation as quickly as possible.

Any specific comments you have about language, it would certainly be helpful to get it to the committee and to Senator Gillibrand obviously.

Senator Blumenthal's proposal regarding the big cats, I didn't hear any specific reference to that in your presentation. Do you have comments regarding that specific bill?

Mr. GUERTIN. Yes, Mr. Chairman. We support the overall intent of the legislation which would amend the Lacey Act by clarifying provisions of the underlying Captive Wildlife Safety Act which would prohibit individuals from breeding and possessing prohibited wildlife species.

This would address the larger impact to public health and safety and we support the idea of grandfathering in those who already possess these animals.

We would like to work with the Senator and the committee leadership on some of the exemptions that we think are applied a little too broadly. Certainly main accredited institutions, zoos, universities and other programs would be fine under the language but we would like to take a critical look at some of the potential exemptions that might fall under that.

At the same time, we would like to work on other program implementation issues but we would be glad to set up a follow on staff level meeting to work through these kinds of program implementation issues, not policy level issues.

Senator CARDIN. Senator Heller's proposal dealing with the quagga mussel, do you have a view on that?

Mr. GUERTIN. Senator, we do not oppose listing the quagga mussel as injurious under the Lacey Act. We do have some concerns about the vision in there which would exempt a lot of publicly managed waterways. As currently worded, we believe that might be too big of a blanket exemption.

We know that the States are really leading the charge on combating quagga mussels and other invasive species. We recognize concerns from public water managers and others, but we think we need to sit down with folks to try and hammer out some way to address that.

Because of that, we cannot currently support the legislation because it includes that exemption.

Senator CARDIN. The exemption is too broad in that bill?

Mr. GUERTIN. Yes, sir.

Senator CARDIN. You have some concerns with Senator Blumenthal's bill, that the exemption may be too broad also, did I hear you correctly, some of the language in the Big Cats bill?

Mr. GUERTIN. Yes, sir.

Senator CARDIN. You will try to get information and work with the sponsors on both of those bills? It would be helpful to us.

In one example, we have legislation that would ease the restrictions related to Alaskan Native articles currently prohibited from sale, migratory bird parts. Do you have any advice to the committee on that?

Mr. GUERTIN. Mr. Chairman, we are talking about the Migratory Bird Treaty Act which ratifies four international treaties that guide step-down provisions within each of the host countries to manage migratory birds.

In looking at the language as written in the current bill, we believe there are some potential violations of the larger policy goals of those four international treaties and would like to take a look at that.

We also think a way to get after this issue exists. That is using the ongoing leadership and work of the Alaska Migratory Bird Co-

management Council which comprises representatives of the State of Alaska, Alaska Natives, Native corporations, as well as the Fish and Wildlife Service who are currently evaluating what kind of flexibility there might be, if any, under the Migratory Bird Treaty Act to allow Native American use in Alaska of some of these bird species.

An interesting footnote to all of this is the only time the larger international treaties have been amended was with Canada and even then did not address the subsistence use of bird parts and things like that.

We would like to sit down with the bill sponsors to look at that but urge the committee to allow the ongoing work of the commission in Alaska to potentially find a way forward on that situation as well.

Senator CARDIN. Thank you for your comments.

Mr. Shapiro, in regard to Senator Kirk's bill, you indicated you had some technical issues with the way that bill was drafted. Can you get those comments to us as quickly as possible?

Mr. SHAPIRO. We can provide specific comments. We may also want to discuss with the staff what we view as some lack of clarity in some of the provisions around the bypass portion of the bill. We would be happy to do that.

Senator CARDIN. Thank you.

Senator Boozman.

Senator BOOZMAN. Thank you very much, Mr. Chairman.

We appreciate both of you being here and also appreciate your hard work.

Mr. Shapiro, in the absence of legislation, does the Administration lack the needed authority to carry out its Great Lakes Restoration Initiative?

Mr. SHAPIRO. No, we continue to operate the Great Lakes Restoration Initiative under annual appropriations. The structure that has been set up is very similar to the one that would be put in place if the legislation we are discussing was passed.

The legislation would provide a firm statutory foundation for the Great Lakes Restoration Initiative, as well as the advisory board that would be created and the Interagency Task Force. That would provide some continuity and more ability to plan going forward knowing that those entities existed and had a statutory foundation.

Senator BOOZMAN. Mr. Guertin, you mentioned on the Resource Protection Act that currently criminal and vandalism fines are collected. What happens to the revenue now?

Mr. GUERTIN. Senator, that is a great question. Currently, if there is damage on a refuge, we have the authority to write the violator a ticket and collect a penalty which might be several hundred dollars. It goes to the General Fund of the Treasury, it does not come back to the refuge or hatchery where the damage took place.

If this legislation were enacted, it would give the Service the ability to also pursue restitution or recovery of the actual damages much as we do with an oil spill or something similar and directly allocate that money back to the field station to remedy the damages on the ground.

Senator BOOZMAN. You actually determine the amount of the ticket and then the Department of Justice—who collects it?

Mr. GUERTIN. Under current authority to write a citation, we have authority to collect a couple hundred dollars for a minor infraction up to $100,000.

Senator BOOZMAN. Then it goes into the General Fund?

Mr. GUERTIN. The Treasury.

Senator BOOZMAN. If this were to pass, do you envision increased law enforcement in these?

Mr. GUERTIN. Not necessarily, sir. We would have our ongoing eyes and ears of the refuge law enforcement program and other refuge personnel who would have this as a collateral duty.

Currently their frustration is if damage occurs, there is no way to pursue damage restitution and the bill is passed to the taxpayer. The same people on the ground now would be able to be leaders in moving forward on a potential solution for damage restoration.

Senator BOOZMAN. Mr. Shapiro, regarding the Cardin bill for trying to clean up the Great Lakes with the overflow from sewage, what would be required? What would the guilty or the dirty dozen be required to do to make it such that those overflows wouldn't happen?

Mr. SHAPIRO. The decisions they would have to make with regard to preventing overflows would have to be evaluated on a case by case basis. Some of that work may have already been done but I am not familiar with it.

In general, the kinds of things you would have to do is look at the sources of the excess water; in some cases you may want to use additional storage, expand certain kinds of treatment capacity and in some cases, there may be leakage of stormwater into parts of the system that can be avoided. There are a variety of measures that would be considered to be undertaken.

I would also note that in the bill, there are exemptions for extraordinary circumstances that would not result in a penalty. In general, some form of additional engineering would be necessary, an investment in order to prevent conditions leading to the overflow occurring.

Senator BOOZMAN. It must be there that there are a bunch of non-extraordinary circumstances occurring or you wouldn't need the bill.

Mr. SHAPIRO. Correct.

Senator BOOZMAN. Are these older treatment plants, do you think?

Mr. SHAPIRO. Are they older treatment plants?

Senator BOOZMAN. Yes. Would a newer sewage treatment plant be subject to as much problem with stormwater runoff or whatever the problem is?

Mr. SHAPIRO. Often, these problems are an accumulation throughout the entire system. It may not be a problem at the plant; it could be a problem dealing with how stormwater and in some cases, combined sewer discharges are collected and transported to the plant and leakages into the system.

Generally speaking, if it was a new plant, it would be designed for the right capacity. In some cases, it could be that the plant is simply pushed to the extreme of its capacity and needs more capac-

ity. That is a potential problem but there are other issues with the collection system and the management of water that could lead to problems that would force a bypass in the system.

Essentially, you have to bypass when there is just too much volume coming into the treatment units and rather than run the risk of destroying or damaging the treatment units, you are forced to have a bypass.

Senator BOOZMAN. Thank you very much.

Senator CARDIN. Senator Whitehouse.

Senator WHITEHOUSE. Thank you, Mr. Chairman.

Mr. Guertin, you were involved in the field, your organization, and taking care of a lot of the precious natural resources that many Americans enjoy from mountains to coasts and very warm areas to very cold areas.

Across that great span of geography, what are the sort of consequences you are beginning to see already in those properties as the result of climate change?

Mr. GUERTIN. Certainly we are seeing along many of our coastal refuges, particularly here on the eastern seaboard, the impacts of sea level rise which is starting to inundate a lot of coastal and estuarine habitats. We can point to a lot of that being caused by climate change.

As we move into the interior of the country, there is a growing belief that a lot of the severity and impacts from the big wildfires can be attributed as well. We are wildlife managers so we don't necessarily claim to be experts on the science behind the changing climate in and of itself.

Our mission is to evaluate what climatic changes are doing to the trust species the Fish and Wildlife Service oversees.

Senator WHITEHOUSE. You are seeing habitat changes, species moving into new areas where they weren't before, you are seeing invasive species and pests?

Mr. GUERTIN. Yes. The sad story is over and over again, when you add up the cumulative impacts of drought, fire, invasive species, exacerbated with an overlay of climate change, there are dramatic shifts in the composition of flora and fauna on many of the landscapes.

How the species are responding to that is what we are working on now and developing adaptation strategies under the Administration's Wildlife Adaptation Management Plan and stepping that down into the action agencies for implementation.

Senator WHITEHOUSE. Some of the natural resources that we find on this earth that are at risk and are actually suffering some consequences already are ones that in turn provide benefit to the environment. When you lose them, you don't just lose them, it creates a knock-on effect. A dune on a coast, when it is gone, doesn't protect the headlands behind it. A forest, when it is dead, doesn't protect the streams that run through it.

Could you elaborate a bit on the extent to which some of this natural infrastructure is actually providing ongoing value beyond its mere existence into the larger natural resource we all enjoy and depend on?

Mr. GUERTIN. I think a good example would be the intermountain west, Senator. When you add up the impacts from ongo-

ing drought and invasive species, pine bark beetle, and overlay that with a series of wildfires, overlay that with changing climatic conditions, we are seeing a large change in the composition of forests out there and the Rocky Mountain region in particular and the kind of animals that utilize those habitats out there.

That is a pretty striking example that comes home to roost every summer as communities and the wild urban interface have to struggle with the severity of these fires and the large amount of Federal dollars now being expended to protect the citizens, protect the public investment and infrastructure and protect these valuable natural resources well.

Senator WHITEHOUSE. Along the coasts, is it correct that there are often wetland verges between the upland and either the ocean coast or a lake or river coast that exist in a kind of dynamic environment? If they are overwhelmed and are no longer successful at maintaining themselves and disappear, you can then get considerable follow on changes.

I heard some of this when I was traveling along the southeastern Atlantic coast. There is a lot of storm protection, for instance, from these oceanside marshlands but if they get flooded so that creatures and grasses who maintain them cannot survive, then they turn into mud and wash away, and you have lost all that protection on the shore. Is that a simplified understanding?

Mr. GUERTIN. You are talking about seawater intrusion into freshwater habitats. There is a lot of that going on along the coast.

Our understanding is if you add up the cumulative impacts of changes in climatic conditions, erosion, invasive species, depending on where you are, fire or not, drought and such, we are seeing a change in the underlying habitat composition certainly on the eastern seaboard.

A lot of the Administration's work with congressional support moving forward is trying to develop more resilient coastlines by engineering natural systems to provide storm surge protection, a lot of work to try and prioritize where these key habitats are left and things like that.

Senator WHITEHOUSE. Thank you very much, Mr. Guertin.

Thank you, Mr. Chairman.

As the Senator from Maryland and me representing Rhode Island, coastal resiliency is something we have to pay a lot of attention to. I appreciate Mr. Guertin's testimony.

Senator CARDIN. You are absolutely right. Looking at your legislation, I see how it could very much benefit the State of Maryland. Thank you for being so concerned about the State of Maryland.

Thank you both very much. That will complete that panel.

We will now go to our non-governmental, non-Federal panel. Dr. Bruce Stein is the Director of Climate Change Adaptation at the National Wildlife Federation. Chad Lord is the Policy Director, Healing Our Waters—Great Lakes Coalition and Senior Director, Water Policy, of the National Parks Conservation Association. Last, we have Mr. Tony Wasley, Director of the Nevada Department of Wildlife.

We welcome all three of you. As I pointed out earlier, your written statements will be made a part of the record, without objection. You may proceed as you wish.

Dr. Stein, we will start with you.

STATEMENT OF BRUCE A. STEIN, Ph.D., DIRECTOR, CLIMATE CHANGE ADAPTATION, NATIONAL WILDLIFE FEDERATION

Mr. STEIN. Thank you very much, Chairman Cardin, Ranking Member Boozman and Senator Whitehouse, for the opportunity to share the National Wildlife Federation's view on several of the important bills with the potential to benefit the Nation's wildlife.

The National Wildlife Federation is a non-partisan, non-profit organization whose mission is to inspire Americans to protect wildlife for our children's future. NWF is supported by 49 State and territorial affiliates and more than 4 million members and supporters, including hunters, anglers and outdoor enthusiasts from across the Nation.

My written testimony addresses a number of the bills under consideration by the subcommittee at this hearing. Here, I would like to focus on several bills that we support of particular interest to NWF.

Regarding climate change, climate change is no longer a distant concern but already is affecting people and wildlife across the Nation. A rapidly changing climate, in fact, is emerging as the primary conservation challenge of our time. National resource managers increasingly will need to adopt climate smart approaches to conservation.

S. 1202, the SAFE Act, introduced by Senator Whitehouse, is designed to help Federal and State agencies more effectively prepare for and adjust to the growing impacts of climate change on our Nation's natural resources.

Considerable progress is now being made to incorporate climate adaptation and resilience into work across the Federal Government. The SAFE Act builds on a number of these important initiatives.

In particular, the legislation would codify the National Fish, Wildlife and Plants Climate Adaptation Strategy and encourage implementation of this comprehensive blueprint for adaptation and resilience. It would also authorize key programs in the U.S. Geological Survey that focus on improving the scientific basis for reducing climate-related risk to wildlife and ecosystems.

Climate adaptation will have costs but the cost of inaction would be far higher. The sooner we begin taking meaningful adaptation action, the more successful these efforts ultimately will be.

Invasive species are another issue of grave concern to the National Wildlife Federation. We believe that the most effective approach to combating invasive species is by closing the pathways through which these species enter the country and spread; in other words, prevention.

S. 1153, the Invasive Fish and Wildlife Prevention Act, introduced by Senator Gillibrand, would help close those invasion pathways by modernizing the Nation's antiquated systems governing the import and interstate transport of harmful, non-native animals.

Current law provides the Fish and Wildlife Service with only limited powers to declare a species as injurious, a process that is painfully slow and expensive. S. 1153 would strengthen the ability of the Service to make timely, science-based decisions as to whether

a candidate for import is likely to be harmful to the Nation's ecosystems and economy.

The legislation would also give the Service emergency listing authority similar to what USDA and the CDC already have to regulate imports that present disease risks.

Quagga mussels, in fact, are an example of this need for modernization. A close relative of zebra mussels, as you have heard, they are spreading through western waterways, and listing is urgently needed to contain their damage.

To expedite their listing as an injurious species, S. 2530, the Protecting Lakes Against Quaggas Act, would provide statutory listing of this species.

The Great Lakes are a unique and vital ecosystem that face a variety of serious ecological threats from polluted runoff such as we just heard about to a potential invasion of veracious Asian carp. The Great Lakes Restoration Initiative, GLRI, was established to address various threats to the Lakes. Since its inception, it has been enormously effect.

S. 1232, the Great Lakes Ecological and Economic Protection Act, introduced by Senator Levin, would provide formal authorization for the GLRI and ensure continued progress in restoring the Great Lakes.

NWF is a member of the Healing Our Waters Coalition. Chad Lord, to my left, will be offering additional testimony on this bill on behalf of that coalition.

Finally, S. 2560, the United States Fish and Wildlife Service Resource Protection Act, introduced by Chairman Cardin, would provide the Service with needed authority to receive compensation for damage caused by others to national wildlife refuges.

Most refuges already are underfunded and currently repair of such damage must come from already strained budgets. The National Park Service and NOAA, in contrast, can recover any use damages for harm done to their property or resources. This legislation would confer similar authority to the Service and is a common sense solution to paying for the damages from vandalism and other destructive acts.

In closing, healthy wildlife populations and habitats are core to who we are as a Nation. NWF is pleased to see Members of Congress put forward legislation to address a number of important wildlife related issues.

We look forward to continuing to work with you to develop and pass legislation designed to protect wildlife and the habitats on which they and we depend.

Thank you and I look forward to answering any questions.

[The prepared statement of Mr. Stein follows:]

Testimony of Bruce A. Stein, Ph.D.
Director, Climate Change Adaptation
National Wildlife Federation

United States Senate
U.S. Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife
Legislative Hearing
July 16, 2014

Thank you Chairman Cardin, Ranking Member Boozman, and members of the Subcommittee for the opportunity to share the National Wildlife Federation's views on several important pieces of legislation with the potential to benefit our nation's wildlife. NWF is a non-partisan, non-profit organization whose mission is to inspire Americans to protect wildlife for our children's future. National Wildlife Federation is supported by 49 state and territorial affiliates, and more than 4 million members and supporters including hunters, anglers, backyard gardeners, birdwatchers and many other outdoor enthusiasts from throughout the nation.

NWF commends this committee and the sponsors of the bills being discussed today for working to address some of the greatest threats to wildlife and ensure that Americans across the country will continue to enjoy the benefits of robust and healthy ecosystems, and wildlife populations. Today I will comment on several pieces of legislation that if enacted would help wildlife adapt to a warming climate, combat the spread of invasive species, protect and restore the Great Lakes, and ensure that the U.S. Fish and Wildlife service has the needed tools to protect its refuges and the wildlife that inhabits them. The issues covered by these bills pose significant threats not only to our nation's wildlife and habitats, but also to the American people, whose safety and prosperity depends on the availability of healthy ecosystems and abundant natural resources.

Preparing for the Impacts of Climate Change

People and wildlife across the nation are already experiencing the impacts of climate change, ecologically and economically. These impacts are no longer a distant concern – they are happening right now, as documented in the recently released Third National Climate Assessment.[1] As a result, an increasingly variable and rapidly changing climate must be viewed as the primary conservation challenge of our time. Addressing the growing threats brought about or accentuated by rapid climate change will require a fundamental shift in the practice of natural resource management and conservation. Resource managers and conservationists increasingly will need to adopt forward-looking goals and implement strategies specifically designed to prepare for, and adjust to, current and future climatic changes—an emerging discipline known as climate change adaptation.[2,3]

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[1] Melillo et al. 2014. Highlights of Climate Change Impacts in the United States: The Third National Climate Assessment. Washington, DC: U.S. Global Change Research Program. (http://nca2014.globalchange.gov/report)
[2] Stein et al. 2013. Preparing for and managing change: Climate adaptation for biodiversity and ecosystems. Frontiers in Ecology and the Environment 11: 502-510. (www.esajournals.org/doi/abs/10.1890/120277)
[3] Stein et al. 2014. *Climate-Smart Conservation: Putting Adaptation Principles into Practice*. Washington, DC: National Wildlife Federation. (www.nwf.org/climatesmartguide)

S. 1202, Safeguarding America's Future and Environment (SAFE) Act

The SAFE Act, sponsored by Senator Whitehouse, is designed to help federal and state agencies effectively prepare for and address the growing impacts of climate change on our nation's natural resources. Preparing now for these changes will enable us to reduce the long-term costs of climate change and sustain the many benefits that our natural resources provide to the American people by contributing to our health, safety, and economy.

Considerable progress is being made to incorporate climate adaptation and resilience into work across the federal government. Despite this progress, the growing risks climate change poses to people and wildlife requires even more action, both to better understand climate-related risks and to put in place mechanisms to reduce climate-related impacts and vulnerabilities. The SAFE Act builds on a number of existing initiatives, and by codifying and authorizing these activities we will ensure that progress to address climate impacts to the nation's wildlife, ecosystems and human communities not only continue but are enhanced.

The recently released National Fish, Wildlife, and Plants Climate Adaptation Strategy offers a comprehensive roadmap for federal, state, and tribal activities designed to address this challenge. Building on the foundation laid out in this national strategy, the SAFE Act will create an integrated federal program, promote implementation of the strategy, and facilitate public and private collaboration in planning for and managing natural resources in the face of a changing climate.

This legislation will:

- Codify the National Fish, Wildlife and Plants Climate Adaptation Strategy, set a timeline for future updates, and encourage full agency implementation;
- Authorize the National Climate Change and Wildlife Science Center within the U.S. Geological Survey to improve scientific basis for reducing climate-related impacts and risks to wildlife and ecosystems;
- Include strategies to reduce costs and maximize efficiency for natural resource protection;
- Provide context for directing future financial resources that Congress allocates to the States to address natural resource climate adaptation;
- Ensure the continuity of natural resources climate adaptation programs and initiatives.

Since 1980, the United States has sustained 151 climate-related disasters where overall damages have reached or exceed $1 billion, for a total cost in excess of $1 trillion. In response to Hurricane Sandy, Congress recently directed $360 million to address the natural resource impacts and build resilience of coastal areas to future storms. Over the past 50 years, sea levels rose 8 inches or more along parts of the Atlantic and Gulf coasts and are already eroding shorelines and inundating wetlands, increasing the risk to communities from future storms.

Natural resources drive a critical sector of our national economy. According to a 2012 Outdoor Industry Association report, the total annual economic value of outdoor recreation – including camping, wildlife, viewing, and hunting – equals $646 billion. As states depend on the economic activity generated by our natural resources to sustain local communities, it is important that we take action to protect these resources by preparing for future storms, more extreme weather, and other conditions associated with climate change.

Although climate adaptation will have costs, the cost of inaction—through continuing with business as usual—is likely to be far higher. The sooner we begin the task of planning for a climate-altered future and taking meaningful adaptation action, the more successful these efforts ultimately will be. It is imperative that natural resource managers begin to act now to prepare for and manage these changes, in order to provide the best chance for cherished conservation values to endure. The SAFE Act, by focusing on preparing for and managing climate-related risks, can make a difference by sustaining our nation's diverse species and ecosystems well into the future. Indeed, protecting our rich conservation legacy depends on our rising to this challenge.

Combatting Invasive Species

Invasive species pose an enormous risk to our native wildlife, and impose huge costs to the nation's economy. The introduction and spread of harmful invasive species has caused or contributed to the decline of many species of fish and wildlife, including many of the rarest and most endangered, and is estimated to cost the U.S. economy more than $100 billion a year.[4] These risks are only expected to increase due to the confluence of a number of factors, including increases in international trade and a changing climate that will make the U.S. habitable by a wider array of potentially invasive organisms as well as enabling others to further spread.

The National Wildlife Federation, a founding member of the National Environmental Coalition on Invasive Species (NECIS), believes that the nation's top priority for combatting invasive species must be closing the pathways by which additional harmful species enter the country and spread. Until these pathways are closed, managing established invasions will be a never-ending burden. We must also, however, put the tools, authorities, and funding in place to limit the spread of existing invaders that are already wreaking havoc on our nation's lands and waterways.

Two bills being considered today by the committee address these twin concerns. **S. 1153, the Invasive Fish and Wildlife Prevention Act** focuses on modernizing the nation's antiquated systems governing the importation and inter-state transport of potentially harmful non-native species, while **S. 2530, the Protecting Lakes Against Quaggas Act (PLAQ Act)** is urgently needed precisely because of deficiencies in current federal authorities to regulate and stop the transport and spread of harmful invasives, like the quagga mussel.

S. 1153, Invasive Fish and Wildlife Prevention Act

The Invasive Fish and Wildlife Prevention Act would modernize our nation's laws on the importation and inter-state transport of non-native animals by strengthening the ability of the U.S. Fish and Wildlife Service to make timely, science-based decisions as to whether a candidate for importation is likely to be harmful to the nation's ecosystems and economy. Strengthening this risk determination process will be instrumental in halting the introduction of foreign species that pose a high risk to the economy, the environment, human health or native wildlife, and will ultimately save taxpayers hundreds of millions of dollars every year in damages and control costs. Global trade has increased enormously over the past several decades, and with it the volume of live animal imports into the United States, including some that have become invasive

[4] Pimentel et al. 2006. Update on the environmental and economic costs associated with alien-invasive species in the United States. Ecological Economics 52: 273-288.

and caused extensive ecological and economic damage. Incredibly, in this age of global jet travel, the current system for regulating live animal importation relies on a law—the Lacey Act—enacted in 1900 prior to the Wright Brothers first self-propelled flights!

Current law provides the U.S. Fish and Wildlife Service with only limited powers to declare non-native species as "injurious" and to prohibit the importation and interstate sales of harmful species. This outdated approach is painfully slow, particularly given the rapidity of global trade; currently it takes, on average, about four years to complete a Lacey Act injurious species listing. This regulatory approach is both costly and ineffective, and often results in listings occurring following a successful invasion, rather than being proactive and preventing the introduction and invasion of harmful species. As a result, land and water managers are faced with expending scarce financial resources to control harmful species, such as red lionfish or Nile monitor, while the same animals continue to be imported and sold, compounding the invasion risk from these species. This legislation will allow the FWS to stem the flood of unwelcome, non-native invasive species that have damaged this nation, from the Burmese python and nutria invading fragile wetlands, to the Asian carp threatening major ecological and economic harm to the Great Lakes, to the chytrid fungus, a disease devastating our native frogs.

The Invasive Fish and Wildlife Prevention Act would provide vital new policy guidance and regulatory tools to the U.S. Fish and Wildlife Service, the agency that implements the Lacey Act. Scientific methods for assessing invasion risks from new imports have increased considerably in recent years. S 1153 seeks to take advantage of such scientific advances and put them to use to improve risk screening for the live animal import trade, and prevent the introduction of new harmful invasives. The legislation would direct the Service to speed up the current listing approach by cutting through unnecessary "red tape" and taking full advantage of modern risk prediction science.

This legislation would also give the Fish and Wildlife Service emergency listing authority, similar to what the U.S. Department of Agriculture already has to regulate imports that present risks to livestock or to plant crops, and to what the Centers for Disease Control already have to regulate imports that present human disease risks. The legislation would provide the Service with clear authority (which no agency currently has) to regulate threats of diseases of wildlife. Emerging wildlife diseases, such as white-nose syndrome in bats and chytrid fungus for amphibians, has become increasing problematic and a major driver of wildlife population declines and species extinctions. And the legislation would create a more flexible two-tiered system for regulating harmful species by distinguishing between species with the very highest risk levels (injurious species 1), which should only be imported or moved interstate pursuant to special permits, and those with somewhat lower risks (injurious species 2) that can readily be managed by zoos, aquaria and educational and research institutions without need for a Federal permit.

S. 2530, Protecting Lakes Against Quaggas Act (PLAQ Act)

Quagga mussels are an aggressive and harmful aquatic invasive that is closely related to the more widely known zebra mussels. Both quagga and zebra mussels are wreaking havoc on ecosystems across the United States. These bivalves reproduce rapidly and attach to various surfaces in freshwater ways, clogging water structures and negatively impacting commercial and recreational fishing, boating, and other activities. Together, these mussels have racked up an

estimated $5 billion bill in prevention and control efforts since their accidental introduction, likely from ship ballast water discharge, to the Great Lakes in the 1980s, more than any other aquatic species invader.

At the time that the zebra mussel (*Dreissena polymorpha*) was listed as "injurious" under the Lacey Act, the relationship, introduction status, and risks associated with related species in the genus *Dreissena* were not well understood. Therefore, rather than listing the entire genus as injurious, only *D. polymorpha* was listed. Because of the rapid spread of quagga mussels (*D. rostriformis*) in waterways, especially in the western United States, and the consequent ecological and economic damages, there is an urgent need to include this species on the list of injurious species by broadening injurious species status to all species in the genus *Dreissena*. Time is of the essence in stopping the spread of this very aggressive and damaging invader, and due to the structural delays in the current Lacey Act listing process (noted above and which would be rectified by the reforms embodied in S. 1153), the National Wildlife Federation supports statutory listing of this species as described in the PLAQ Act. This statutory listing will provide the U.S. Fish and Wildlife Service with new tools to prevent the spread of quaggas to new regions of the United States, including currently uninvaded bodies of water in Nevada and across the West.

Protecting and Restoring the Great Lakes

Although NWF works across the nation on important conservation issues, we have a special interest in protecting and restoring the Great Lakes. The reasons are obvious. The Great Lakes contain about 85 percent of North America's fresh surface water and over 20 percent of the fresh water worldwide; they are a unique and vital ecosystem, and an important economic engine throughout the region. The Great Lakes basin supports a diverse range of industries and small businesses, supporting an estimated 1.5 million American jobs. More than 30 million Americans live within the Great Lakes basin and rely on the Great Lakes as the source of safe drinking water, transportation, and recreation.

The Great Lakes, however, face significant ecological threats and are highly sensitive to the effects of a variety of pollutants. Challenges include invasive species, polluted runoff, habitat destruction, and toxic hot spots throughout the basin. In addition, the effects of climate change are being felt across the region as large precipitation events and warmer winters are exacerbating excess nutrient runoff and causing lower water levels in the Great Lakes themselves when less ice cover produces more evaporation.

As recently as 2003, the Government Accountability Office (GAO) was decrying the lack of coordination among federal agencies working in the Great Lakes, and also noted the lack of a cohesive restoration plan for the most significant freshwater resource on the planet – our Great Lakes. Since that time, a bipartisan group of members of Congress and a broad coalition of interests from across the Great Lakes have worked together to first produce the Great Lakes Regional Collaboration document, which became a blueprint for action for the region. Then in 2010, President Obama proposed and Congress funded, the Great Lakes Restoration Initiative. Over the last five years, Congress has appropriated $1.6 billion to support this interagency effort that builds on the collaborative strategy from the previous Administration.

S. 1232, Great Lakes Ecological and Economic Protection Act (GLEEPA)

NWF strongly supports S. 1232, which will help protect and restore the Great Lakes' precious natural resources and boost the economic growth in the Great Lakes region. This bill would formally authorize the Great Lakes Restoration Initiative (GLRI) and direct the implementation of recommendations presented in the Great Lakes Regional Collaboration Strategy of 2005 and the Great Lakes Restoration Initiative Action Plan.

The GLRI is an action-oriented, results-driven initiative targeting the most significant problems within the basin, including aquatic invasive species, toxics and contaminated sediment, nonpoint source pollution, and habitat and wildlife protection and restoration. Among the GLRI's successes are:

- Twenty-two (22) beneficial use impairments and 13 Areas of Concern have been removed. In fact, nearly three times as many impaired water segments have been restored in the Basin since the GLRI began in 2010 than in the previous 22 years; replaced by hope for a bright economic future in these spots that for so long were pegged as places of persistent pollution.
- Over 100,000 acres of wetlands and other habitat in the Great Lakes have been restored to date;
- Nearly 2,000 river miles have been cleared of barriers resulting in fish swimming into stretches of river where they have been absent for decades.

These are real, tangible, victories. Just last fall a GAO report confirmed that federal Great Lakes restoration efforts are on the right track. The report sends a strong signal to federal public officials to maintain support for the Great Lakes Restoration Initiative in the federal budget as well as act to confront other urgent threats such as climate change and sewage contamination that can undermine restoration efforts.

Now it is time to authorize these activities for the long haul. The progress we have seen in the Great Lakes over the last five years is a good start but is still just a down payment on the work that must continue in the decades to come.

The Great Lakes Ecological and Economic Protection Act would:

- Authorize the appropriations for the GLRI at $475 million annually.
- Reauthorize the Great Lakes National Program Office (GLNPO) — EPA's National Program Office is the primary office within the agency for handling Great Lakes matters, including the GLRI, Great Lakes Water Quality Agreement (GLWQA), the Great Lakes Legacy Program, Remedial Action Plans for Areas of Concern and Lakewide Management Plans;
- Reauthorize the Great Lakes Legacy Act. The Great Lakes Legacy program was first authorized in 2002 and has been extremely successful at removing contaminated sediment from the U.S. Areas of Concern (AOC). There are 31 U.S. AOCs in the U.S. and shared with Canada; since those areas were identified in 1987, only two U.S. AOCs have been delisted – Oswego (NY) and Presque Isle Bay (PA).
- Authorize the Federal Interagency Task Force. The Great Lakes Interagency Task Force (IATF) brings together eleven U.S. Cabinet and federal agency heads to coordinate restoration of the Great Lakes amongst the different agencies.

- Authorize the Great Lakes Advisory Board. The Great Lakes Advisory Board (GLAB) provides advice and recommendations to the EPA Administrator, as Chair of the Great Lakes Interagency Task Force, on matters pertaining to Great Lakes restoration and protection.

In an era of extreme pessimism about what the federal government can do to us, we see the GLRI as a shining example of what the federal government can do for us. It is time to take this initiative to the next level.

S. 571, Great Lakes Protection Act

This legislation addresses one of the most serious problems in the Great Lakes: sewer overflows. Antiquated wastewater systems spill tens of billions of gallons of partially treated sewage and stormwater into the Great Lakes every year, closing beaches, threatening public health, and undermining the quality of life for the millions of people who call the region home.

In 2011, Chicago, Cleveland, and Detroit alone sent more than 63 billion gallons of raw and partially treated sewage combined with stormwater, a volume of polluted water equaling the amount of water that flows over Niagara Falls during a 15-hour period. These discharges sicken people, force beach closures, prompt health advisories, harm wildlife, and hurt tourism. Beach closures due to sewer overflows can have a serious negative impact on local economies. With eight million swimmers and 80 million swimming days in the Great Lakes region each year, tourism revenue from beach visits is big business and vital to many communities. These spills have clear economic and environmental impacts on the lakes' ecosystem and communities.

These overflows are most often the result of out-dated wastewater infrastructure. Many sewer systems in the Great Lakes region collect stormwater and wastewater in the same pipes, some of which may be close to 100 years old. Normally wastewater treatment plants can handle this combination. However, when it rains hard, exactly what the models predict will happen more frequently in the Midwest as a result of climate change, the influx of rain water overwhelms the region's old, outdated wastewater infrastructure sending the polluted waste into regional waterways and into the Great Lakes themselves.

Combined sewer discharges can be stopped, but, because the problem is so big, it will take a long-term commitment to do so. U.S. EPA predicts $338 billion in upgrades is needed nationwide over the next 20 years. The Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes called for at least $14 billion to help cities halt sewage overflows and protect Great Lakes water quality.

S. 571 provides the incentive needed for communities to make real progress to address this issue. This bill would prohibit overflows after 2033, giving counties, cities, and other jurisdictions plenty of time to act. Another important part of his bill is its requirement for greater transparency and public notification protocols about when an overflow occurs, how much was discharged, and where it occurred. Rapid access to this information protects the public's health by alerting them to areas where the water quality has been impaired by human waste, excessive nutrients, untreated industrial waste, and many other things. It also assists businesses by more accurately tracking an overflow, ensuring beaches and other areas aren't closed unnecessarily or longer than needed.

Enabling the Work of the U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service is the primary federal agency responsible for protecting wildlife and the habitats on which they depend. This is accomplished through both regulatory action, particularly focused on trust resources (e.g., migratory birds, endangered species), and land and water management responsibilities, primarily through management of the 150 million acres included in the National Wildlife Refuge system. Two bills under consideration by the subcommittee are directly relevant to providing the U.S. Fish and Wildlife Service the tools needed to carry out their responsibilities. S. 2560 provides the ability for the Service to receive compensation for damages caused to Service properties and use those funds to address the damages. H.R. 1300 reinforces the Fish and Wildlife Service's authority to work with volunteers, and further facilitates volunteer-refuge partnerships.

S. 2560, United States Fish and Wildlife Service Resource Protection Act

The National Wildlife Federation, a member of the Cooperative Alliance for Refuge Enhancement (CARE), strongly supports the U.S. Fish and Wildlife Service Resources Protection Act introduced by Senator Cardin. We see this as a commonsense solution to a long-standing and ill-conceived reimbursement arrangement. Currently, the U.S. Fish and Wildlife System does not have the authority to receive compensation from responsible parties for damage done to National Wildlife Refuges or other resources under the agency's control. While both the National Park Service and the National Oceanic and Atmospheric Administration can recover damages for harm done to their property or resources, the Refuge System must cover those costs from their already appropriated budget. This arrangement can, and has, significantly impacted existing refuge programs by diverting already scarce resources towards fixing problems caused by others.

National Wildlife Refuges are owned by all Americans. When individuals cause harm, intentionally or not, they—not taxpayers—should bear the costs of remedying those damages. Under the current system, the Fish and Wildlife Service has to pay to remedy these damages out of their existing budget, funded by taxpayers, rather than using the perpetrator's own money. For instance, in 2010, thirty-nine reported arson cases caused $850,000 in damages to refuge system resources. The Fish and Wildlife Service recouped no funds for those damages and had to pay out of pocket to assess, repair and replace structures and habitat harmed by those fires. In 2011, over 2,400 cases of vandalism were reported; the Fish and Wildlife Service had to cover the cost of the $404,000 worth of damage done and received no reimbursement for their expenses. Spending existing budget allocations on these crimes takes resources and attention away from important programs that protect habitat, provide visitors services, and manage fish and wildlife populations.

This legislation would allow monetary damages to be collected and processed through the Department of Interior's Natural Resources Damage Assessment and Restoration Fund, thereby allowing FWS to track the funds and ensure they are used on the appropriate restoration projects. Damages will be applied directly to the harm done. Money collected will be used to:

- Reimburse assessment costs;
- Prevent or minimize resource loss;
- Abate or minimize the risk of loss, monitor ongoing effects; and/or
- Replace, restore or acquire resources equivalent to those injured or destroyed

The National Wildlife Refuge System is already dealing with severe budget cuts, while simultaneously facing new and costly challenges stemming from a changing climate and the subsequent increases in invasive and injurious species. Senator Cardin's bill, S. 2560, shifts the burden of restoring harmed resources away from an over-extended agency and onto the criminals who inflict the damages. By making those responsible foot the bill, the Service will be able to fulfill its mission of protecting these unique habitats and ecosystems for future generations of American outdoorsmen and women.

H.R. 1300, The Volunteer and Community Partnership Act of 2013

As a staunch advocate for the National Wildlife Refuge System, the National Wildlife Federation is a strong supporter of H.R. 1300, the Volunteer and Community Partnership Act of 2013. Not only are National Wildlife Refuges home to thousands of unique plant and animal species, they are a huge economic driver for local communities and for our country. For each dollar appropriated, local economies enjoy a return of $4.87. Refuges play host to over 46 million visitors annually, generating $2.4 billion in economic gain.

Volunteers are hugely instrumental in ensuring a functioning and successful National Wildlife Refuge System. Volunteers work on controlling invasive species, assist with restoration and climate adaptation projects, and help educate and host the millions of visitors who spend time at our nation's refuges. Last year, more than 38,000 people contributed more than 1.4 million hours as volunteers, a contribution equivalent to an additional 702 full-time employees and valued at $31 million. But volunteers cannot replace full-time, paid staff. As the Refuge System has seen its budget slashed in recent years, staff working as volunteer coordinators have lost their jobs. The result is a significant decline in the number of people volunteering, just when these refuges need the most help.

H.R. 1300 reinforces the Fish and Wildlife Service's authority to work with volunteers, and further facilitates volunteer-refuge partnerships that have resulted in significant improvements to the refuge system. The National Wildlife Federation sees the benefit of volunteer programs in our national parks, refuges, and public lands as instrumental to training the next generation of conservationists, sportsmen and wildlife enthusiasts.

Conclusion

As detailed throughout this testimony, wildlife is facing unprecedented challenges, from changing climates, spreading invasive species, degraded habitats, and lack of resources for management. These challenges jeopardize not only wildlife itself, but the countless recreational industries and much loved pastimes such as hunting, fishing, hiking and birding that are dependent upon healthy and flourishing wildlife populations. Furthermore, healthy ecosystems are essential for maintaining the health and safety of the American people. NWF is pleased to see

members of Congress put forward legislation to address some of these important wildlife-related issues and would be pleased to work with you to continue to develop and pass legislation to protect and restore wildlife and the habitats on which depend.

Senator CARDIN. Thank you, Dr. Stein.
Mr. Lord.

STATEMENT OF CHAD LORD, POLICY DIRECTOR, HEALING OUR WATERS—GREAT LAKES COALITION, AND SENIOR DIRECTOR, WATER POLICY, NATIONAL PARKS CONSERVATION ASSOCIATION

Mr. LORD. Chairman Cardin, Ranking Member Boozman and Senator Whitehouse, thank you for inviting me to testify here today.

The bills before the subcommittee all seem to do the same thing, protect our country's natural resources for future generations. Most of these bills benefit either our national parks, our Great Lakes or both.

First, we appreciate the subcommittee considering legislation that helps our environment adapt to a changing climate. Senator Whitehouse's bill is a non-regulatory bill that builds upon existing Federal initiatives to set a framework for coordination on natural resource adaptation planning. This is important to our national parks.

Rising waters and intense storms threaten our national monuments in Washington, DC, historical structures in the southeast and archeological evidence of the earliest settlers in Alaska. Glaciers that have for decades brought families to national parks in Montana, Alaska and Washington are vanishing.

Though we cannot prevent some of the effects of climate change from occurring, we can slow climate-related changes by reducing the amount of carbon dioxide we emit to the atmosphere. We can and need to also ensure that we are as well prepared as possible.

This principle also applies to Senator Heller's invasive species bill that addresses the damage caused by a particularly nasty invasive mussel by listing them as injurious under the Lacey Act. If there is any experience the Great Lakes does not want to share with western waters, it is the damage caused by the quagga mussel.

These little creatures have caused billions of dollars in damage throughout the Great Lakes region and have undermined entire lake ecosystems. Six hundred waterways and 27 States are also now dealing with this problem.

Invasive species are destroying the natural resources in our national parks and wrecking the Great Lakes and other waters around the country. Invasive species cost the United States more than $120 billion in damages every year. It would be much better for our national parks, Great Lakes and all our ecosystems if we weren't intentionally importing things that cause such damage to American landscapes.

Senator Gillibrand's bill goes a long way in updating a 114-year-old law, bringing U.S. screening standards into the 21st century, reducing the damage to our economy and environment and allowing our public lands agencies to focus on other critical problems.

Wearing my Great Lakes hat, I want to particularly thank the subcommittee for considering two bills designed to help restore and protect 20 percent of the world's fresh surface water. To put that

in perspective, the water in Lake Superior alone is enough to submerge all of North and South America in 1 foot of fresh water.

Even though they are huge, they are still vulnerable to a number of threats from invasive species, habitat loss, toxic pollution and sewer overflows which is the focus of Senator Kirk's bill. His bill would prohibit sewer overflows on the Great Lakes Basin after 2033. His bill also sets region-wide reporting standards so everyone everywhere throughout this region knows when overflows occur.

Even if sewer overflows end tomorrow, the region is still left with a legacy of environmental damage caused by years of neglect. A new legacy is being written right now in the region, one where States, cities, tribes, Federal agencies and citizens have come together to do something about the Great Lakes' problems.

In 2005, the region established for itself a restoration blueprint, the result of a process kicked off by an Executive Order from President George W. Bush. President Obama followed up with an implementation plan and Congress has provided the resources for the restoration work through something called the Great Lakes Restoration Initiative, GLRI.

The results of all this bipartisan support have been impressive. Toxic hot spots cleaned up after years of waiting create new economic opportunities. Thousands of acres of wetlands have been restored creating new, self-sustaining populations of fish like Lake Sturgeon. Ag lands put into conservation practices reduce algae producing runoff.

Now is the time for Congress to authorize the GLRI for the long haul. The GLRI has broad based support from cities, States, chambers of commerce, tribes, industry and the more than 115 non-governmental organizations that make up the Healing Our Waters Coalition.

This initiative is driven from the ground up, coordinates implementation activities and has created what your former colleague, Senator George Voinovich, kept calling for, an orchestra leader at the USEPA. It creates an effective and efficient mechanism for getting resources to the right places to do the right things on the ground and responds to the GAO. Most importantly, it is producing results.

Senator Levin's bill authorizes the GLRI, among other important Great Lakes programs, putting in place a framework needed for ongoing and future success. Congresses and Presidents change; the Lakes are with us forever.

We hope this committee will mark up this bill and send a strong message of support for this continuing work to transform last century's rust belt into this century's water belt of America. Moving Senator Levin's bill would also be a fitting tribute to one of your colleagues, a man who has fought for the Great Lakes his entire career.

Thank you again for inviting me to testify today. I am happy to answer any questions you may have.

[The prepared statement of Mr. Lord follows:]

Testimony of Chad W. Lord
Senior Director, Water Policy, National Parks Conservation Association
Policy Director, Healing Our Waters-Great Lakes Coalition
Before the Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife
"Legislative Hearing"

June 16, 2014

Chairman Cardin, Ranking Member Boozman, members of the subcommittee – thank you for the opportunity to testify today on a number of bills under consideration. I am here today on behalf of both the National Parks Conservation Association (NPCA) and the Healing Our Waters-Great Lakes Coalition (HOW Coalition).

For more than 90 years, NPCA has been advocating for our national parks and the National Park Service, educating decision makers and the public about the importance of preserving the parks, helping convince members of Congress to uphold the laws that protect the parks and to support new legislation to address threats to the parks, fighting attempts to weaken these laws, and assessing the health of the parks and park management to better inform our advocacy work. We believe that America's national parks and historical sites embody the American spirit. They are windows to our past, homes to some of our rarest plants and animal species, and places where every American can go to find inspiration, peace, and open space. But these living, breathing monuments to our nation's history, culture, and landscape need care and support to overcome the many dangers that threaten to destroy them forever. At NPCA, we work every day to ensure our national parks get the vital care and support they deserve.

The HOW Coalition takes a similar approach to our Great Lakes. The Coalition is comprised of more than 115 environmental, conservation, hunting, and fishing organizations; museums, zoos, and aquariums; and businesses representing millions of people whose goal is to restore and protect North America's greatest freshwater resource, our Great Lakes. The Great Lakes are a global resource. Over 30 million people depend on them for their drinking water, and millions more benefit from the business, industry and commerce that is connected to them. Today, the lakes suffer from a legacy of toxic pollution, the introduction and spread of invasive species, and the loss and degradation of habitat. Our Coalition's goal is to continue to implement our restoration blueprint to stop sewage contamination that closes beaches and harms recreational opportunities; clean up toxic sediments that threaten the health of people and wildlife; prevent polluted runoff from cities and farms that harm water quality; restore and protect wetlands and wildlife habitat that filter pollutants, provide a home for fish and wildlife, and support the region's outdoor recreation economy; and prevent the introduction of invasive species, such as Asian carp, that threaten the economy and quality of life for millions of people.

Today, the subcommittee is considering eleven bills, most of which directly benefit either our national parks, our Great Lakes, or both.

S. 571, the Great Lakes Protection Act

Members of the HOW Coalition support this legislation because it addresses one of the most serious problems in the Great Lakes: sewer overflows. Antiquated wastewater systems spill tens of billions of gallons of partially treated sewage and stormwater into the Great Lakes every year, closing beaches, threatening public health, and undermining the quality of life for the millions of people who call the region home. In 2011, Chicago, Cleveland, and Detroit alone sent more than 63 billion gallons of raw and partially treated sewage combined with stormwater into the Great Lakes, a volume of polluted water equaling the amount of water that flows over Niagara Falls during a 15-hour period. These discharges sicken people, force beach closures, prompt health advisories, harm wildlife, and hurt tourism. Beach closures due to sewer overflows can have a serious negative impact on local economies. With eight million swimmers regionally and 80 million swimming days each year, tourism revenue from beach visits is big business and vital to many communities around the region. These spills have clear economic and environmental impacts on the lakes' ecosystem and communities.

Why do these overflows occur? These overflows are most often the result of old wastewater infrastructure. Many sewer systems in the Great Lakes region collect stormwater and wastewater in the same pipes, some of which may be close to 100 years old. Normally wastewater treatment plants can handle this combination. However, when it rains hard, which is happening more frequently every year, the influx of rain water overwhelms the region's old, outdated wastewater infrastructure sending the polluted waste into regional waterways and into the Great Lakes themselves.

These combined sewer discharges can be stopped, but it will take a long-term commitment to do so because the problem is so big. The American Society of Civil Engineers in 2013 gave America's wastewater infrastructure a grade of "D." The Great Lakes Regional Collaboration "Strategy to Restore and Protect the Great Lakes" called in 2005 for at least $14 billion to help Great Lakes cities halt sewage overflows and protect Great Lakes water quality.

Senator Kirk's bill won't end overflows overnight, but it will hopefully provide the incentive needed for communities to make real progress on separating their sewers or taking other actions to address this issue. This bill would prohibit overflows after 2033, giving counties, cities, and other jurisdictions plenty of time to act. After then increased fines would be leveled for each overflow and those fines reserved to help others with wastewater treatment options with a special focus on habitat protection and wetland restoration. It has no impact on the state formulas set by the Clean Water State Revolving Fund program.

Another important part of his bill that shouldn't be overlooked is its requirement for greater transparency and public notification protocols about when an overflow occurs, how much was discharged, and where it occurred. Rapid access to this information protects the public's health by alerting families to areas where the water quality has been impaired by human waste, excessive nutrients, untreated industrial waste, and many other things. It also assists businesses by more accurately tracking an overflow ensuring beaches and other areas aren't closed unnecessarily or longer than needed.

According to the Alliance for the Great Lakes, which has analyzed reporting approaches throughout the region, federal policy requires dischargers to only take minimum steps to notify the public of overflows in a timely manner. What is lacking, however, is a uniform approach and absence of a clear definition of what is "timely". This lack of clarity has led to varying

approaches in different Great Lakes states. For example, in New York, since the state passed its Sewage Pollution Right-to-Know law in 2013, discharges of untreated and partially treated sewage must be reported by publicly owned treatment works and publicly owned sewer systems within two hours of discovery to the state agency and within four hours of discovery to the public and adjoining municipalities. In Pennsylvania, notification must occur within 4 hours and, if reasonably possible to do so, the discharger must notify all downstream users. Indiana requires dischargers to develop a notification procedure and notify the affected public and anyone who requests it. Most notably, and unique among Great Lakes states, Michigan provides a detailed annual report of all sewer overflows in the state. Senator Kirk's bill remedies these discrepancies by providing regional reporting standards. A family from Duluth, Minnesota, visiting a Chicago beach will know how to stay protected from potentially polluted water because the reporting and notification standards will be the same as back home.

S. 1153, Invasive Fish and Wildlife Prevention Act

Both NPCA and the HOW Coalition support this legislation.

Invasive species are destroying the natural resources in our national parks and wrecking the Great Lakes and other waters around the country. Invasive species cost the United States more than $120 billion in damages every year. In 2011 alone, the Department of the Interior spent $100 million on invasive species prevention, early detection and rapid response, control, management, research, outreach, and restoration. According to a fact sheet prepared by the U.S. Fish and Wildlife Service, Eurasian watermilfoil reduced the value of Vermont lakefront property up to 16 percent and lakefront property values in Wisconsin by 13 percent. Annually, non-native species from ballast water cost the Great Lakes region $200 million to control. The Nature Conservancy reports that the Great Lakes Fishery Commission spends more than $18 million each year on its sea lamprey control program and that it costs one Great Lakes power plant $1.2 million per year to monitor and control zebra mussels.

The economic impacts are well documented. As are the environmental ones. Many invasive species prey on native animals. They are known for out-competing them for food and other resources. Invasive species often carry foreign diseases and in certain cases prevent native species from actually reproducing or killing their young. Food webs within an ecosystem are changed when invasive animals, plants, and diseases appear. Invasive species can alter the abundance or diversity of animals and plants. Invasive species can change the ecosystem itself, altering soil chemistry or the intensity of wildfires.

Our national parks are good places to see the damage caused by invasives. Over 6,500 non-native invasive species have been documented on park lands, 70 percent of which are plants. Around 5 percent of park lands are dominated by invasive plants. Approximately 10 percent of all invasive species found in national parks occur in marine environments.

Probably the most well know example of the damage done to a national park and its surrounding landscape is the Burmese python. The introduction of the Burmese python in the Everglades is a direct result of their presence in the pet trade in the urban and suburban areas of Miami-Dade and adjacent counties. First confirmed in the mid-1990s, the python is consuming many of the native species park visitors want to see, including alligators, birds and mammals, some of which are endangered or threatened. According to the National Geographic, python are eating through the Everglades supply of mammals, from rabbits to deer – even bobcats. Recent

surveys document the severe declines. Made between 2003 and 2011, observations of raccoons have dropped 99.3 percent, opossum by 98.9 percent, and bobcat by 87.5 percent! Each year the park spends $1.5 million and significant time to both understand these constrictor snakes but also to control and eradicate them.

Asian carp are another species gaining national attention, and deservedly so. Known to be voracious eaters, these fish quickly outcompete all of their native neighbors in the rivers where they swim causing major disruptions of native aquatic ecosystems. One species of Asian carp is also a threat to humans as it is known to leap out of the water when startled injuring boaters and anglers. In the Illinois River, where the infestation is extreme, 90 percent of the river's biomass is now Asian carp.

Carp were imported into the southern United States from China in the early 1970s to control weed and parasite growth in aquatic farms. It is commonly believed that during the Mississippi River flooding of the 1990s, a few Asian carp managed to escape into the Mississippi River and its tributaries, and their populations grew quickly. Asian carp are slowly making their way northward up the Mississippi River and its tributaries and have been caught as far north as Minnesota, threatening the outdoor recreation industry, native fish populations, and two national parks, including the Mississippi National River and Recreation Area and the St. Croix National Scenic Riverway, all of which support a multi-billion dollar tourism industry and thousands of jobs and businesses. These fish continue to swim towards the Great Lakes too threatening the lakes $7 billion native fishery and tourism economy. State and federal resources continue to be directed toward researching and identifying ways to fight this invasive species threat. In 2010 alone, the federal government committed $78.5 million to prevent Asian carp from getting into the Great Lakes. Similar amounts have been spent each subsequent year.

Another fish in the Chesapeake Bay region is also threatening national park ecosystems. An invasive fish from East Asia known as the northern Snakehead is a predatory fish known for their sharp teeth, ferocious appetite for virtually all other fish, and prolific reproduction. Snakehead first made an appearance in the Potomac River in 2002, and have since invaded aquatic ecosystems along the Potomac River at C&O Canal National Historical Park, Rock Creek Park, and as north as Great Falls. They have been caught in the Anacostia River, a tributary to the Potomac, at national parks including Anacostia park and Kenilworth Aquatic Gardens. Scientists continue to monitor juvenile Snakehead now able to withstand salinity and enter the Chesapeake Bay.

The history of the Wild Boar in the Great Smoky Mountain National Park is one that began as a sport around 1900. This "sport" quickly grew seriously out of control when the first hogs were brought to the Appalachian region in North Carolina. It was about that time that these large and hearty 300+ lb. feral hogs escaped their pens in North Carolina and began populating all across the Great Smoky Mountains National Park. A mother hog or "sow" can birth up to 12 piglets in a single litter each year. The numbers obviously grew at an alarming rate and soon the Wild Boar was well entrenched into the local mountain areas. It is currently believed there are over 500 wild boars in the National Park today. They are a vicious, unpredictable, basically good-for-nothing menace and have become an ecological nuisance rooting out native plants and destroying streambanks, and with them habitat for salamanders and other sensitive wildlife. These park pests also carry disease, including swine brucellosis, pseudorabies (which is fatal to park coyotes and fox), and hog cholera (classic swine fever).

And invasive species aren't just threatening terrestrial and freshwater parks. The venomous lionfish is a particularly nasty example. This fish took less than a decade to invade the U.S.

southern Atlantic and Gulf coasts and is now found everywhere including Biscayne, Dry Tortugas, the Everglades National Parks, Canaveral National Seashore, Gulf Islands National Seashore, and all National Park Service coastal-marine units in the Virgin Islands. The fish likely came from Indonesia through the aquarium trade. Due to their venom and lack of natural predators, lionfish threaten commercial fisheries, the aquarium industry, and coastal tourism. They can sting park visitors and their voracious consumption of native reef fish both represent the biggest threats to park resources. Some areas have experienced as much as a 79 percent decrease in native fish due to their presence.

Size rarely matters in the damage caused by an invasive. Invasive bugs can be just as damaging as invasive animals. For example, staff at Shenandoah National Park confirmed the existence of Emerald Ash Borer beetles, an invasive from Asia, in 2013. First discovered in Michigan in 2002, these half-inch long metallic green beetles have spread across the eastern half of the United States over the last decade. Having probably arrived on solid wood packing material carried in cargo ships or airplanes, these beetles lay their eggs on the bark of ash trees and then burrow under the bark cutting off nutrients and water flow to the tree. Trees typically die within three to five years of being infected. Ash trees are a significant part of the Shenandoah National Park's ecosystem, accounting for 5 percent of the park's trees. NPS is currently investing in treatment of 1,200-1,500 ash trees per year.

Saguaro National Park's iconic species, the saguaro cacti, is also severely threatened by the invasion of a invasive grass. Buffelgrass, a perennial bunchgrass from Africa, was introduced to the United States in the 1930s as livestock forage, and has also been used for erosion control and soil stabilization. In 1980 it began its rapid expansion spreading quickly across southern Arizona. It now threatens the Sonoran Desert ecosystem and the plants and wildlife that inhabit this national park landscape. Buffelgrass is the greatest invasive species threat the park has ever faced because it competes with native plants for resources, creates dense stands which inhibits native plant growth, and promotes fire in a community dominated by plants and animals (like saguaros and desert tortoises) that are not adapted to it. Buffelgrass increases the fuel load and provides a continuous fuel source thereby increasing the frequency and intensity of fire.

As the above examples demonstrate, if the United States had a better screening system, the python, lionfish, and Asian carp may not be threatening important U.S. ecosystems and costing millions of dollars to control. For 114 years the Fish and Wildlife Service has had limited authority to prevent a species from being imported into the United States. The current process is very slow. The average listing time takes 4 years and over a century only 40 animal groups have been listed. S. 1153 updates this federal policy and gives the Fish and Wildlife Service the modern tools and scientific approaches it needs to first assess the potential risks associated with a species proposed for import before deciding whether to allow or prohibit its trade into the country. NPCA particularly appreciates how the risk assessment required by the bill acknowledges the importance of national parks by requiring the assessment to look at whether the potential species will damage land, water, or facilities of the National Park System or other public lands.

In addition to the speeding up a review process designed to limit the damage the flora and fauna being imported into the United States may cause, the bill also provides the public, other agencies like the National Park Service, states, or other entities the ability to assist the Fish and Wildlife Service in identifying harmful species that should be prohibited from trade. It gives the Fish and Wildlife Service limited emergency authority, similar to other federal agencies like USDA, which it can use to block harmful imported animals when they pose an imminent threat to people, the economy, or the environment. For the first time primary authority to prevent the

importation of wildlife pathogens and harmful parasites is also given to the Fish and Wildlife Service. The new information system created by the bill on wildlife trade will be an important source of information to both the public but also land managers and park superintendents.

The bill requires Fish and Wildlife to consult with states and recognizes state actions in making risk determinations. It also creates a limited user fee for live animal importers to help defray the costs of monitoring trade and complete risk analyses more quickly.

The benefits of this bill are plenty. Clearly, by blocking the importation of non-native species like the lionfish or python, damage to the economy and environment will be reduced. Federal funding can be redirected towards addressing other resource needs rather than unnecessarily fighting invasive plants or wildlife. The clarified and modernized authority at the Fish and Wildlife Service also helps the National Park Service to respond to invasive threats given how the two agencies work so closely together. Improved risk assessments and invasive species science benefits everyone.

S. 1202, Safeguarding America's Future and Environment (SAFE) Act

NPCA supports this legislation.

The effects of climate change are being felt in all corners of this country, but perhaps most visibly in our national parks. Climate change threatens to alter the fundamental environmental characteristics of national parks, the unique qualities that define them as our most spectacular places. Simply, the parks that today host millions of annual visitors and supply billions of dollars to local economies are being irreversibly altered.

All parks will be affected. Our national seashores are currently hosting millions of vacationers, but sea level rise and ocean acidification will change the seashores at Cape Hatteras, Padre Island, Cape Cod and Gulf Islands. Rising waters and increasingly intense storms threaten national monuments in Washington, D.C. and New York, historical structures in national parks of the Southeast, and archaeological evidence of the earliest settlers in Alaska. Glaciers that have for decades brought families to national parks in Montana, Alaska and Washington are melting.

Though we cannot prevent some of the effects of climate change from occurring, we can slow climate-related changes by reducing the amount of carbon dioxide we emit into the atmosphere. We can – and need – to also ensure that we are as well prepared as possible. S. 1202 helps our resource-management agencies like the National Park Service prepare by requiring them to implement the National Fish, Wildlife, and Plants Climate Adaptation Strategy, released by the administration in March 2013. The Strategy is not a new set of regulations, but rather a plan to assess the vulnerability of resources, prioritize conservation efforts and include federal agency actions, and coordination plans. Natural resource agencies, with the help of state, tribal, and local governments, will create adaptation plans to best shepherd their resources in the face of changing conditions and update these plans regularly. Specifically, the SAFE Act is a non-regulatory bill which builds on existing federal initiatives to set forth a framework for federal, state, and tribal coordination on natural resource adaptation planning. Specifically, this legislation:

- Codifies the National Fish, Wildlife and Plants Climate Adaptation Strategy into law and encourages full agency implementation

- Legislatively authorizes the National Climate Change and Wildlife Science Center within the U.S. Geological Survey
- Includes strategies to reduce costs and maximize efficiency for natural resource protection
- Provides context for directing future resources Congress allocates to the states to address climate adaptation challenges
- Ensures continuity of natural resources climate adaptation programs through changing administrations

Climate change is already impacting national parks; if we act now we can try to prevent treasured resources form damage due to consequences of our changing climate.

S. 1232, Great Lakes Ecological and Economic Protection Act

The HOW Coalition and NPCA support this legislation.

Over thirty million people rely on the Great Lakes for their drinking water, and the entire country benefits from the commerce that depends on these waters. Protecting and restoring them is a huge priority for the people in the region and restoring and protecting them is what the region has been successfully doing since 2005. This region is undertaking one of the world's largest freshwater ecosystem restoration projects. Non-governmental groups, industries, cities, states, and federal agencies are forging public-private partnerships to clean up toxic hot spots, restore fish and wildlife habitat, and combat invasive species. The HOW Coalition has invested almost half a million dollars of our own resources to help our member groups restore and protect this resource. The philanthropic community has also invested approximately $100 million over the past four years through initiatives to educate citizens and policy makers about the Great Lakes environment and to identify actions and policies that most effectively will restore its health. The President has requested and Congress has appropriated over $1.6 billion since fiscal year 2010.

This work is being done because cleaning up the Great Lakes is critical for the health and quality of life of the region. It also drives economic development – and jobs – in communities all around the Basin. Investments in Great Lakes restoration are creating jobs and leading to long-term economic benefits for the Great Lakes states and the country. A Brookings Institution report shows that every $1 invested in Great Lakes restoration generates at least $2 in return, making Great Lakes restoration one of the best investments on the dollar in the federal budget. Research from Grand Valley State University shows that the return for certain projects is closer to 6-to-1. The University of Michigan has also demonstrated that over 1.5 million jobs are connected to the Great Lakes, accounting for more than $60 billion in wages annually. According to the Great Lakes Commission, more than 37 million people boat, fish, hunt, and view wildlife in the region, generating over $50 billion annually. Great Lakes businesses and individuals account for about 28 percent of the U.S. gross domestic product, according to Bureau of Economic Analysis data.

Jobs are being created by the efforts to clean up the Great Lakes and restore fish and wildlife habitat. These jobs include wetland scientists, electricians, engineers, landscape architects, plumbers, truck drivers, and many others. While we do not know how many jobs have been created to clean up the Great Lakes, it is likely in the thousands. Consider:

- 125 jobs were created for a $10 million project to restore fish and wildlife habitat in Muskegon Lake, a Great Lakes Area of Concern in Michigan.
- 177 people are employed to control the invasive sea lamprey in the Great Lakes, which costs the U.S. government around $20 million annually.
- 174 jobs were created, some of which were filled by at-risk youth, to remove dams and other barriers in a 150-mile stretch of the Milwaukee River system.

Specifically, stories like that of business owner Jim Nichols of Carry Manufacturing are increasingly common. Jim tells of how GLRI projects are adding new orders for his manufacturing business. Carry Manufacturing has manufactured water control equipment since 1987. Their employees are being kept busy building submersible pumps for GLRI projects that flood duck habitat or drain areas to re-establish native habitat for sport fishing. The jobs add up when you begin counting the men and women at other companies who manufacture the pipes for the pumps, the control structures in which the pumps are housed, and the hunters, anglers, and wildlife watchers that benefit from the improved environment the pumps help create.

And the people that have been put to work protecting and restoring the Great Lakes are working on projects that are producing results (from EPA's 2014 congressional budget justification and 2013 report to Congress):

- The Presque Isle, PA, Area of Concern was delisted, the first since 2006, and the second U.S. AOC since they were established in 1987. The management actions necessary for delisting the Sheboygan, WI, AOC were also completed, Ashtabula, OH, is very close, and two more de-listings are expected in FY 2015. (EPA 2014)
- Between 2010 through 2013, 29 beneficial use impairments (BUIs) at 13 AOCs were removed in Illinois, Indiana, Michigan, New York, Pennsylvania, and Wisconsin, more than tripling the total number of BUIs removed in the preceding 22 years. More BUIs have been removed since the GLRI began than between 1987 and 2009. (EPA 2014)
- From 2004 to 2009, the Great Lakes region was the only area in the country to show a gain in wetland acreage. Now the GLRI is building on that foundation with a goal to restore one million acres in the Basin. So far, the FWS, NPS, NRCS, and NOAA (among others) restored, protected, or enhanced over 115,000 acres of wetlands and other habitat. (EPA 2014)
- 1,900 river miles were cleared of over 250 barriers resulting in fish swimming into stretches of river where they have been absent for decades. (EPA 2014)
- Based on U.S. Fish and Wildlife Service monitoring, GLRI-sponsored actions are increasing self-sustaining populations of native species important to the Great Lakes, like lake sturgeon. For example, efforts in the Saginaw River watershed have contributed to the now self-sustaining walleye population in Saginaw Bay, MI. (EPA 2013)
- Nearly 800,000 acres of Great Lakes agricultural land were put into USDA conservation contracts to reduce erosion and nutrient runoff into Great Lakes tributaries. (EPA 2014)

These numbers are impressive. The stories behind them, however, are more illuminating as to the types of results that we are seeing and what is being accomplished. The Coalition has documented more than 100 restoration success stories across the region.[1] Among them:

- At the Ashtabula River in Ohio, a sediment cleanup and habitat restoration project has restored the lower two miles of the river and advanced efforts to get it de-listed as a Great Lakes Area of Concern. The project has improved water quality and deepened the

[1] Found at www.healthylakes.org/successes/.

river channel, making the lower Ashtabula suitable again for maritime commerce, fishing, and recreation boating.

- The Grand Calumet River in Indiana, which flows through a heavily industrialized area south of Chicago, was for years considered America's most polluted river. Thanks to a major cleanup, a large wetland was restored and more than 575,000 cubic yards of toxic mud was removed from the Lake Michigan tributary. The restoration project addressed pollution that had led to fish consumption advisories, drinking water restrictions, beach closings, habitat destruction, and an array of other environmental problems.
- At Clear Creek in Freedom, New York, excess stream erosion and sediment, in-stream barriers, elevated water temperatures, and competition from invasive fish restricted brook trout to a few tributaries in the watershed. A Great Lakes Restoration Initiative project restored 1,200 linear feet of in-stream habitat and re-established fish passage over a sheet-pile grade control structure, reconnecting six miles of prime trout habitat.

How the region is accomplishing all this work is as impressive as what has been done. The GLRI, which President Obama first proposed in 2010, is a model for large, landscape scale restoration. It ensures that the focus remains on the highest regional priorities that were identified through a large stakeholder process in 2005. It also provides an outlet for the U.S. to meet its obligations under the new Great Lakes Water Quality Agreement with Canada. The GLRI is a critical component towards ensuring that the goals we set for ourselves in both the agreement and comprehensive plan can be achieved.

Additionally, the GLRI sought to fix problems the Government Accountability Office identified in 2003 when it complained that there was inadequate coordination among federal agencies and between federal and non-federal stakeholders.[2] Now, the EPA, working with other federal agencies like the Fish and Wildlife Service, NOAA, NRCS, and the National Park Service, can quickly convert the funding they receive to supplement restoration activities through their existing, authorized programs. This structure allows for funds to move quickly from EPA through the interagency agreements EPA has with the other agencies and onto the ground to complete important restoration work. This model also ensures accountability through the establishment of an "orchestra leader" (EPA), helps accelerate progress, and avoids potential duplication, all of which help save taxpayers money while focusing efforts on the highest, consensus-based priorities.[3]

Unfortunately, the health of the Great Lakes continues to be seriously threatened by problems such as sewage overflows that close beaches, toxic pollution that poses a threat to the health of people and wildlife, algal blooms that harm local drinking water supplies, and invasive species that hurt fish and wildlife populations and our outdoor recreation economy. While we have cleaned up two AOCs, there are still 29 more to go. Algal blooms in Lake Erie and other lakes still result in cancelled charter boat tours and closed beaches. Communities are still dealing with legacy pollutants that have led to drinking water restrictions, beach closings, and fish consumption advisories. The work is not done so maintaining federal support is needed.

One important thing this Congress can do is remove all doubt that the region is on the right path and pass S. 1232, the Great Lakes Ecological and Economic Protection Act. Currently, EPA uses its existing authority and the legislative language provided by appropriators as the basis for its

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[2] We anticipate that the GLRI Action Plan for FY2015-2019 will incorporate changes that address the concerns raised by GAO in 2013. Those concerns included, in part, recommending the initiative incorporate climate change into its goals and create metrics of success that better link the ecological change being sought to the actions being supported and undertaken.

[3] Even with quick federal action, the Great Lakes region has a shortened work season because of winter conditions. This can result in a longer time period for grantees to outlay GLRI funds rather than just the obligation of funds.

coordinating role. Passing legislation creates greater certainty for the program and allows everyone to focus on getting the job done.

In particular, without an authorization, Great Lakes restoration efforts are at risk from changing administrative and congressional priorities. Congress has not passed legislation to make the Great Lakes Restoration Initiative and other Great Lakes programs a long-term priority. Authorizing legislation will provide a legislative vehicle for Congress to make the necessary investments in the Great Lakes annually for years to come.

GLEEPA will help ensure future success by targeting resources efficiently and effectively to improve water quality, protect the health of people and wildlife, create jobs, and uphold the region's quality of life. It will help invest resources in the right areas and the right places. It will facilitate continued regional collaboration. It will help better monitor restoration progress and ensure that restoration efforts are guided by science so that efforts can be adjusted to make them as effective as possible. It will ensure that restoration efforts are transparent and allow for citizen input.

How does this bi-partisan bill accomplish these goals? First, it authorizes the Great Lakes Restoration Initiative. The GLRI is an action-oriented, results-driven initiative (see above) targeting the most significant problems within the basin, including aquatic invasive species, toxics and contaminated sediment, nonpoint source pollution, and habitat and wildlife protection and restoration. It grew out of a process started by former President Bush, called the Great Lakes Regional Collaboration, where stakeholders designed a strategy for the restoration, protection, and sustainable use of the Great Lakes. President Obama requested and Congress appropriated $475 million in EPA's FY 2010 budget for the GLRI to implement the collaboration strategy from the previous Administration. $300 million has been provided for the last four years. The results from this collaboration between administrations is plain to see, (described above). Sen. Levin's bill formally authorizes the GLRI and directs the implementation of recommendations presented in the Great Lakes Regional Collaboration Strategy of 2005 and the Great Lakes Restoration Initiative Action Plan.

The bill also reauthorizes Great Lakes National Program Office (GLNPO). GLNPO is the primary office within EPA for handling Great Lakes matters, including the GLRI, the Great Lakes Water Quality Agreement (GLWQA), the Great Lakes Legacy Program, Remedial Action Plans for Areas of Concern and Lakewide Management Plans.

The bill reauthorizes the Great Lakes Legacy Program. The Great Lakes Legacy program was first authorized in 2002 and has been extremely successful at removing contaminated sediment from the U.S. Areas of Concern (AOC). There have been 31 U.S. AOCs in the U.S. and shared with Canada; since those areas were identified in 1987, only two U.S. AOCs have been delisted – Oswego (NY) and Presque Isle Bay (PA). The Legacy program was authorized through 2010; however, appropriators have continued to fund the program, currently as a subset of the GLRI. Sen. Levin's bill reauthorizes the program for an additional 5 years and increases the funding level from $54 million to $150 million per year, a reflection of the cost associated with cleaning up these areas. The reauthorization of the Legacy Act would maintain the requirement of at least 35 percent of project costs be provided by a nonfederal sponsor, with U.S. EPA providing up to 65 percent for remediation activities.

Lastly, GLEEPA would authorize the Federal Great Lakes Interagency Task Force and the Great Lakes Advisory Board. The Great Lakes Interagency Task Force (IATF) brings together eleven U.S. Cabinet and federal agency heads to coordinate restoration of the Great Lakes among the

different agencies. The IATF was created by Executive Order in 2004 and is unique in that it forces the federal agencies to coordinate more regularly on Great Lakes matters. The bill authorizes the IATF in its current form. It also models the GLAB on its current structure to ensure a smooth transition upon enactment of the legislation. The board will continue to be composed of 12-20 members representing a broad range of interests in order to provide EPA and the other federal agencies with stakeholder input on Great Lakes protection and restoration priorities.

This bill has broad support in the region. Attached to this testimony is a letter sent to the committee this week from the Great Lakes Commission, HOW Coalition, Great Lakes Fishery Commission, Great Lakes and St. Lawrence Cities Initiative, Chippewa Ottawa Resource Authority, Council of Great Lakes Industries, and the Great Lakes Metro Chambers Coalition.

S. 2225, Smart Water Resource Management Conservation and Efficiency Act

Neither NPCA nor the HOW Coalition have a position on this bill. However, both NPCA and the HOW Coalition support the bills focus on water conservation and efficiency. Conserving water is as equally important as conserving energy, and in fact, water conservation is a strategy to conserve energy. NPCA encourages this committee to use the national parks as places to interact with the public to educate them about the importance of conserving our water resources through innovative and novel approaches.

S. 2530, Protecting Lakes Against Quaggas (PLAQ) Act

NPCA supports this legislation.

If there is any experience the Great Lakes can share with the west, it's the damage caused by quagga and zebra mussels. These little creatures, which hitched rides in the ballast tanks of ocean going vessels, have caused billions of dollars in damage through the Great Lakes region and have undermined entire lake ecosystems in some of the lower Great Lakes. Diporeia, a small, shrimp-like crustacean that is one of the most important organisms in the Great Lakes, has virtually disappeared from their waters, pushed out by these two invasive bi-valves.

What's more, because these mussels' bio-accumulate toxins, shore birds and other wildlife – including humans – are increasingly at risk. Sleeping Bear Dunes National Lakeshore has documented bird die offs caused by neurological disorders resulting from fish-eating birds consuming round gobies (another invasive species) that ate the mussels contaminated with type-E Botulism, a powerful neurotoxin. Their filter feeding also impacts the size of algal blooms in the lakes turbo charging an already significant problem.

And it takes millions a year just to control them since eradication is probably impossible. As noted above, one power plant spends $1.2 million a year to keep its pipes clear of these tiny mollusks, which coat the surface of anything sitting still.

Now Lake Mead and 600 other waterways in 27 states are dealing with this problem too. And while the costs in the Great Lakes are astounding, they could be greater in western waters that don't cool off in the winter. The cold Great Lakes winters dampen these mussels' ability to mate somewhat, but the average 65 degree waters in Lake Mead create what the Las Vegas Sun called a "year-round honeymoon spot", causing more mussels to reproduce.

Western waters are faced with the same threats too as their freshwater companions in the Midwest. Hoover dam must battle these mussels non-stop to avoid its cooling pipes getting clogged, which could lead to a shutdown of its power generators. Las Vegas's drinking water is threatened, like the water quality in the Great Lakes, by the quagga and zebra mussel's water-filtering abilities creating the perfect conditions for cyanobacteria, a dangerous type of algae that can kill animals and make people sick.

Much needs to be done to address the issues raised by these mussels. One of which is accomplished by Sen. Heller's bill. His legislation adds quagga's to the list of "injurious" species under the 1900 Lacey Act, which prohibits the trade in wildlife, fish, and plants that have been illegally taken, transported, or sold. According to an analysis by the Pew Charitable Trusts, if quaggas are put on the list, the federal government could prosecute—criminally or civilly—people who import or transport the mussels across state lines. Those convicted of felony trafficking under the act face fines up to $20,000, five years in prison, or both. A misdemeanor, which is a more likely charge, carries the maximum fine of $10,000 and one year behind bars.

Zebra mussels are already listed. It could take years for the Fish and Wildlife Service to add quaggas administratively. Legislation would speed up this process and hopefully prevent more waters from having to face the environmental and economic damage two invasive mollusks can bring with them.

Again, thank you for the opportunity to provide this written testimony.

Attachments (1): Great Lakes letter

July 14, 2014

Hon. Barbara Boxer, Chair
Environment & Public Works Committee
United States Senate
410 Dirksen Senate Office Building
Washington, DC 20510

Hon. David Vitter, Ranking Member
Environment & Public Works Committee
United States Senate
456 Dirksen Senate Office Building
Washington, DC 20510

Hon. Benjamin Cardin, Chair
Subcommittee on Water and Wildlife
Environment & Public Works Committee
United States Senate
410 Dirksen Senate Office Building
Washington, DC 20510

Hon. John Boozman, Ranking Member
Subcommittee on Water and Wildlife
Environment & Public Works Committee
United States Senate
456 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairmen Boxer and Cardin and Ranking Members Vitter and Boozman:

We are writing to convey our support for S. 1232, the **Great Lakes Ecological and Economic Protection Act (GLEEPA) of 2013**, being considered by the Subcommittee on Water and Wildlife. This bipartisan legislation, introduced by the cochairs of the Senate Great Lakes Task Force, Senators Carl Levin and Mark Kirk, provides a solid platform to ensure our region continues to work together successfully to implement a science-based and outcomes-focused plan of action for restoring and protecting the Great Lakes; spends resources effectively and transparently; targets funding at the right priorities and the right areas; and engages people, communities and stakeholders who know the problems and their solutions. **This is a top regional priority for the Great Lakes states, local communities, tribes, conservation organizations, and business and industry.**

The Great Lakes Ecological and Economic Protection Act (GLEEPA) establishes a strong regional framework to sustain effective restoration, protection and ongoing management of the Great Lakes. First, GLEEPA formally authorizes the popular, multi-year Great Lakes Restoration Initiative (GLRI) and links its implementation to our regional plans. It does this in part by enhancing regional accountability and transparency through the creation of the Great Lakes Advisory Board, which will recommend restoration priorities that federal agencies use when setting their budgets each year. The bill also increases coordination among federal agencies by establishing the federal Great Lakes Interagency Task Force. While these bodies are already in place, the legislation formalizes their role and provides direction from Congress. Lastly, the bill reauthorizes both the successful Great Lakes Legacy Act, to continue cleaning up contaminated hot spots across the Great Lakes, and the Great Lakes National Program Office, to ensure U.S. EPA has the necessary authority to coordinate Great Lakes restoration efforts.

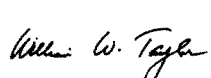
Passing this legislation now will clarify the focus and accountability of our restoration efforts and ensure the program continues to achieve effective results. We have joined with federal agencies to rewrite the GLRI Action Plan, which guides federal restoration efforts. The new plan lays out our region's restoration goals and objectives, and revises how we measure progress, taking into account recommendations from the Government Accountability Office's (GAO) recent report, which found no major deficiencies in the GLRI and recognized the complexities of guiding this type of large-scale ecosystem restoration program. GLEEPA will establish the legislative framework to implement our updated plan.

Restoring the Great Lakes creates jobs, stimulates economic development, and protects a source of fresh drinking water for 30 million people. The lakes currently generate over 1.5 million jobs and $60 billion in wages annually, and provide the foundation for a $30 billion tourism economy. **Clearly, the Great Lakes are an invaluable resource worth restoring and protecting, and GLEEPA's provisions are critical to our collective efforts toward this end. We urge you to approve the legislation and pass it on for consideration by the full Senate.**

Sincerely,

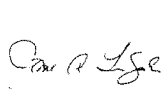
Tim Eder
Executive Director
Great Lakes
Commission

Todd Ambs
Director
Healing Our Waters-
Great Lakes Coalition



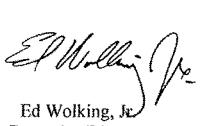
William Taylor
Chair, U.S. Section
Great Lakes
Fishery Commission

David A. Ullrich
Executive Director
Great Lakes and
St. Lawrence Cities Initiative



Jane A. TenEyck
Executive Director
Chippewa Ottawa
Resource Authority

Kathryn A. Buckner
President
Council of
Great Lakes Industries



Ed Wolking, Jr.
Executive Director
Great Lakes
Metro Chambers Coalition

Senator CARDIN. Thank you, Mr. Lord.
Mr. Wasley.

STATEMENT OF TONY WASLEY, DIRECTOR, NEVADA DEPARTMENT OF WILDLIFE

Mr. WASLEY. Thank you, Chairman Cardin and Ranking Member Boozman for the opportunity to provide the Nevada Department of Wildlife's views on S. 2530, the Protecting Lakes Against Quaggas Act of 2014, introduced by Senator Dean Heller on June 25, 2014.

The Nevada Department of Wildlife fully supports the legislation to add the genus Dreissena, specifically quagga mussels, to the National List of Invasive Species covered under the Lacey Act.

In addition, the Department supports the exclusion of the listing on operation of public water systems, water conveyances, storage and distribution facilities noted in the Act.

The State of Nevada has both quagga-infested waters and quagga-free waters and therefore must face the issue of quagga mussel infestation from a unique perspective. Nevada had the first documented population in the United States west of the Rocky Mountains in Lake Mead. Containment of this threat to the waters in which it presently exists requires creative and adaptive strategies.

Additionally, in order to provide and protect priceless national resources such as the Lake Tahoe Basin, we must maintain its quagga-free status. Quagga and zebra mussels cause significant ecological and economic harm in the United States. The transport and introduction of aquatic invasive species into uninfected waters require shared responsibility at both the Federal and State level.

In 2011, Nevada enacted the Nevada Aquatic Invasive Species Act, AB 167, which established provisions for protecting the waters of the State from aquatic invasive species. Established in the language were provisions providing the Nevada Department of Wildlife with the necessary authority to prohibit the transport of quagga and zebra mussels within the State. Other States have established similar language.

At the Federal level, zebra mussels are currently listed as a prohibited species under the Lacey Act making the transport across State borders illegal. However, quagga mussels are excluded from coverage under title 18 of the U.S. Code because they are not previously recognized as a distinct species of Dreissena mussels.

Quagga mussels are one of the greatest aquatic invasive species threats to the waters of the western States. For the Columbia River Basin, a 2010 Independent Economic Analysis Board report estimates that roughly $100 million annually would be required to maintain infrastructure operations for irrigation, fish passage and propagation, navigation and other Columbia-Snake River functions in response to an invasive mussel invasion.

Such infestations have occurred in the Great Lakes and other eastern waterways as well as the southwestern part of the country. In another western State study, the invasion of quagga mussels into Lake Tahoe Basin could devastate Tahoe's fragile ecosystem and native fisheries, impact boats and recreation areas and could cost the Tahoe Basin more than $20 million annually.

In 2007, quagga mussels were discovered in Lake Mead and are believed to have been introduced there by the movement of an infested watercraft trailered from the Great Lakes region. Since their discovery at Lake Mead, the mussels have spread throughout the lower Colorado River system, including Federal and State water supply networks.

Currently, there are no feasible eradication methods available. However, when the States and Federal Government work together, we have increased capacity for preventing the movement and introduction of these invaders into uninfected waters.

In 2013, in a joint effort between the Lake Mead National Recreation Area, the U.S. Fish and Wildlife Service and the Nevada Department of Wildlife, a prevention program was developed to assist in preventing quagga contaminated watercraft from exiting the park. Although still in its infancy, the program has provided the public with free decontaminations for fouled watercraft moving to other States and uninfected waters.

The Lake Mead National Recreation Area Project has struggled with long term Federal funding and exists on a year-to-year basis. Regardless of funding issues, the program is a prime example of the State of Nevada and agencies within the Federal Government working together to prevent the spread of quagga mussels into uninfected waterways.

However, current Federal law, because of the exclusion of quagga mussels, does not provide adequate regulatory authority to assist the States in situations when a watercraft owner knowingly ignores decontamination stations and other State level requirements and transports quagga mussels across State lines.

Further, the provisions of S. 2530 will significantly aid collaborative efforts between State and Federal partners when addressing invasive species issues on Federal lands such as units of the National Park Service.

The Nevada Department of Wildlife supports the Act entitled Protecting Lakes Against Quaggas Act of 2014. The legislation is also supported by the Western Governors Association, Tahoe Regional Planning Agency, National Wildlife Federation, Pacific States Marine Fisheries Commission, Northwest Power and Conservation Council, Irrigation and Electrical Districts Association of Arizona and the National Environmental Coalition on Invasive Species.

The wide array of supporters indicates this legislation is both necessary and warranted from an economic and natural resource management perspective. The Act will assist the States by strengthening the Federal Government's authority and preventing the interstate transport of quagga mussels and by providing increased opportunity for Federal and State collaboration.

Mr. Chairman and members of the committee, thank you for the opportunity to testify and I would be happy to answer any questions.

[The prepared statement of Mr. Wasley follows:]

STATEMENT OF
TONY WASLEY,
DIRECTOR OF NEVADA DEPARTMENT OF WILDLIFE
BEFORE THE
SENATE SUBCOMMITTEE ON WATER AND WILDLIFE
ON **S. 2530,**
"PROTECTING LAKES AGAINST QUAGGAS ACT OF 2014" OR "AS THE PLAQ ACT OF 2014"

July 16, 2014

Thank you Chairman Cardin, Ranking Member Boozman and members of the Committee, for the opportunity to provide the Nevada Department of Wildlife's views on S. 2530, The Protecting Lakes Against Quaggas Act of 2014, introduced by Senator Dean Heller on June 25, 2014. The Nevada Department of Wildlife fully supports the legislation to add the genus *Dreissena*, specifically quagga mussels, to the national list of invasive species covered under the Lacey Act. In addition, the Department supports the exclusion of the listing on the operation of public water systems, water conveyances, storage and distribution facilities noted in the Act.

The State of Nevada has both quagga infested waters and quagga free waters and therefore must face the issue of quagga mussel infestation from a unique perspective. Nevada had the first documented population in the United States west of the Rocky Mountains in Lake Mead, and containment of this threat to the waters in which it presently exists requires creative and adaptive strategies. Additionally, in order to provide, and protect priceless national resources such as the Lake Tahoe Basin, we must maintain its quagga free status.

Introduction

Quagga and zebra mussels cause significant ecological and economical harm in the United States. The transport and introduction of aquatic invasive species into un-infected waters requires shared responsibility at both the federal and state level. In 2011, Nevada enacted the Nevada Aquatic Invasive Species Act (A.B. 167) that established provisions protecting the waters of the State from aquatic invasive species. Established in the language were provisions providing The Nevada Department of Wildlife with the necessary authority to prohibit the transport of quagga and zebra mussels within the State. Other states have established similar language. At the federal level, zebra mussels are currently listed as a prohibited species under the Lacey Act making the transport across state borders illegal. However, quagga mussels are excluded from coverage under Title 18 US Code because they were not previously recognized as a distinct species of Dressinid mussels.

Quagga mussels are one of the greatest aquatic invasive species threats to waters of the western states. For the Columbia River Basin, a 2010 Independent Economic Analysis Board report estimates that roughly $100 million annually would be required to maintain infrastructure operations for irrigation, fish passage and propagation, navigation and other Columbia-Snake river functions in response to an invasive mussel invasion. Such infestations have occurred in the Great Lakes and other eastern waterways, as well as the southwestern part of the country. In another western state study, the invasion of quagga mussels into

the Lake Tahoe Basin could devastate Tahoe's fragile ecosystem and native fisheries, impact boats and recreation areas, and could cost the Tahoe Basin more than $20 million dollars annually.

In 2007, quagga mussels were discovered in Lake Mead and are believed to have been introduced there by the movement of an infested watercraft trailered from the Great Lakes region. Since their discovery at Lake Mead, the mussels have spread throughout the lower Colorado River system including Federal and State water supply networks. Currently, there are no feasible eradication methods available; however, when the states and federal government work together, we have increased capability for preventing the movement and introduction of these invaders into un-infected waters.

In 2013, in a joint effort between Lake Mead National Recreation Area (LMNRA), the U.S. Fish and Wildlife Service and the Nevada Department of Wildlife, a prevention program was developed to assist in preventing quagga contaminated watercraft from exiting the Park. Although still in its infancy, the program has provided the public with no-charge decontaminations for fouled watercraft moving to other states and un-infected waters. The LMNRA Project has struggled with long-term federal funding and exists on a year to year basis. Regardless of funding issues, the program is a prime example of the State of Nevada and agencies within the federal government working together to prevent the spread of quagga mussels into un-infected waterways. However, current Federal law, because of the exclusion of quagga mussels, does not provide adequate regulatory authority to assist the states in situations when a watercraft owner knowingly ignores decontamination stations and other state-level requirements, and transports quagga mussels across state lines. Further, the provisions of S. 2530 will significantly aid collaborative efforts between State and Federal partners when addressing invasive species issues on federal lands such as units of the National Park Service.

Conclusion

The Nevada Department of Wildlife supports the Act entitled "Protecting Lakes Against Quaggas Act of 2014". This legislation is also supported by the Western Governors Association, Tahoe Regional Planning Agency, National Wildlife Federation, Pacific States Marine Fisheries Commission, Northwest Power and Conservation Council, Irrigation and Electrical Districts' Association of Arizona, and the National Environmental Coalition on Invasive Species. The wide array of supporters indicates this legislation is both necessary and warranted from an economic and natural resource management perspective.

The Act will assist the states by strengthening the federal government's authority in preventing the interstate transport of quagga mussels and providing increased opportunity for federal and state collaboration. Nine western states, in addition to Hawaii and Alaska, currently are free of quagga mussels and numerous lakes and reservoirs exist in all western states that have not been infected. It is imperative that federal and state authority coexist where interstate boundaries are concerned to develop comprehensive containment strategies and help prevent the spread of quagga mussels into un-infected waters.

Mr. Chairman and members of the committee, thank you for the opportunity to testify on this legislation. I would be happy to answer any questions.

Senator CARDIN. I thank all three of you for your testimony.

Let me ask all three of you to respond. I think I will start with Mr. Wasley first.

Dealing with the quagga mussels, the Department has raised some concerns about the exception related to the operation of public water systems or related water conveyance storage or distribution facilities.

Mr. Wasley, as I understand, you support that exemption. Could you explain the rationale for the exemption? Dr. Stein or Mr. Lord, if you have any comments, I would welcome them.

Mr. WASLEY. I guess I would say that as a trained biologist and not having expertise in engineering or water conveyance systems, part of my concern is the timeliness of this and not letting perfect stand in the way of progress.

The challenges of water conveyance are not insignificant. Water comes and goes from States throughout the west, and I would hate to see something like that hinder our ability to address this issue in a timely manner.

Senator CARDIN. Dr. Stein.

Mr. STEIN. We are very concerned about the spread of quagga mussels across the west and very much support the statutory listing of quagga mussels in this manner.

The House bill, to which this is a companion, did not have that broad exemption for water conveyance systems, and quite honestly, we have not looked seriously at what some of the implications of that exemption are.

We understand the concerns of the public water managers, but there is also a concern that transporting water in this way could, in fact, be a pathway for continued spread of the mussels. There is an open question, I think.

Senator CARDIN. There seems to be general agreement that the quagga mussel should be listed. If the Gillibrand bill were law, could it be handled through that bill by determination made as a result of the criterion that is established in that legislation?

Mr. LORD. For something like the quagga mussel, probably not. The quagga mussel was introduced to the Great Lakes through the ballast tanks of ocean going vessels back in the 1980s, so there would have been no chance to screen for that type of invasive species.

What we are really looking at are other things that would potentially come in through U.S. customs, ports, those types of places where you would know what exactly it is you are looking for.

Senator CARDIN. Dr. Stein.

Mr. STEIN. While the primary intent of the Gillibrand bill would be to prevent new invasions, there is the emergency listing provision in the bill that I think could be invoked in a very time sensitive situation of this nature.

Emergency listing has a time bound to it and so could not be used indefinitely, but at least it could provide immediate relief that could be used to provide the regulatory authorities to better put in place the very aggressive actions of the State of Nevada and Federal agencies in that region.

Senator CARDIN. Let me make a comment. You have all been supportive of the efforts by some of my colleagues, Senator

Whitehouse dealing with adaptation, Senator Udall dealing with water efficiencies, I think Senator Feinstein has a bill also dealing with some of the habitat restoration.

Last week, I was at the water treatment facility in Baltimore constructed 100 years ago and was state-of-the-art 100 years ago. It is still functioning pretty much today as it did 100 years ago. It is carrying out its function, Baltimore has safe drinking water. It is good water. It is not efficient and costs a lot of money to run the operation. It loses a lot of water.

I would just point out that the Senator Udall's efforts with regard to water efficiency are something that we all should be concerned about. We waste millions of gallons of water in our system because of the inefficiencies and spend millions of dollars in utility costs increasing our carbon footprint as a result of the inefficiencies of our water system. That is just one example.

On adaptation, we have very valuable resources in our State as Senator Whitehouse mentioned. Assateague Island, one of the great treasures, is at risk today because of the changing climate in this country.

We have seen when we adapt and do things that are smart, as we have on our coasts, we save literally millions of dollars in damages that otherwise would be caused. To me, the No. 1 effort is to do what we can to mitigate the circumstances surrounding climate changes but adaptation should be an area in which we all agree we can use additional resources.

I really wanted to underscore some of the points that you all have made on those issues. I know our committee will try, as we have in the past, to work together in a bipartisan way on issues such as adaptation and mitigation and those types of areas where we can find a common area to move forward to help our communities.

Let me turn it over to Senator Boozman.

Senator BOOZMAN. Thank you, Mr. Chairman.

Dr. Stein, you mentioned that the National Wildlife Federation supported Congressman Runyan's bill to reauthorize the Voluntary Community Partnerships Act. Could you elaborate on the value you see from these volunteer programs and community partnerships?

Mr. STEIN. Certainly. The U.S. Fish and Wildlife Service refuge system, which I believe covers on the order of 150 million acres, is an extraordinary national treasure, but the budget of the U.S. Fish and Wildlife Service is quite limited. In many places, they rely on active volunteer participation to carry out both visitor interpretative services as well as critical resource management activities.

It is something that many other agencies rely on as well, but it is especially important on refuges. My understanding is that in order for the Service to continue to most fully use volunteers, it needs that reauthorization in order to continue.

The National Wildlife Federation really focuses on connecting people with nature, especially getting kids connected to nature because that is our next generation of conservation leaders and really encourages the type of volunteerism that is embodied in that legislation.

Senator BOOZMAN. Very good. Thank you.

Mr. Wasley, we appreciate you making the long trip to come and testify. You mentioned that the legislation would help you to work collaboratively with the Federal Government to address invasive species, particularly on Federal lands.

You talked about this a little but can you elaborate a bit more on how the expanded authority would be of help?

Mr. WASLEY. Presently, we do have voluntary inspection stations and compliance, but we still have some folks that will willfully and knowingly cross State lines with quagga-infested watercraft either into the State or out of the State.

Having a Federal law, potential violation of a Federal law, certainly is an additional tool and certainly provides a great incentive for compliance with that requirement. It elevates the seriousness of the infraction and will hopefully provide an additional functionality in screening and enforcing the current laws we have in the State as well as the Federal law.

Senator BOOZMAN. Very good.

That is really all I have, Mr. Chairman. I do ask unanimous consent to include the testimony from Congressman Runyan in the record.

Senator CARDIN. Without objection.

[The referenced information follows:]

Senate Committee on Environment and Public Work
Subcommittee on Water and Wildlife Legislative Hearing
Testimony of Rep. Jon Runyan on HR 1300
7/16/2014

Chairman Cardin and Ranking Member Boozman thank you for holding a hearing on this legislation, H.R. 1300, which is very important to the Edwin B. Forsythe National Wildlife Refuge in my district and to National Wildlife Refuges all across the country.

H.R. 1300, would reauthorize the volunteer programs and community partnerships at National Wildlife Refuges nationwide. The authorization for these programs expires at the end of this year; this bill would simply extend the authorization until 2018. This legislation has proven to be very effective over the last several decades. For example in 1982 the Refuge System Volunteer Program had 4,251 volunteers compared to the estimated 46,800 volunteers in 2011.

Volunteers are the backbone of National Wildlife Refuges and the Refuge system could not function adequately without their contributions. In fact, in 2011 the U.S. Fish and Wildlife Service had 46,800 volunteers that contributed 1,718,369 hours of work. This work had an hourly value in the private sector of $21.36 bringing the volunteers contributions to a total value of over $36 million. During a time of mounting deficits and tightening budgets these volunteers are absolutely crucial to the function of our Refuges.

At a local level, the northern section of the Edwin B. Forsythe National Wildlife Refuge lies within my Congressional district. Led by the "Friends of Forsythe" volunteer organization the Forsythe Refuge received over 14,000 volunteers in 2012. This is the equivalent of seven full time employees. The Forsythe Refuge is a shining example of how effective the volunteer and friends programs have been and illustrates the importance of reauthorizing these programs. This is a common sense bi-partisan piece of legislation that deserves the support of this committee.

HR 1300, passed the House of Representative via a voice vote on July 30, 2013. I look forward to working with the committee to ensure that this bill clears the committee and gets to the floor for a vote. Again I would like to thank the Chairman and Ranking Member for holding this hearing today.

Senator BOOZMAN. Also, I ask unanimous consent to include several statements on the Big Cats bill from the Motion Picture Association, Zoological Association of America and others.

Senator CARDIN. Without objection, all those statements will be included in our record.

[The referenced information follows:]

Statement for the Record
U.S. Senate Committee on Environment & Public Works
Subcommittee on Water and Wildlife Hearing on "S.1381, Big Cats and Public Safety Protection Act"

July 16, 2014

The Motion Picture Association of America respectfully submits the following comments on behalf of its members[1] for inclusion in the record of the U.S. Senate Subcommittee on Water and Wildlife's hearing on S. 1381, the "Big Cats and Public Safety Protection Act." Although the MPAA applauds the intent of S. 1381, we are concerned the legislation would have unintended effects on the motion picture and television industry.

Under the proposed bill, only those institutions that are members of the Association of Zoos & Aquariums would be eligible to own and train big cats. Unfortunately, even though the federal government licenses the television and motion picture industry's professional animal trainers, they are ineligible for accreditation by the AZA because they work for neither a zoo nor an aquarium. Should the legislation be enacted into law as currently drafted, film and television productions would be forced to film outside of the United States when big cats are required, taking American jobs with them.

The animal handlers who work in the film and television industry take great care to ensure the safety, health, and well-being of their animals both on set and off. The U.S. Department of Agriculture licenses these professional trainers and the Animal and Plant Health Inspection Service conducts regular oversight. Only those trainers and handlers with USDA licenses are allowed to work with animals on productions, regardless of whether the animals are classified as exotic or otherwise. In fact, the use of any animal in a production requires the authorization of the USDA[2]. Unfortunately, notwithstanding the trainers' stellar care and commitment to the animals they work with, the AZA will not accredit them.

The industry relies on animal trainers and handlers of all breeds and sizes to make our creative works. The MPAA and its member companies have a long history of ensuring the safety of animals. Since 1980, the industry has operated under the American Humane Association's Guidelines for the Safe Use of Animals in Filmed Media.[3] The guidelines apply to all animals we use in productions and are more comprehensive than any state's anti-cruelty laws.

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[1] The MPAA represents Paramount Pictures Corp., Sony Pictures Entertainment Inc., Twentieth Century Fox Film Corp., Universal City Studios LLC, Walt Disney Studios Motion Pictures, and Warner Bros. Entertainment Inc.
[2] 7 U.S.C. § 2133.
[3] Guidelines for the Safe Use of Animals in Filmed Media, American Humane Association, *available at* http://www.americanhumanefilmtv.org/guidelines/.

We have a proud history of bringing stories to the big screen while educating and capturing the hearts of our audiences. The MPAA requests changes be made to the legislation to ensure that our industry is allowed to continue our safe and humane work with big cats to tell those stories.

ZOOLOGICAL ASSOCIATION OF AMERICA

Testimony of Peter Brewer, DVM, Chairman
Zoological Association of America
Before the
Subcommittee on Water and Wildlife
Committee on Environment and Public Works
United States Senate
July 16, 2014

Good afternoon Chairman Cardin, Ranking Member Boozman and members of the Senate EPW Subcommittee on Water and Wildlife. My name is Dr. Peter Brewer and I am the Chairman of the Zoological Association of America (ZAA). Thank you for allowing the ZAA to offer testimony in strong opposition to S 1381: Big Cats and Public Safety Protection Act.

The ZAA strongly believes that S 1381 is an unwarranted federal intrusion into the rights of responsible wildlife exhibitors and will have significant negative impact on many large and small family owned businesses and publicly funded facilities, as well as critical conservation efforts. Further, proponents of the bill have engaged in a campaign to smear the good reputation of the ZAA and have provided misinformation to the committee.

The ZAA is a professional trade organization that provides zoological accreditation for its members. It was formed in February 2005 to promote responsible ownership, management, conservation, and propagation of animals in both privately funded and publicly funded facilities through professional standards in husbandry, animal care, safety and ethics. World renowned animal expert, and former host of "Mutual of Omaha's Wild Kingdom," Jim Fowler, serves as ZAA Ambassador and Advisor to the Board. It is the second largest zoological accreditation organization in the United States, and has been recognized in precedent by numerous state legislatures as a professional trade association.

S 1381 purports to address public safety issues and issues of illegal trafficking in tigers and their parts, however, advocates for the bill have shown little evidence to support these claims or to demonstrate a need for a federal ban on the breeding and transport of these animals. We believe that the bill's "findings" are misleading, and will ultimately have a negative impact on conservation and the survival of this critical and highly endangered species. Simply put, this bill is a reaction to recent negative headlines regarding animal welfare, but is poorly crafted such that it has a number of unintended consequences that will significantly harm many responsible owners.

Specifically,

U.S. based tiger populations have no impact on illegal trade in wildlife

There is no evidence that tigers bred and held in captivity in the United States are entering the illegal markets, either as live animals or for their parts. Both the World Wildlife Fund (WWF) and the U.S. Fish and Wildlife Service (USFWS) have acknowledged this fact. [See USFWS proposed rule at 76 FR 52297 (August 22, 2011) Endangered and Threatened Wildlife and Plants; U.S. Captive-bred Inter-subspecific Crossed or Generic Tigers.]

S 1381 will hinder efforts at conservation and education

Many of the breeders and exhibitors of tigers that will be impacted by this legislation are actively engaged in conservation through in situ programs, education through exhibition, or support important on the ground research. These global efforts are funded in part through their ability to work with these animals here in the U.S., which is now being threatened by S 1381. Further, continued captive breeding of these animals here in the U.S. ensures a diverse gene pool for the future while we continue to address challenges impacting wild habitat.

S 1381 fails to exempt federally licensed exhibitors and arbitrarily favors certain classes of exhibitors over others

Under current law, all organizations that exhibit wildlife to the public must obtain what is known as a "Class C Exhibitors License" issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act (AWA). Licensees must abide by AWA rules governing the housing, keeping and care of its animals and are subject to regular unannounced inspections by the Animal Plant Health Inspection Service Animal Care division (APHIS/AC). These inspection reports are public information and licensees that fail to adhere to the AWA are often subject to enforcement action by the Agency.

Nonetheless, S 1381 removes the current exemption for USDA licensed exhibitors under the Captive Wildlife Safety Act and exempts only those entities that are accredited by the Association of Zoos and Aquariums (AZA), a competing trade association that restricts its membership to certain categories of facilities. AZA member zoos are subject to the exact same requirements under the AWA as all other public exhibitors, and yet membership in their organization is the new federal baseline for responsible breeding under this bill. While several of our ZAA members are also members of the AZA, it is therefore perplexing as to why one trade association should be favored over others by the federal government. As a result, the bill denies many responsible federally-licensed facilities access to animals for exhibition and breeding purposes, while at the same time, does nothing to address the issues of breeding by non-licensed, non-regulated intrastate breeders, and, ironically, provides exemptions for unregulated sanctuaries established to house surplus animals.

Misinformation by proponents of S 1381

The ZAA supports Congressional dedication to public safety, but our concern is that lawmakers have been given misleading information by special interest proponents of S 1381, and therefore have not had a fully informed perspective from which to make sound decisions.

Recently, Debbie Leahy of the Humane Society of the United States (HSUS) was quoted in The Fredrick News-Post in Maryland calling ZAA, "[a] fringe group with low standards". That statement is patently false and seems an attempt to smear the reputation of ZAA. Further, HSUS has used the moniker of "roadside zoo" to malign ZAA facilities, and has implied that we are somehow providing a haven for renegade pet owners. ZAA accreditation is neither for exotic pet owners nor "roadside zoos". We accredit only professionally managed zoological facilities. Additionally, ZAA has a

flawless safety record. There has never been a fatality at a member facility. The AZA, who is exempted from this bill, has had six fatalities since 2007.

ZAA counts among its members Six Flags Theme Parks. They are a 1.1 billion dollar private corporation that is considered the global leader in theme parks. Other institutions accredited by ZAA include the Montgomery Zoo, the Ft. Worth Zoo, the Metro Richmond Zoo, and many others.

We have attached a letter endorsing ZAA accreditation standards from world renowned animal expert, television host, and Director Emeritus of the Columbus Zoo, Jack Hanna.

ZAA accredited member facilities were exempted in the landmark Dangerous Wild Animal legislation passed in Ohio in 2012, and have been recognized by many states across the country including Maryland and Illinois in 2014. Our written standards were used as requirements of the permitting provision in Ohio; as well as the 'baseline' for discussions by the dangerous animal work group in the State of Virginia in 2012.

S 1381 exempts the AZA without providing equitable relief for the ZAA. ZAA and AZA represent the top two trade associations in the sector and as such have several common members, and well as several members who were formerly with one and are now with the other. We cooperate with them regularly. S 1381 will create a legislative monopoly for a single private trade association because it currently only allows an exemption for the Association of Zoos and Aquariums (AZA). If proponents are successful in their attempt to manipulate this process into providing a monopoly for AZA zoos, it will effectively eliminate all competition and put dozens of USDA licensed and fully accredited zoos out of business.

In addition, there seems to be a misperception that AZA is a public institution. They are not. Only the USDA licenses and inspects zoological facilities for public safety and enforces federal law. AZA is one trade organization, no more, no less.

Accordingly, the ZAA opposes the bill in its current form and would welcome the opportunity to work with the bill's sponsor to discuss the necessary changes.

ZAA

ZOOLOGICAL ASSOCIATION OF AMERICA

July 11, 2014

The Honorable Barbara Boxer, Chairman
Senate Committee on Environment and Public Works
410 Dirksen SOB
Washington, DC 20515

The Honorable David Vitter, Ranking Member
Senate Committee on Environment and Public Works
456 Dirksen SOB
Washington, DC 20515

Dear Chairman Boxer and Ranking Member Vitter,

On behalf of the Zoological Association of America (ZAA), I write to you today to make clear our opposition to S. 1381, the "Big Cats and Public Safety Protection Act", as introduced. We strongly believe that this bill is an unwarranted federal intrusion into the rights of responsible wildlife exhibitors and will have significant negative impact on many small and family owned businesses as well as critical conservation efforts.

By way of background, the ZAA is a professional trade association formed in 2005 to promote increasing animal welfare standards for all of the animals under our care and to promote responsible legislation to enhance these goals, while protecting the rights of our membership. While our association is fairly young, our accredited facility members and board of directors have decades of experience in the zoological field. Our member organizations are also committed to promoting global conservation education internally through our educational programs and externally through a variety of media appearances including the Discovery Channel, Animal Planet, ABC's *Nightline*, CNN, and NBC's *The Tonight Show*. As a complementary piece, many of our member organizations provide funding to critical on the ground wildlife conservation programs across the globe.

S. 1381, currently before the Senate Committee on Environment and Public Works, seeks to arbitrarily restrict the display, captive breeding, and possession of over eight species of big cats by certain privately funded facilities, breeders, exhibitors and conservationists, while excluding others. My letter today focuses on tigers, but I thought it important to clarify that the bill is much broader.

The bill purports to address public safety issues and issues of illegal trafficking in tigers and their parts, however, advocates for the bill have shown little evidence to support these claims or to demonstrate a

need for a federal ban on the breeding and transport of these animals. We believe that the bill's "findings" are misleading, and will ultimately have a negative impact on conservation and the survival of this critical and highly endangered species. Simply put, this bill attempts to chase recent negative headlines regarding animal welfare, but is poorly crafted such that it has a number of unintended consequences that will significantly harm many responsible owners.

Specifically,

U.S. based tiger populations have no impact on illegal trade in wildlife

There is currently no evidence that tigers bred and held in captivity in the United States are entering the illegal markets, either as live animals or for their parts. Both the World Wildlife Fund (WWF) and the U.S. Fish and Wildlife Service (USFWS) have acknowledged this fact. [*See USFWS proposed rule at 76 FR 52297 (August 22, 2011) Endangered and Threatened Wildlife and Plants; U.S. Captive-bred Inter-subspecific Crossed or Generic Tigers.*]

S. 1381 will hinder efforts at conservation and education

Many of the breeders and exhibitors of tigers that will be impacted by this legislation are actively engaged in conservation through *in situ* programs, education through exhibition, or support important on the ground research. These global efforts are funded in part through their ability to work with these animals here in the U.S., which is now being threatened by S. 1381. Further, continued captive breeding of these animals here in the U.S. ensures a diverse gene pool for the future while we continue to address challenges impacting wild habitat.

S. 1381 fails to exempt federally licensed exhibitors and arbitrarily favors certain classes of exhibitors over others

Under current law, all organizations that exhibit wildlife to the public must obtain what is known as a "Class C Exhibitors License" issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act (AWA). Licensees must abide by AWA rules governing the housing, keeping and care of its animals and are subject to regular unannounced inspections by the Animal Plant Health Inspection Service Animal Care division (APHIS/AC). These inspection reports are public information and licensees that fail to adhere to the AWA are often subject to enforcement action by the Agency.

Nonetheless, S. 1381 removes the current exemption for USDA licensed exhibitors under the Captive Wildlife Safety Act and exempts only those entities that are accredited by the Association of Zoos and Aquariums (AZA), a competing trade association that restricts its membership to certain categories of facilities. AZA member zoos are subject to the exact same requirements under the AWA as all other public exhibitors, and yet membership in their organization is the new federal baseline for responsible breeding under this bill. While several of our ZAA members are also members of the AZA, it is perplexing as to why one trade association should be favored over others by the federal government. As a result, the bill denies many responsible federally-licensed facilities access to animals for exhibition and breeding purposes, while at the same time, does nothing to address the issues of breeding by non-licensed, non-regulated intrastate breeders, and, ironically, provides exemptions for unregulated sanctuaries established to house surplus animals.

Prior to introduction of the bill, as part of an *ad hoc* coalition of concerned organizations that would be impacted by the bill, we reached out to the bill's sponsor and the NGOs who are advocating for the bill and requested a number of policy changes in an effort to find common ground. Chiefly, an exemption for federally licensed USDA exhibitors. Unfortunately, we were unable to reach any agreement.

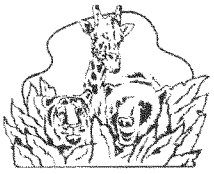
Accordingly, we respectfully ask you to oppose S. 1381. In its current form, this bill is bad policy that will legislate out of business many responsible USDA-licensed owners, while doing little to ensure public safety or prevent illegal trafficking.

Thank you for all of your good work. Please feel free to contact our federal representative, Frank Vitello at (703) 587-0066 should you have any questions or comments.

Best regards,

Peter J. Brewer DVM

Peter J. Brewer, DVM
Chairman
ZAA



Catoctin Wildlife Preserve and Zoo

13019 Catoctin Furnace Rd. Thurmont, MD 21788
General Information 301-271-3180 Offices 301-271-4922
Fax 301-271-2673 Online www.cwpzoo.com

July 14, 2014

The Honorable Benjamin L. Cardin
509 Hart Senate Office Building
United States Senate
Washington, DC 20510-2707

Dear Senator Cardin:

I am writing today to make clear our opposition to S. 1381, the "Big Cats and Public Safety Protection Act", as introduced. This bill will be heard in the Senate Committee on Environment and Public Works, Subcommittee on Water & Wildlife on July 16, 2014.

We strongly believe that this bill is an unwarranted federal intrusion into the rights of responsible wildlife exhibitors and in addition to negatively impacting critical conservation efforts, the bill will have significant negative impact on our business in Maryland.

Through our trade association, the Zoological Association of America (ZAA), we reached out to the office of the bill's sponsor, Senator Richard Blumenthal, and explained our various policy concerns. For your reference, those concerns are outlined in an attached letter from the ZAA to the Senate EPW Committee. In response, Senator Blumenthal's office refused to consider any of our concerns. Further, the EPW Subcommittee on Water & Wildlife has scheduled the bill for a legislative hearing along with eleven other bills and has neglected to invite any outside witnesses to provide testimony on the bill.

Therefore the only option we have at this point is to oppose S. 1381 and ask that you make clear your opposition to this bill as well. This legislation has far-reaching implications and too many unintended consequences to simply rubber stamp it through the process or include it in a package of bills. We hope we can count on your support to oppose S. 1381 and make clear to Chairman Boxer and Ranking Member Vitter that you do not want this bill included in any package of bills the Senate intends to move.

Thank you for your support and for your good work on behalf of the people of Maryland.

Richard Hahn, Executive Director

Richard A. Hahn

Catoctin Wildlife Preserve and Zoo

COLUMBUS ZOO AND AQUARIUM

9990 RIVERSIDE DRIVE, P.O. BOX 400
POWELL, OH 43065-0400
614-645-3400

July 13, 2014

The Honorable Ben Cardin, chairman
Senate Environmental and Public Works Committee
Subcommittee on Water and Wildlife
410 Dirksen Senate Office Building
Washington, DC 20510

The Honorable John Boozman, Ranking Member
Senate Environmental and Public Works Committee
Subcommittee on Water and Wildlife
456 Dirksen Senate Office Building
Washington, DC 20510

RE: S. 1381 — Big Cats and Public Safety Protection Act

Dear Chairman Cardin and Ranking Member Boozman,

I am writing to voice my support of the Zoological Association of America (ZAA) and my concerns surrounding S. 1381 – the Big Cats and Public Safety Protection Act. There is currently an exclusion of the Association of Zoos and Aquariums (AZA) facilities and I feel that ZAA organizations should also be granted an exclusion from S. 1381.

S. 1381 will have a negative impact on many experienced wildlife exhibitors, small and large family owned businesses, and publicly funded facilities, as well as critical conservation efforts for endangered species. Having worked in the zoo industry for more than 40 years, I have seen the impact that small organizations can have in saving a species and educating the public.

I have been a member of ZAA for several years and find the organization to be a credible and responsible representative for the zoological community. I personally know many of the professional members in ZAA and have worked directly with a number of accredited facilities in ZAA. ZAA was very helpful in the development of our new regulations in Ohio, and a representative of ZAA sits on the Ohio Dangerous and Restricted Animal Advisory Board.

A diverse group of wildlife educators is needed to ensure the survival of species for generations to come. Please consider opposing S. 1381 until ZAA can be granted an exclusion. If you have any questions, please feel free to call my office at 614-645-3480.

Respectfully,

Jack Hanna
Director Emeritus, Columbus Zoo and Aquarium
Host, *Jack Hanna's Into the Wild* and *Jack Hanna's Wild Countdown*

7/15/14

Congressman Benjamin Cardin, Senator of Maryland
509 Hart Senate Office Building Washington DC 20510

Re: S. 1381 The Big Cats and Public Safety Act

Dear Congressman Cardin and Committee Members,

My name is Dr. Jan E. Janecka. I am an assistant professor in the Department of Biological Sciences at Duquesne University and am an expert in conservation biology, genetics, and wild cats with over 30 scientific publications. In addition, I am the Genetic Program Director of the Snow Leopard Conservancy, Science Director of the Species Survival Trust, a member of the IUCN/SSC Cat Specialist Group, Snow Leopard Network, and the USFWS Ocelot Translocation Team. I also serve as a genetic advisor to captive breeding institutions and zoos. I am a major contributor to the recently developed Species Survival Trust and a private big cat registry which focuses on conservation through genomics.

I am writing to voice my strong opposition to S. 1381 The Big Cats and Public Safety Act. It would be a drastic backward step in the conservation of tigers, and other big cats, and education of the public in wildlife, nature, conservation issues. **S. 1381 would cause irrevocable damage to the captive populations of tigers and other big cats, these species as a whole, and the community of private breeders that maintain them,** all of which have great value for education, research, and conservation of these remarkable species. The key to long-term health of the big cats and other endangered species is large population size and genetic diversity. **The S. 1381 bill would reduce both population size and genetic diversity of captive tigers and other big cats, in turn increasing extinction probability and health threats, and reducing their potential for adaptation.**

In addition, S. 1381 would directly negatively affect my research at Duquesne University. I lead an on-going big cat genomics program with the goal to increase the health and stability of big cat populations, to improve understanding of these species, and to involve students in science. Many of my collaborators are legitimate private non-AZA institutions that maintain non-SSP tigers and/or breeding programs which would be eliminated by S. 1381. **If S. 1381 is passed it will drastically reduce my big cat research and conservation program and negatively affect my activities at Duquesne University.**

The captive populations of tigers and other big cats in the US are an important resource that ensures the long-term preservation of these species. In the wild, tigers and other big cats are rapidly decreasing and have already been eliminated in many areas. This is occurring in numerous developing countries over which the US has little to no influence. **Maintaining healthy diverse breeding populations of big cats in the US is one of the biggest contributions to conservation we can make for 3 reasons:**

1. **It ensures a large gene pool that promotes healthy big cats in the future**
2. **It ensure support for conservation by using tigers and other big cats as flagship species**
3. **It ensure biological, genetic, and behavioral research that leads to healthy big cats and development of more effective conservation actions**

S.1381 would have 3 primary outcomes that would damage the captive populations of tigers and other big cats, and negatively impact conservation and research efforts by US facilities:

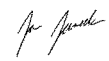
Problem #1: S. 1381 would prohibit tigers in facilities that do not have AZA accreditation.
The AZA is a valuable group however they are only one private association that maintains captive cats. They have breeding programs that do not prioritize maintaining high levels of diversity and have some unnecessary restrictions. They should not be the only organization in charge of all of the captive big cats in the US. There are other reputable US facilities with tigers and other big cats that are not part of the AZA, and because of legitimate reasons these facilities do not want to be in the AZA. I am working with these non-AZA institutions to develop a scientifically based breeding plan, the Species Survival Trust, which will be a valid alternative to the AZA's SSP. **S. 1381 would tragically eliminate this important private sector of wildlife facilities that serve vital conservation and educational roles.**

Problem 2: S. 1381 would prohibit the breeding of tigers and other big cats not assigned to a subspecies or in the Species Survival Plan (SSP)
A large number of healthy big cats are not in an SSP and have not been assigned to a subspecies, yet they are valuable breeders. In addition, the non-AZA facilities have a much better representation of some big cats than AZA zoos, for example the Bengal tiger subspecies. S. 1381 would reduce the viability of the captive big cat populations by removing healthy and genetically diverse tigers and other big cats from breeding programs just because they are not in an SSP. **This reduction in the breeding population caused by S. 1381 would in turn increase the loss of genetic diversity, increase inbreeding, increase the occurrence of heritable disorders, increase the susceptibility to diseases, and increase extinction risk**.

Problem 3: S. 1381 would eliminate facilities that allow safe interaction with endangered species.
Many legitimate wildlife sanctuaries allow monitored interaction with the public in a safe and controlled manner. These outreach activities are strictly supervised by knowledgeable trainers and done in very controlled situations. These outreach activities serve to educate the public and promote conservation of endangered flagship species such as the tigers. In addition, non-AZA facilities have more flexibility to conduct important research projects that involve handling of big cats in collaboration with scientists, which will lead to scientific breakthroughs to improve conservation and medicine. Many of these outreach and research opportunities are largely not available at AZA zoos and are therefore primarily provided by non-AZA facilities. **S. 1381 would practically eliminate numerous legitimate wildlife institutions that provide safe public outreach and serve important scientific roles that contribute to conservation and research on big cats.**

My entire career has been dedicated to science and conservation, with a focus on wild cats. **I strongly urge you to take all the necessary steps to block SB 1381 because it would hinder conservation and research.** I would be happy to provide additional consultation that would assist in making your decision. Thank you for your consideration.

Best Regards,



Jan E. Janecka, Ph.D, Assistant Professor, Duquesne University, Pittsburgh PA.
Phone: 412-396-5640; Email: janeckaj@duq.edu

Written Testimony of Congressman Howard P. "Buck" McKeon on S.1381, *the Big Cats and Public Safety Protection Act* in the Subcommittee on Water and Wildlife
Wednesday, July 16, 2014
03:00 PM EDT
EPW Hearing Room - 406 Dirksen

I would like to thank Chairman Cardin, Ranking Member Boozman, and Senators on the Subcommittee on Water and Wildlife for allowing me to submit written testimony for their hearing on Wednesday, July 16, 2014. I appreciate the opportunity to share my interest on the Big Cats and Public Safety Protection Act, of which I have authored in the House of Representatives (H.R. 1998).

Mr. Chairman, having authored numerous pieces of legislation in Congress on wildlife, I am fearful of the consequences of not addressing the alarming situation of domesticating these very large and very wild big cats. From my successful 2003 Captive Wildlife Safety Act, which thoroughly examined and strengthened laws that dictated the state to state transport and the purchase of exotic animals to my authorship of this bill in the House, I am well versed in the danger that these creatures possess. With close to twenty-five percent of my U.S. House of Representative colleague's co-sponsoring H.R. 1998, the Big Cats and Public Safety Protection Act, wild animals and the laws that surround them are salient in today's world. No matter how many times people try to do it, these animals are impossible to domesticate for personal possession. Not only is this a severe safety issue, when accidents do occur, our public safety officers are neither trained, nor prepared to take action and are left financially responsible for the gross negligence of its citizens.

Unfortunately, situations do occur that put a stress on our local municipalities. A few years back, an unstable man in Zanesville, Ohio made the decision to, not only open all of the animal cages that he kept at his home, but he also decided to end his own life. The mass hysteria he left behind resulted in local authorities reacting to rectify this situation. Again, this is not only a safety issue for the tigers and for the people in their path; this is also a financial situation. Estimates indicate that the extra costs related to the Zanesville, Ohio incident reached thousands of dollars. Our local municipalities are overtaxed and they can't bear the burden of these accidents that are 100 percent preventable.

The current regulatory structure for big cats falls into the hands of the United States Department of Agriculture and its Animal and Plant Health Inspection Service. Unfortunately, with an estimated 10,000 plus big cats in private hands, the USDA is

operating in an environment that is not efficient, nor safe. They are underfunded, lacking in resources and not able to enforce the current regulatory regime. However, this is not new information. Multiple USDA Inspector General Reports indicate inherent problems over the years when it comes to oversight. According to the Reports, the licensing process is underwhelming. Often renewals are completed without inspections. It is not uncommon for those who domesticate big cats to skirt state laws, which are often more onerous than federal laws, by acquiring a USDA license. The USDA and their Animal and Plant Health Inspection Service can't continue to exercise lax oversight in this area.

It is high time to make the right decision with big cats. No longer should they be in private hands. With over 20 killings and over 200 attacks from big cats in the last few decades, can we sit around and continue to allow individuals to raise these wild animals? Stricter laws are needed and they are needed now. One killing is too many. I am concerned for the safety of our citizens, the well-being of the animals and the welfare of those involved in public safety.

Again, I applaud the United States Senate for having this discussion and I will continue to work to pass the Big Cats and Public Safety Protection Act in the House of Representatives. Thank you again for allowing me to submit this statement. I would also like to take the opportunity to submit a letter written by Tippi Hedren, the leader of the Shambala Preserve and an ardent activist for big cats. Thank you.

LETTER TO CONGRESS from TIPPI HEDREN

The Captive Wildlife Safety Act, which passed unanimously and was signed into law by President Bush on December 19, 2003, is to stop the interstate traffic of big cats for sale as pets or for financial exploitation. That bill was inspired by a prototype I brought to my U.S. Representative "Buck" McKeon. The bill now before Congress, (HR 1998, S1381) "Big Cats and Public Safety Protection Act", I also brought to Rep. McKeon in 2007. This bill is to stop the breeding of big cats (apex predators) to be sold as pets and/or used for financial exploitation. It will be up for review in the Senate in the middle of this week, July 14-17, 2014, hopefully to be voted upon.

I'm urging you to support this bill. Not one more human adult, or child, should be maimed for life or killed by a big cat. Not one more big cat should be abused by being born in captivity under the misunderstanding that they will be a good pet; or be brutalized into doing tricks for our "entertainment".

My qualification to ask for this support is: I have rescued and provided sanctuary for big cats born in the U.S. since 1972. I founded The Roar Foundation in 1983 to become the financial support arm for The Shambala Preserve and to educate the public against owning wild animals. We have rescued and given lifetime care to over 250 exotic big cats over these years. I also have been the sitting President of the American Sanctuary Association, an accrediting organization for wild animal facilities, as well as a wildlife placement organization, since 2000.

Description of a big cat: Apex predator, top of the food chain, one of four of the most dangerous animals in the world, whose job in the wild is to take out any animal who is sick, old or lame. This instinct/gene manifests predatory behavior in captivity and threatens humans as well. Example: Roy Horn, who had a stroke on stage, survived the attack by tiger "Montecore" only because the trainers standing off-stage, managed to get the cat off of him. In Montecore's mind, Roy was physically hurt and had to be "taken out". In the human species, these kinds of dictates are referred to as psychopathic. Our jails are filled with psychopaths who can, and will, harm or kill any being, with no sense of conscience or remorse. These conscience and remorse instinct/genes are absent in the big cat predator as well.

In my studies of the big cat since 1972, and while living at Shambala alongside them since

1976, I have found them to be infinitely fascinating – and life threatening. Their physical beauty is magnificent and it is the combination of that and their relationships, their sense of humor, their affection towards each other, and sometimes toward us, that draws many of them to us.

But, their memories of a bad relationship with another animal or human, their possessiveness of objects, and always over food, are what can cause you to be caught in a serious situation. They can, and will, kill you if those possessions are threatened. I managed to live through those situations ... the scars are fading, but not the memories. I understand these magnificent beings way too well. They can never be trusted. They don't care about us! They are, in point of fact, serial killers!

Those who we call "pets" live in our homes; we cuddle them, sleep with them, feed them well, play with them, call them family, playmates and friends. We are able to trust them. They are from an entirely different genetic mindset than the predator. Don't think of describing an exotic feline as a "pet". Please, think again when voting to stop apex predators from being bred as a pet for exploitation. Stop the misinformation sent to the U.S. population that any exotic feline can, or will, be a 'great pet'.

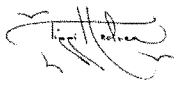
I thank you for giving your support, because you in our Government are the only hope we have of stopping this insanity. I pray you will pass this vitally important bill, "Big Cats and Public Safety Protection Act".

Who of you would put your child, your grandchild, your wife, friend or yourself in harms way for a photo op with a "great cat"? Would you place a loaded pistol on your coffee table .....?

Since 2011, over 104 attacks by big cats on humans in the U.S. have occurred.

This responsibility lies with you,

Tippi Hedren



President-Roar Foundation

The Shambala Preserve

www.shambala.org

Big Cat Rescue
12802 Easy Street
Tampa, FL 33625
www.BigCatRescue.org

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON WATER AND WILDLIFE
Proponent Testimony in Support of Senate Bill 1381
Carole Baskin
July 16, 2014

Dear Chairman Boxer, Ranking Member Vitter, and Members of the Committee:

Thank you for the opportunity to submit testimony on this vitally important legislation. My name is Carole Baskin. I am the Founder and CEO of Big Cat Rescue, a sanctuary for big cats in Tampa, FL. On behalf of the exotic feline residents of Big Cat Rescue and their more than 200,000 of supporters worldwide, I am presenting this testimony in favor of SB 1381. This bill would put an end to the federal government wasting millions of dollars trying to do something that is both financially and operationally impossible, i.e. insure humane treatment of thousands of big cats inappropriately kept in back yards and used for entertainment. It would end forcing these majestic animals to live in deplorable conditions.

My first contact with exotic cats came about in the early 1980s when I was in the office of a veterinarian who had done surgery on a wild bobcat who had a broken rear leg. The surgery only took a few hours. But the cat needed several weeks of care while the leg healed before it could be released into the wild. I volunteered to provide that care and became what we call a "rehabber."

I got my first young bobcat that I actually owned and planned to keep captive in 1992 at an animal auction. I outbid a taxidermist sitting next to me who told me he was going to buy the cat, club it to death in the parking lot, and turn it into a den ornament. A year later my then husband and I bought 56 bobcats and lynx from a fur farm to keep them from being turned into fur coats. At that time, I thought they could make good pets and began placing them in homes. In those early years I believed the lie told by breeders and exhibitors that breeding big cats in captivity did something for conservation. In those early years Big Cat Rescue did a limited amount of breeding of various species under that misconception.

A few years later the bobcats I placed as pets starting being returned when they reached adulthood and became unmanageable. I realized they did not make good pets. I also realized that captive breeding did nothing to promote conservation. In fact, captive breeding hurts conservation in the wild. So during the 90's I went from being a breeder who placed cats as pets and occasionally took them off property as entertainment to becoming an advocate of stopping the nightmare that private ownership creates for these amazing animals that deserve so much better.

Big Cat Rescue is the largest sanctuary for big cats that is accredited by the Global Federation of Sanctuaries. Big Cat Rescue is held out by GFAS as a model of operating and financial

efficiency, and has been asked to hold seminars and private visits to teach other sanctuaries how to replicate its success. We provide a permanent home to about 100 big cats. Charity Navigator, the dominant charity rating agency, consistently gives Big Cat Rescue its highest four star rating.

Cats typically come to Big Cat Rescue from two sources. Some come after being discarded by exhibitors who exploit them for profit. Many others come from private owners who abandon the cats once they are no longer cute kittens, sometimes years later as their family situation changes. Others are confiscated by law enforcement because they are kept in horrible conditions.

Under current law, USDA is charged with setting "minimum standards" for how big cats that are "exhibited" are to be treated and kept. USDA rules only apply to those owners who show their cats to the public, or in many cases claim to show the cats to the public in order to obtain a license to evade State prohibitions. USDA rules do not apply to the estimated thousands of cats whose owners simply keep the animals in their back yard. Those fall under state laws that range from no regulation at all to very complete prohibitions on owning big cats. Many of the states that prohibit ownership unfortunately exempt those who hold a USDA license. This has become a huge "loophole." An audit of USDA licensees by the OMB found that of those who owned four or less big cats, 70% were really pet owners who only held a USDA exhibitor license to evade the state prohibition.

The point I want to make today is that USDA trying to regulate how these animals are kept sounds good in theory, but is simply impossible from a cost and operational standpoint. This is not for lack of trying. I have met a significant number of USDA staff over the years. By and large they are highly qualified people, often with veterinary degrees, who care about animals and want to do right by them. In "off the record" conversations they frequently express the same frustration we feel at their inability to enforce the Animal Welfare Act mandate of providing a humane existence for these animals. I know of some who finally quit in frustration, because they could not stand to continue to helplessly see animals living in miserable conditions.

I speak to you as someone who has lived this issue daily in the trenches for over 20 years. During that time Big Cat Rescue has taken in hundreds of animals from heartbreaking conditions. But even more heartbreaking is the thousands of big cats that, despite the regulations, suffer inhumane treatment and do not end up spending at least the latter part of their lives at a good sanctuary. To explain why this is the case, I am going to give you a detailed, practical understanding of what happens in the field when USDA tries to regulate, and illustrate with a few examples.

Successfully regulating humane conditions and treatment is impossible because:

- Number of inspectors. When I last counted there were almost 350 licensees who had tigers and the last report I saw had close to 700 who had big cats. But, the same inspectors who monitor big cat facilities are also charged with inspecting pet stores, dog, cat and other pet breeders and dealers, farms, slaughter houses, laboratories and other animal related businesses. As of 2011 there were only 105 inspectors charged with monitoring 7,976 such facilities. It is financially impossible to have enough inspectors to inspect all these facilities regularly.

- What inspectors can see when they inspect. USDA does not do "undercover" operations like Fish and Wildlife Service sometimes does. Even if they did, they could not possibly afford to do

enough to make a difference. The USDA inspector typically comes to the facility without advance notice and announces that they are there. If the facility refuses to let them in, the exhibitor receives a citation for not letting the inspector in and the inspector has to come back another time. There is no fine for this citation.

An individual who worked for one particularly notorious exhibitor told us that the staff was all told that if the USDA inspector came they were to delay the inspector as much as possible. The owner would get on the radio and tell the keepers to make sure the water bowls all had water and stop doing anything that could be a violation, like exhibiting a tiger cub so young that its immune system was not developed, or a cub so big it was dangerous.

Once the inspector is taken around the facility, what can they see? They can see if the condition of the cages complies with the rules. They can see if the cage has shade and water. They can see if an animal is clearly underfed or has some obvious condition like a wound. They can see if the food preparation area is clean. They can check the "census" the exhibitor is supposed to keep to attempt to see if all animals are accounted for. But, this census is basically an honor system among people who lack honor. If the exhibitor breeds tiger cubs and wants to sell them illegally, or not account for them if they die, he simply does not put them on the census. Two of the most prolific tiger cub breeders keep the cubs in their residences where the inspector does not go.

-What the inspector will not see is if an animal is being mistreated, because no one at the facility is going to do that in front of them.

At a stationary zoo facility the inspector can at least find the animals. Monitoring traveling exhibits is far more difficult. Those that travel interstate end up in the territories of different inspectors who do not know they are coming. Many of the exhibits are on weekends. Generally they are not inspected unless there is a report of a potential violation, and often the traveling show is gone before an inspector can respond, particularly if the display is on a weekend.

Because Big Cat Rescue is well known nationally for exposing those who abuse big cats, employees and volunteers from some of these facilities sometimes contact us with reports. In some cases they are willing to file a complaint with the USDA. In other cases they will not because they are afraid of the exhibitor or because they are concerned that they would not be hired by another animal facility if it became known that they had filed a complaint.

One of the most troubling examples is the treatment of tiger cubs bred incessantly around the country to be used to make money by allowing the public to pet them, take photos with them, or swim with them. To start with, they are taken from the mothers almost immediately after birth so they bond to people and not the mother. This is a torment to both the mother and infant.

If you have ever watched domestic kittens, what do they do? First, they sleep a lot – they need it. When awake, you see them pouncing on each other, biting at each other, hitting each other or grabbing onto each other with their claws. These play behaviors are how they learn to use the muscles and skills that instinctively they need to build if they were to live in the wild.

Tiger cubs are no different. They want to do these natural behaviors and do not want to sit still to be held for photos. So they are physically punished when they attempt their natural behaviors. They are punched and slapped in the face, kicked, hit with sticks and whips, and have their faces shoved into the dirt, according to undercover video and employee and volunteer reports. We

have video of cubs being kept on display with raging diarrhea and used for petting when they are suffering from ringworm which is highly contagious and easily transmitted to humans. We even have reports of the cubs being thrown into the air to see how they bounce. They do not land on their feet.

When on exhibit, they are deprived of the sleep they naturally need. If a customer is willing to pay, you can be sure the cubs are going to be petted or awakened to be held for a photo. We have video of one cub being held under the front legs and waved around to show a crowd. The cub was so exhausted that even being held in this uncomfortable manner and waved around it did not awaken. In the video, one young girl in the crowd said, tellingly, "Oh my God, I thought it was dead."

- What happens if the inspector does find violations? If an inspector does find one or more violations, they issue a citation. Typically some time frame for curing the deficiency is given. The inspector may or may not make it back in that timeframe. If the licensee has not fixed the problem, a "repeat citation" may be given. If the infraction is not fixed by the next visit after that, another repeat citation may be given. If the infraction has been cured, the inspector may find a different violation.

Where does this all lead? What we see over and over is horrible places cited year after year after year, while they continue to operate in the same way and cats continue to suffer.

- What happens after years of serious citations? In addition to inspectors, USDA has investigators and attorneys, but of course there are a limited number. It takes a lot of time to build a record that will hold up in court. So, only a handful of the worst of the worst of the exhibitors is subjected to USDA bringing them to the administrative court to be punished with fines, suspension, or revocation of their license to exhibit.

Actually bringing a case to trial is of course a huge time commitment for the limited legal staff. So, they have a huge incentive to settle cases. One example is an exhibitor who racked up 197 violations, many serious like failure to provide veterinary care, over a four year period. USDA finally filed for penalties, and two years later settled for $25,000 and a two week suspension. The exhibitor bragged that he has made almost that much in one weekend of his cub petting exhibit.

Another example was cited in testimony that helped Ohio pass one of the strongest state prohibitions against owning big cats after the infamous Zanesville massacre:

"Lorenza Pearson ran a facility called L and L Exotics in the Akron area for decades. Although a pet tiger killed his 2-year-old child in 1983, over the next 20 years he was allowed to acquire 82 dangerous wild animals. Although the USDA recorded multiple violations in housing, fencing and animal care, including the removal of 27 lions and tigers in 2004 and a fire that killed several animals in 2005, it did not take away Pearson's license until 2007 – after he had racked up a staggering 953 violations of the Animal Welfare Act."

At a minimum, after years of citations and finally being charged by USDA, the licensee can delay for years in litigation.

- What happens if a license is revoked? Very, very few licenses are revoked. If the license is revoked, the licensee can keep their animals in the same conditions that USDA cited them for as

long as they do not exhibit to the public. They are no longer inspected by USDA because they are not a licensee.

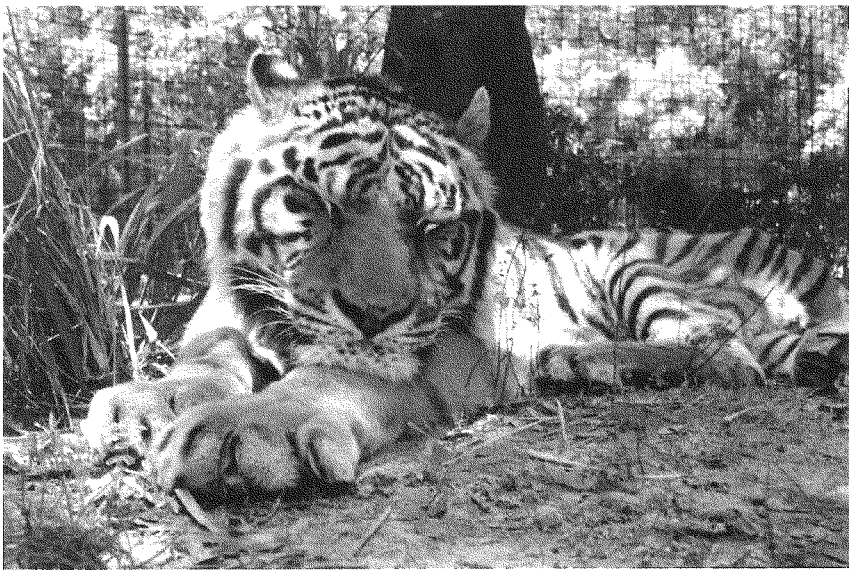
If they continue to exhibit in violation of the AWA, USDA generally must rely on other agencies to enforce the violation. That does not always happen. We took in two lions and two tigers from a former licensee named Diana McCourt in Ohio. The cats were not only declawed, but three of them were defanged to make them "safer." McCourt would chain the animals down and charge people to come and take photos with these adult cats and get a certificate saying they were a tiger or lion "tamer." After numerous injuries to visitors over a period of years, McCourt finally had her license taken away. But she continued to operate as an exhibitor illegally for three years after that without a license because no one chose to enforce her open violation of law. She only stopped when she was evicted from the property for not paying rent for years. She left and abandoned the cats. The local dog catcher then took control and sent them to us.

But there is another more common way for a licensee who loses their license to continue to operate legally if their license is revoked. They just have someone else get a license. That was the case in our most recent rescue. On May 27 of this year we took in 3 tigers from "JnK's Call of the Wild" in Sinclairville, New York.

Ken and Jackie Wisniewski started the facility in 1997. When they lost their exhibitor license after years of citations , they simply had their daughter Kristy Wisniewski obtain a license. To obtain a license requires a one page application and a $10 application fee. They continued to operate under Kristy's license, and received more USDA citations under this new license. Meantime, conditions at the zoo deteriorated and the animals were living in cages that were increasingly ramshackle and grossly underfed and losing weight. The cages were not being cleaned so the cats were living in their own feces. Only after Kristy had a falling out with her mother and refused to renew the license were the animals sent to new homes. But, not by USDA.

New York law bans private ownership of these animals. But, it has the huge loophole I mentioned earlier – it exempts those who hold a USDA exhibitor license. Once Kristy declined to renew her USDA license JnK was in violation of New York's prohibition against possession of such animals. After the Zanesville incident brought national awareness about what can happen, New York's Attorney General became more aggressive about enforcing this law.

Zeus, a 17 year old male tiger who was born at JnK pictured below, arrived at Big Cat Rescue over 200 pounds underweight with his hip bones showing prominently through his ragged coat. I remind you that USDA inspected this facility for years, issuing citation after citation. Was the "regulation" effective in providing Zeus a humane existence? Obviously not. And he is one of the lucky ones. He may at least get 3 or 4 years of his life in a humane setting after the years of suffering. If Kristy had not had an argument with her mother and refused to renew her license, Zeus would still be in starving and living in his own feces.



Sanctuaries – a ticking time bomb. When these animals are seized or abandoned many go to sanctuaries. Big Cat Rescue has followed a different financial strategy than other sanctuaries. We view the future financial cost of caring for the cats to the end of their lives the same way a company views the pension liability to its retired employees. Companies fund, or at least fund in significant part, that pension liability. The only difference is our retirees are big cats.

In 2003 we made a decision to keep the number of cats at the sanctuary stable, only taking in new cats as our existing ones pass away, so we could build financial reserves to fund that future liability. We have done that successfully. I know of no other sanctuary that has done that. Most have spent whatever revenue comes in taking in more and more cats, steadily increasing the ongoing operating costs of the facility, and have not set aside reserves to insure they can meet the commitment to care for the cats to the end of their lives.

There are now a number of facilities that have over 100 big cats, and others between 50 and 100. In a number of cases they are run be aging founders who work 7 days a week, have no succession plan, and have little or no financial reserves to sustain them through a transition. When Wild Animal Orphanage in Texas went bankrupt in 2010, there were 76 big cats among the 400 animals there. It took over a year and a massive effort by USDA, International Fund for Animal Welfare, GFAS and others to place these animals. Many ended up at some of the facilities I just described, further straining their resources.

In the recent financial crisis it was recognized that allowing the biggest banks to fail would be a disaster. I believe we are on the verge of the big cat version of the financial crisis. The difference is we do not have a big cat Federal Reserve. Whether it is the next large big cat facility to fail that breaks the system or the one after that I do not know. But I believe it is inevitable that we will get to a point where a large facility fails and there is simply no place for the animals to go. If we do not pass S1381, by continuing to allow the rampant private breeding and possession of big cats, the Federal Government will end up responsible for massive euthanasia of these big cats to the horror of the American public, or face the enormous cost of footing the bill to provide for all these cats for the rest of their lives.

Conclusion. Regulations could be made stronger, we could double the USDA staff, and it would simply be fingers in the dyke. For the detailed reasons stated above, regulation simply does not work. The evidence is clear. We have spent millions of dollars each year for decades inspecting and trying to enforce rules and most big cats still live in conditions the vast majority of Americans view as inhumane.

At a time when our nation struggles with deficits, and country after country around the world, and state after state in this country, pass laws that recognize that it is inhumane and unsafe to have these apex predators in private hands, it makes no sense for our Federal Government to spend millions of dollars each year inspecting tigers living in back yards and playing whack a mole ineffectively chasing only the worst of the worst of the exhibitors. This bill would put a stop to all but a limited amount of breeding and ownership. As the current population of big cats in private hands dies out over the next decade or so, it would save the taxpayers millions of wasted dollars while ending the misery in which most of these animals live.

Thank you for allowing me to testify. I urge you to vote to end the suffering and wasteful spending by passing this bill.

Written Statement of Carson Barylak,
Campaigns Officer, International Fund for Animal Welfare

Submitted to the Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife

July 16, 2014

Chairman Cardin, Ranking Member Boozman, and Members of the Subcommittee, on behalf of the International Fund for Animal Welfare, thank you for the opportunity to provide testimony concerning the Big Cats and Public Safety Protection Act (S. 1381/H.R. 1998).

For many years, IFAW has called for an end to the private ownership and captive breeding of big cats in the United States and around the world. The organization has a long history of rescuing and providing sanctuary for captive big cats that, because of deficiencies in existing law governing big cat ownership, have endured inhumane and unsafe living conditions, often for many years. Since 2004, IFAW has worked with bona fide sanctuaries and the Global Federation of Animal Sanctuaries to assist with the rescue and transport of big cats from backyards, basements and failed sanctuaries into permanent, optimal lifetime care.

In total, IFAW has helped rescue and relocate 118 big cats, including lions, tigers and cougars, from failing facilities to accredited sanctuaries across the United States. One rescue effort consisted of removing 24 big cats from conditions in which, according to the New Jersey Department of Environmental Protection's Division of Fish and Wildlife, the cats were forced to choose between standing knee-deep in mud and feces or taking shelter in filthy trailers. In another case, IFAW rescued and transported to sanctuaries six big cats that had been abandoned by their owner at an Ohio facility. In the same state a few years later, IFAW supported the rescue of and provision of veterinary care for five tigers at a failing facility, transporting the animals to legitimate sanctuaries and better lives. Through advocacy and rescue work, we have seen firsthand the sad conditions of these captive animals and the corresponding public safety hazards.

The Big Cats and Public Safety Protection Act would address this serious—and ever worsening—public safety and animal welfare crisis in the United States by bringing an end private ownership and breeding of lions, tigers, leopards, snow leopards, clouded leopards, cheetahs, jaguars, and cougars, as well as any hybrid of these species. These dangerous big cats are kept as pets in the U.S. in alarming numbers, which threatens public safety, diminishes global big cat conservation efforts, and often results in mistreatment and cruelty toward the animals. Captive big cats may be kept on residential properties, roadside zoos, and other places in which they live in inhumane conditions and pose a significant risk to people. It is estimated that there are more than 10,000 big cats in private ownership in the U.S.,[1] including roughly 5,000 captive tigers[2]—more than are found in the wild. However, the exact number of captive big cats remains a mystery, and this lack of knowledge about nationwide big cat ownership is a significant part of the problem.

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[1] *See* 90-Day Finding on a Petition to Delist the Tiger, 75 Fed. Reg, 48917 (2010).
[2] Douglas F. Williamson and Leigh A. Henry, *TRAFFIC North America Report: Paper Tigers? The Role of the U.S. Captive Tiger Population in the Trade in Tiger Parts* (2008).

Since 1990, there have been at least 740 dangerous incidents involving captive big cats, including maulings, escapes, confiscations, situations in which big cats have been killed, and—alarmingly—cases in which captive big cats have killed people.[3] These incidents have resulted in at least 21 human deaths (including 5 children), 246 maulings, 254 escapes, 143 big cats deaths, and 131 confiscations.[4] Moreover, private owners of captive big cats have sought to surrender or abandon at least 1297 big cats since 1999.[5] The actual number of unwanted big cats is likely much higher, as this figure accounts for the number of big cats about which a *single* rescue was approached during these years.[6] Such risks are unavoidable under the current legal and regulatory structure governing big cat ownership; these dangerous, wild animals cannot be trained or domesticated in such a way that people can safely have direct contact with them. Private operations that keep, breed, and offer for handling big cats are fundamentally unsafe for the public.

It is not only the individuals who choose to keep or interact with big cats that are at risk. First responders are often not trained or equipped to deal with these wild animals, but nonetheless must put their lives on the line when dangerous incidents involving big cats occur. The law enforcement officers who were called upon to respond to the 2011 "Zanesville massacre," an incident in which an Ohio man operating a backyard menagerie released 38 big cats and other exotic animals, have recounted the peril and challenge of such situations. Muskingum County Sheriff Matthew Lutz, acknowledging the strain placed on his agency by the incident, recalled, "In order to protect my community, I had to make the difficult decision to shoot the animals.... This decision, although the right one, brought major adversity to my office and my community. It also placed a heavy burden on our Deputies some which still carry that today."[7] He emphasized that "[l]aw enforcement and other first responders don't go through training for this, and taxpayers pay the cost when big cats escape or otherwise jeopardize the community.... Some of our Deputies took quite some time to cope with the situation they were put in."[8] Other first responders have echoed these statements, noting that "first responders should never be expected to manage animals of this magnitude"[9] and calling S. 1381 "common sense legislation [that] will help our public safety officers to protect the public and themselves."[10]

The Big Cats and Public Safety Protection Act would require that facilities that are permitted to raise and keep big cats be legitimate sanctuaries or zoos approved by the American Zoological Association (AZA). It is noteworthy that the backyard menagerie in Zanesville, Ohio would not be considered an exempted facility under S. 1381, as it (like many similar operations) was not a legitimate sanctuary or zoo. Accredited zoos and reputable sanctuaries, in contrast to such

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[3] Big Cat Rescue, Big Cat Attacks, *available at* http://bigcatrescue.org/big-cat-attacks/.
[4] *Id.*
[5] *Id.*
[6] *Id.*
[7] Letter from Matthew J. Lutz, Muskingum County Sheriff, to Members of Congress (2013).
[8] *Id.*
[9] Open letter from Dwight Graves, Commissioner, Alabama Fire College and Personnel Standards Commission (2013).
[10] Open letter from Tim Harrison, Director of Outreach for Animals, retired police officer/firefighter/EMT-paramedic, and instructor for the National Emergency Response and Rescue Training Center (2013).

backyard operations, adhere to the highest standards of public and animal welfare safeguards. These facilities are in the best position to keep big cats and protect the public.

Presently, very little information is kept by the USDA, state agencies or local authorities regarding how many big cats are being kept, under what conditions, and where. By requiring big cat owners to publicly register their animals with the USDA, S. 1381 will ensure that state agencies, local law enforcement, first responders and the surrounding community are informed about who owns big cats, how many are owned and where the big cats are being kept. It will avert unnecessary human suffering, deaths and injuries from these inherently dangerous animals.

In addition to advancing public safety, S. 1381 will protect big cats from the inhumane conditions that are ubiquitous among backyard breeding operations, cub handling exhibits, roadside zoos and "pet" enclosures that are poorly suited to these wide-ranging apex predators. The captive big cat community has shown a systemic culture of inhumane mistreatment of the animals. Owners and exhibitors are often cited by USDA inspectors or local authorities for cruelty and other animal welfare abuses.

IFAW investigators have witnessed firsthand the deplorable conditions that are common among big cat displays. From 2004-2005, IFAW investigated 42 USDA-licensed sanctuaries where big cats were being kept and exhibited and found that in most cases: the big cats involved were housed in structurally unsound facilities; operators permitted direct contact between dangerous big cats and people, including very young children; facilities were characterized by poor maintenance and animal hygiene, including dead animals, filthy water buckets and grossly inadequate sewage disposal; big cats were being fed rotten meat that had been stored without refrigeration; and, in many instances, no attendants were on hand at big cat exhibits. Sadly, this is far from being an isolated example of the shocking conditions and poorly monitored facilities in which captive big cats have been found.

Exhibitors (including those licensed by USDA) who profit from allowing people to handle cubs promote excessive breeding because there is a constant need to produce new cubs for display. The young animals used for handling exhibits are prematurely taken from their mothers, constantly held and photographed, exposed to illness due to constant human contact, and subjected to abusive training techniques in futile attempts to make them safe for public contact once they mature. Big cats kept in facilities that encourage direct contact between the cats and people may be drugged in an attempt to sedate them to tolerate these interactions. Allowing cub petting can give the general public the false impression that these animals can be tame, harmless, and suitable as pets, and that they can be humanely kept in small enclosures with little stimulation—a misconception that is problematic with respect to both animal welfare and human safety.

Once cubs become too large to be used for profit in cub handling displays, they are often left to live out their lives in extremely inhumane conditions, without much-needed space or stimulation. They may be sold to roadside zoos at which conditions are just as deplorable, sold as pets and kept in yards, basements, or otherwise dangerous and cruel conditions, or even killed. In one case, more than 90 dead tigers, including 58 cubs stuffed into freezers, as well as other exotic

animals suffering from malnutrition, were found abandoned by a USDA-licensed exhibitor who operated a breeding facility in California.[11]

Big cats that are kept as pets are often held in extremely small spaces that are entirely inconsistent with their natural behaviors and welfare. Their owners may be uninformed about the resources needed to care for such an animal, or do not have the means to do so. Tigers, for instance, are 600-pound carnivores that cost $5,000-6,000 a year just to feed and require huge spaces to roam. Many tigers and other big cats in the U.S., however, live their entire lives in basements, backyard kennels, or even in apartment buildings. When big cats escape from such unsuitable facilities, they are often killed, as first responders have few options under these dangerous circumstances.

Given these challenges, owners of big cats may relinquish their animals to rescues and sanctuaries for a variety of reasons: cats have grown up and become dangerous; the cats cost too much to feed and maintain; the owner has experienced health problems that interfere with his or her care of the animals; the owner plans to retire and no longer wishes to provide for the big cats—or, in many instances, the animals are seized by the state or U.S. Department of Agriculture (USDA) due to neglect or cruelty. Theme parks, roadside zoos and others who operate under the guise of "sanctuaries" fail to provide even basic standards of care, leaving local authorities to handle their unwanted animals.

Even where big cat owners make the right choice to surrender captive wild animals to an organization of facility better suited to caring for them, resource constraints make it difficult to place big cats. Most sanctuaries for mistreated or unwanted big cats are at or nearing capacity, and many lack financial reserves for more than 1-3 months operating expenses.[12] A number of rescue facilities facing financial difficulties have been forced to close, and remaining sanctuaries are not equipped to continue taking in animals as the U.S. big cat population grows. Unwanted big cats that cannot go to true sanctuaries from breeders and exhibitors often end up warehoused,[13] sent to other exhibitors, or sold to other individual owners, further exacerbating animal welfare and human health and safety concerns. For these reasons, the vast majority of big cat sanctuaries that accept these unwanted big cats support a federal ban on the private possession and the unregulated breeding of these animals and feel that private ownership is a major problem threatening animal welfare, public health and human safety.[14]

The suffering of these captive big cats, sadly, does nothing to advance the protection and welfare of big cat species in the wild. Although pro-captivity advocates have argued that big cat ownership results in conservation benefits for wild populations, experts are overwhelmingly in agreement that breeding any animal outside of its natural environment is not an example of "conservation." None of the big cats in private hands in the U.S. can be traced back to wild populations, and they have been crossbred and inbred in captivity.

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[11] Chris Dixon, *Last 39 Tigers Are Moved From Unsafe Rescue Center*, N.Y. Times (June 11, 2004); Barbara Whitaker, *Many Dead Tigers Are Found At Big Cat 'Retirement Home*,' N.Y. Times (April 24, 2003).
[12] Statement of Patty A. Finch, Executive Director, Global Federation of Animal Sanctuaries (2011).
[13] Whitaker, *supra* note 11 (explaining the concept of "warehousing" and noting that "it appeared that the older animals had been taken from the sanctuary when they were no longer appealing to the public and were left to die at the residence....")
[14] IFAW Internal Report: The Current State and Capacity of Big Cat Sanctuaries in the U.S. (2013).

In fact, captivity exacerbates big cat conservation challenges. Private possession and breeding of big cats contributes to the interstate traffic in those species and may contribute to the illegal international wildlife trade. There is currently no way to know how many U.S.-born big cats are disposed of or when their parts are illegally sold into black market trade. However, investigations undertaken by the U.S. Fish and Wildlife Services' (FWS) demonstrate that this threat is far from speculative. For instance, a multi-state investigation that was initiated in 1997 resulted in the conviction of seventeen defendants in seven states after FWS special agents discovered that the defendants involved were purchasing and killing exotic big cats with the intention of selling their meat, hides and parts.[15] These animals were purchased and killed in the United States, underscoring the direct link between private, domestic captivity and breeding and the illicit trade in wildlife parts.

Tigers are placed at a particularly high risk as a result of the relationship between private ownership and trafficking. Tigers are extremely endangered by poaching and trade, and illegal tiger products continue to be smuggled into the U.S. from foreign countries. One of the biggest threats to wild tigers is the demand for tiger parts and products. Since wild tigers are more desirable than captive tigers for these purposes, any leakage of captive tiger parts and products into the illegal market perpetuates demand, encourages poaching and poses a dire threat to remaining wild populations.

It is telling that observer organizations and Parties to the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) believe the U.S. could do more to fully comply CITES Resolution Conf. 12.5, which deals with captive tiger breeding and trade, and for which the U.S. has always been a strong advocate. China, which has over 5,000 tigers housed in massive "tiger farms"[16] that are operated by vocal proponents of reopening domestic trade in tiger parts and products, believes that the U.S. should reduce its own captive tiger population before working multilaterally to encourage China to do the same. The more these parts are supplied from the captive big cat population, the more the market grows, and the more the demand increases for the "real" or premium product—parts from big cats poached from the wild. Recently, the World Bank's Global Tiger Initiative, which includes tiger range states and non-governmental organizations, called upon the U.S. government to "show leadership and phase out its private captive tiger population."[17]

It is noteworthy that captive-bred tigers cannot be used to replenish wild tiger populations, as they can never be released into the wild. They are largely genetic hybrids and would diminish the genetic vitality of wild populations. Captive tigers and other big cats have not learned to hunt, a skill they acquire from their mothers in the wild, and have generally become accustomed to humans, which could lead to conflict with people and put these cats' survival at stake.

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[15] U.S. Fish & Wildlife Service, *Owner of Chicago Area Exotic Meat Market Sentenced to Six Months in Prison*, FWS Journal (Dec. 18, 2003), *available at* http://www.fws.gov/arsnew/print/print_report.cfm?arskey=11071.
[16] *See* Williamson and Henry, *supra* note 2.
[17] Global Tiger Initiative, *Legal Wildlife Crisis in the U.S.?*, http://beta.globaltigerinitiative.org/2011/11/04/legal-wildlife-crisis-in-the-us-viewpoint/ (Nov. 4, 2011).

Wild lions are now facing a similar threat as captive bred lions have been introduced into trade to feed growing demand for lion bones and other products in Southeast Asia. The animals are bred on factory farms where lion cubs are taken from their mothers only days after birth to promote more frequent estrus and maximize profits. Lions, which are not protected under the U.S. Endangered Species Act, have been showing up on restaurant menus with increasing regularity in the United States. The lion meat trade in the U.S., which is fed by captive breeding, stimulates demand globally, which in turn threatens an already severely declining species in the wild.

Conservation threats are particularly important because all species of big cats that would be covered under this bill are listed as endangered under the Endangered Species Act, with the exception of some cougars and lions, for which listing has been proposed. If steps are not taken to restrict the private ownership and breeding of big cats in the U.S., wild populations of these species will face increasing pressure as their captive counterparts continue to suffer.

In addition to contributing to wildlife trafficking, private ownership and breeding of big cats in the U.S. has resulted in the dissemination of misinformation about these species, their natural behaviors and biology, and their conservation in the wild. While some exhibitors claim to be contributing to the protection of these animals, the misinformation that they share with customers runs counter to the objective of advancing conservation education. There is nothing natural or informative about viewing these large predators in tiny enclosures, allowing humans to handle cubs that have been torn from their mothers, or over-breeding, crossbreeding and inbreeding cats to produce revenue-generating cubs, "ligers" and other hybrids, and genetic anomalies such as white tigers. These practices not only fail to provide conservation benefits, but also mislead the public about big cats' natural behaviors in the wild.

Legitimate facilities that may in fact contribute to conservation of big cat species are exempted from the restrictions that would be codified with the passage of S. 1381. Zoos accredited by the AZA—which typically allow breeding only for conservation purposes—that have the resources to properly care for and restrain these wild animals will not be subject to the possession and breeding bans. Also excepted would be wildlife sanctuaries that do not breed or allow public handling, wildlife rehabilitators, state colleges and universities, and select traveling circuses that operate in compliance with the Animal Welfare Act (AWA). Accordingly, qualified institutions could lawfully continue to pursue any conservation, education, or other valid benefit associated with keeping or breeding captive big cats.

In addition to harming big cats, the existing private ownership and breeding systems in the United States burdens taxpayers. When first responders must handle a big cat that has escaped or otherwise poses an immediate threat to nearby communities, taxpayers bear the cost of response efforts. Sheriff Lutz reported that responding to the "Zanesville massacre" cost his department an extra $8,000; expenses like these, which result from irresponsible private ownership, breeding and handling of big cats, are passed on to the public.

The fiscal burden associated with private big cat ownership extends to the federal level. USDA does not have adequate resources to inspect big cat licensees and enforce AWA compliance. During fiscal year 2009, for instance, the Animal and Plant Health Inspection Service (APHIS) had only 97 Animal Care inspectors to perform over 4,300 inspections (pertaining to more than

2,700 exhibitors) on a wide array of facilities that possess big cats, including but not limited to commercial breeders, safaris, zoos, dealers, auctions houses, sanctuaries, and circuses with big cats.[18] As a result, undertaking effective enforcement efforts is a serious challenge, as there are rarely adequate resources to address violations when they have been identified. When the agency does proceed with an enforcement action, they often can do little more than cite the abusers repeatedly, eventually take them to court, and spend years entangled in litigation—all while the animals suffer. Even where an enforcement operation results in license suspension, those who are cited may simply close their business and reopen under a new name or license, which restarts this entire process.

Despite the establishment of various state laws related to big cat possession, a federal solution is needed to address the many problems surrounding the private ownership of big cats in the U.S. The current regulatory patchwork for dangerous captive big cats is ineffective, inefficient and expensive. Five states have little to no restrictions on the private possession of big cats, while 30 states and the District of Columbia have banned the private ownership of these wild animals.[19] Falling in between these two approaches, other states have instituted partial bans on the private ownership of wild animals, forbidding ownership of particular species, while still others have established licensing requirements. A majority of states have enacted statewide bans on big cat possession as pets. However, most of those states have exempted federally-licensed exhibitors from their statewide bans, presumably because they believe that USDA inspectors should be regulating those facilities adequately—at present, that is not the case.

Existing federal law requires that any person who possesses exotic animals for the purposes of exhibition to the public, or to commercially breed or deal in exotic animals must comply with minimum standards of care and treatment under the AWA. The AWA is enforced by USDA-APHIS, which licenses and regulates exhibitors, breeders and dealers. A USDA licensee can be an individual or an organization that houses big cats in anything from an accredited zoo to a roadside menagerie or backyard petting zoo. After meeting a few minimal requirements, filling out a form and paying a small per-animal fee, virtually anyone can become a USDA licensee. APHIS generally conducts a site visit prior to licensing and, once licensed, a facility may be subject to annual inspections and unannounced visits. If the USDA finds violations, they have the power to take away a license; however, this is rarely done. More often the facility is given warnings and minimal fines, which provide little incentive for improvement.

Congress has made efforts to address the captive big cat crisis. In 2003, it passed the Captive Wildlife Safety Act[20] to prohibit interstate trade in big cats. Unfortunately, this trade ban has a gaping loophole; like many state laws, it only applies to those who keep big cats as pets and exempts from its requirements licensed exhibitors, which make up the majority of private possessors of big cats.[21] The Captive Wildlife Safety Act and state laws that provide such an exemption for USDA-licensed facilities overlook both the limited resources available to APHIS

[18] USDA Office of Inspector General, Controls Over APHIS Licensing of Animal Exhibitors, Audit Report 33601-10-Ch, at 5 (2010).
[19] Big Cat Rescue, Big Cat Bans Enacted, *available at* http://bigcatrescue.org/big-cat-bans-enacted/.
[20] *See* U.S. Fish and Wildlife Service, *Captive Wild Safety Act: What Big Cat Owners Need to Know* (2007), *available at* http://www.fws.gov/le/pdf/CaptiveWildlifeSafetyActFactsheet.pdf.
[21] For an overview of state laws, see Brown Free USA, *Summary of State Laws Relating to Exhibiting Exotic Animals*, http://www.bornfreeusa.org/b4a3_exoticexhibits.php.

for AWA enforcement and the ease with which pet owners can register as licensees with commercial interests in bag cat possession. A 2009 Office of the Inspector General (OIG) Audit of USDA found that 70 percent of licensees with four or fewer animals were in fact pet owners using their USDA licenses to take advantage of these exemptions in state law prohibitions against exotic animal ownership.[22]

Given the growth in the number of captive big cats in private possession nationwide, further Federal action in the form of a simple, nationwide standard is necessary in order to accomplish what many states have already tried to do: stop dangerous big cats in private possession from endangering communities and ensure that the small minority of states that have little to no prohibition or regulation of any kind on private possession of big cats cannot continue to cause a nationwide problem. This would not only protect public safety and big cat welfare, but would also reduce the existing complicated regulatory burden and could save taxpayer dollars once in effect. For the sake of public safety, protection of first responders, big cat welfare and conservation, and regulatory efficiency, it is critical that Congress enact the Big Cats and Public Safety Protection Act (S. 1381/H.R. 1998).

For the foregoing reasons, I respectfully encourage the Subcommittee to support S. 1381. Thank you for the opportunity to submit testimony on this important matter.

[22] *See* USDA OIG, *supra* note 18.

Outreach for Animals

Advocating Respect & Proper Behavior Around Wildlife

Written Testimony of Tim Harrison,
Director, Outreach for Animals

Submitted to the Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife

July 28, 2014

Chairman Cardin, Ranking Member Boozman, and Members of the Subcommittee, thank you for the opportunity to provide testimony for the record concerning the Big Cats and Public Safety Protection Act (S. 1381) on behalf of Outreach for Animals.

For more than two decades, I have been involved with rescue and rehabilitation of wildlife in my home state of Ohio and throughout the United States. I have worked as a veterinarian's assistant, developed outreach programs to raise awareness about wildlife protection, and worked with zoos and wildlife facilities across the U.S. to raise and rehabilitate exotic animals. I have also traveled to Asia, South America, Africa, Australia and Europe to investigate and learn about animals and their native environments.

I am the Director and co-founder of Outreach for Animals, a nonprofit advocacy and rescue organization operated by police officers, firefighters and paramedics. Since 2001, it has been our mission is to serve as liaisons between humans and animals and promote practices that keep both wildlife and the public safe. We strive to raise awareness nationally through lectures, films, informational materials, presentations, and other efforts to educate young people about respecting wildlife and habitat. Over the years, our message has reached millions of people.

Examples of Outreach for Animals' on-the-ground work include investigating and tracking escaped pet leopards and cougars, rehabilitating a former pet cougar that had been subjected to severe head trauma and a brutal declawing procedure, arranging for life-saving surgery for a rescued pet tiger, and providing emergency medical and rehabilitative care for an emaciated white tiger rescued from captivity and neglect. We regularly encounter the tragic consequences of private possession of captive big cats, which serve as constant reminders of the urgent need for legislation like the Big Cats and Public Safety Protection Act.

In addition to my direct experience caring for and advocating on behalf of wildlife, I am a retired police officer, firefighter and paramedic for the city of Oakwood, Ohio, as well as an Adjunct/ Instructor for TEEX/National Emergency Response and Rescue Training Center at Disaster City/ EOTC (Texas A&M University) for Homeland Security/FEMA. I teach Enhanced Unified Command for Natural and Man-made Disasters to government, public safety and medical officials from around the U.S. These roles have enabled me to integrate my background in law enforcement/disaster preparedness with my extensive knowledge of exotic wildlife to assist law enforcement agencies and animal control officers in rescuing wild and exotic animals in suburban settings. I have been consulted on national and state levels regarding the capture and handling of cougars, exotic big cats and other wild animals, and have contributed to numerous publications and films on wildlife and the private ownership of exotic animals.

Through both my wildlife care and law enforcement positions, I have had extensive experience with captive big cats, and have witnessed firsthand the inhumane conditions to which they are often subjected. As a law enforcement officer, I have also seen the devastating public safety impacts associated with the private ownership of captive big cats, a practice that causes immense suffering to both the captive exotic wildlife and to members of the public who have been injured—or worse—by these powerful animals.

As a wildlife rehabilitator and law enforcement officer, I have learned through experience that this legislation is critical to bringing an end to the ever-growing captive big cat crisis in the United States. However, in order to effectively address the pervasive problems associated with private breeding and ownership in the U.S., the bill must be passed *without* overly-broad and unnecessary exemptions that would create gaping loopholes and cripple enforcement efforts. I acknowledge the importance of certain exceptions that have been incorporated into the bill's language, but the Subcommittee would be ill-advised to expand upon those categories to create loopholes for facilities that fail to meet the standards of the American Zoological Association (AZA).

Independent accrediting organizations for wildlife owners and exhibitors cannot necessarily be relied upon to certify the welfare of animals and safety of facilities. In many cases, this would equate to the "fox guarding the henhouse," as certain industry groups that offer accreditation enable the exploitation and cruelty inherent in many big cat displays and attractions.

The AZA subjects facilities to a thorough review process and requires that they comply with science-based standards for animal welfare, handling and husbandry. Its mission is to "provide[] members the services, high standards and best practices needed to be leaders and innovators in animal care, wildlife conservation and science, [and] conservation education...."[1] In existence for nearly a century, the AZA has established rigorous standards and requirements including an extensive accreditation application, comprehensive insurance, documented financial stability, thorough inspection processes, emergency preparedness procedures, safety committees and security systems, and strong standards of animal welfare guided by veterinarians and other experts—all of which are noticeably absent from the standards of lesser accrediting entities.

The AZA also favors strong restrictions on the public handling of big cats, acknowledges that exotic animals should not be kept as pets, and supports efforts to prevent captive tigers in the U.S. from entering the illicit trade in wildlife parts. Other certification organizations, in contrast, often support poorly-secured roadside and traveling zoos, as well as private ownership of exotic pets, irresponsible breeding and sale of wild animals, wildlife trade, and the operation of facilities that allow contact between the public and captive big cats. In many cases, facilities that do not meet the standards of the well-respected AZA approach alternative organizations with weak and poorly enforced certification standards simply so that they can refer to themselves as "accredited."

The problems associated with non-AZA accrediting groups are far from speculative; sadly, countless public safety hazards, animal mistreatment cases, and illegal activities have been

[1] AZA 5-Year Strategic Plan, https://www.aza.org/StrategicPlan/.

documented at facilities approved by pseudo-watchdog organizations. Problems have included wildlife trafficking, animal cruelty, escapes from enclosures, attacks, unsafe contact between people and wild animals, unqualified staff, abusive "training" tactics, inadequate or nonexistent veterinary care, lack of food and clean water, premature separation of mothers and cubs, confinement of big cats to tiny cages without much-needed stimulation, and inhumane methods of "disposing" of unwanted animals.

Even where groups' standards sound responsible, they are difficult to enforce. For instance, one accrediting organization that has established its own standards independent of the AZA states in its official guidelines that it "does not support the keeping of [leopards, snow leopards, jaguars, tigers, lions, cougars, panthers] as pets," directing that these species "are to be maintained solely in breeding or exhibition facilities."[2] Such a standard ignores the problem of pet owners registering with USDA as exhibitors to skirt existing restrictions; a 2009 Office of the Inspector General audit of USDA revealed that 70% of USDA licensees with fewer than five animals were in fact keeping their big cats as pets.[3] This is just one example of the problems associated with exploitation-friendly standards advanced by non-AZA accrediting organizations.

Moreover, while AZA-licensed facilities engage in breeding exclusively for conservation purposes, facilities subject to the lax standards of other accrediting organizations openly engage in practices that harm big cat conservation efforts. A number of facilities recognized by other accrediting bodies promote practices such as allowing the public to handle cubs, excessive breeding, and crossbreeding to produce genetic hybrids that are not found in the wild and could never be reintroduced into wild populations.

Particularly troubling is the widespread acceptance of inbreeding among these facilities and the non-AZA entities that attempt to legitimize them. Although inbreeding is a pervasive issue in the captive big cat trade, the propagation of white tigers provides a uniquely disturbing illustration of this rampant practice. Despite what many unscrupulous breeders and exhibitors tell the public, white tigers are not a tiger subspecies, nor are they albino. Rather, they are Bengal tigers with unique pigmentation and they occur rarely in the wild—in fact, white tigers are at a distinct disadvantage in the wild, as their coloration makes it more difficult to camouflage themselves and catch prey. To produce white tiger cubs in captivity, dealers inbreed existing white tigers; in fact, nearly all white tigers in the U.S. are inbred. As a result of this lack of genetic diversity, many of these animals are afflicted with physical deformities, cognitive deficiencies, crossed eyes and cataracts, painful joint abnormalities, and congenital defects in vital organs. Acknowledging the serious problems associated with breeding white tigers, the AZA has condemned the activity, stating:

> "Breeding practices that increase the physical expression of single rare alleles (i.e., rare genetic traits) through intentional inbreeding, for example intentional breeding to achieve rare color morphs such as white tigers...has been clearly linked with various abnormal, debilitating, and, at times, lethal, external and internal conditions and characteristics....Many of these conditions may seriously compromise the welfare of individual animals. In addition, such breeding practices are also

[2] Zoological Association of America, Animal Care & Enclosure Standards (2014).
[3] USDA Office of Inspector General, Audit Report 33601-10-Ch: Controls Over APHIS Licensing of Animal Exhibitors (2010).

> problematic from a population management and conservation perspective....Therefore such practices are not in adherence with AZA's Board-approved Policy on the Presentation of Animals...."[4]

Yet other accrediting organizations—which must not be exempted from the Big Cats and Public Safety Protection Act—defend the profit-driven, anti-conservation practice.

In addition to supporting members who over-breed and inbreed big cats, non-AZA accreditors have gone on record opposing efforts to protect captive big cats in the U.S. from the illegal trade in wildlife skins and parts. One poorly reputed accrediting entity, for instance, vocally opposed a proposed U.S. Fish and Wildlife Service regulation—which was supported by both the AZA and the American Veterinary Medical Association[5]—intended to prevent the introduction of U.S. tigers into black market trade.[6] This explicit anti-wildlife position underscores the dubious motives of the non-AZA groups that exist in large part to protect members' ability to treat big cats as commodities while spreading misinformation, with no regard for animal welfare, public safety or conservation.

Over the past decade, zoos and other exhibitors accredited by non-AZA organizations have seen countless dangerous and/or inhumane incidents including attacks by tigers, cheetahs and jaguars; lion and tiger escapes; insufficient safety barriers on big cat enclosures, resulting in USDA citations; declawing of tigers, lions and clouded leopards; improper veterinary care; and inadequate staff training that resulted in serious harm to both animals and people. Exhibitors licensed by non-AZA entities have been found to use their animal exhibits as covers for illegal activities and businesses, misappropriate funds, engage in shocking animal cruelty, lie to officials, and illegally sell protected big cat species to be killed. Unsurprisingly, USDA has repeatedly cited many of these facilities—yet they continue to operate as "accredited" zoos.

In my own experience rescuing animals from facilities that are not AZA-accredited, including a number of homes and businesses that have joined other accrediting groups with far weaker standards, threats to animal welfare and public health and safety abound. At one facility in Ohio, for instance, a couple had taken in a young cougar and thought they would start a "rescue" facility in their backyard for big cats. To make a long, sad story short, this couple ended up with 12 tigers, 10 African lions, 9 cougars, 7 wolves and a black bear. What started out with good intentions ended with the couple calling my organization for help. Owners dumped their now too big and dangerous animals off and the couple could not say no. There was no place for the owners to take their "pets." The reason I mention this story is that this is typical of the situations that we deal with on a regular basis.

I also want to mention that every big cat owner with whom we have dealt tried to contact the organizations they were members of (paying dues and believing their propaganda) for help and were told, "buyer beware" and "it is your problem now." These non-AZA accrediting groups that want to "police" this problem are in fact the cause of the problem. For the last 30 plus years I

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[4] AZA White Paper: Welfare and Conservation Implications of Intentional Breeding for the Expression of Rare Recessive Alleles (2011).
[5] AVMA Regulatory Brief: Captive-Bred Inter-Subspecific Crossed or Generic Tigers (2011).
[6] Letter from Jim Fouts to Tim Van Norman, Chief, Branch of Permits, Division of Management Authority, U.S. Fish and Wildlife Service (October 5, 2011).

have watched these organizations breed and sell big cats to untrained people at an alarming rate. When I approached government officials and showed them undercover footage and testimonies, I was immediately attacked by animal show celebrities (who use these groups to get their baby cats for television and paid personal appearances) and supposedly educational groups that lie to the public, stating that they need to breed tigers to keep the wild population alive.

I have been to Nepal and India (tiger projects), as well as South Africa and Kenya (lion and leopard projects), and have spoken to these nations' government and research officials. They do not hesitate in their response when asked, "Will you take big cats into your countries that were bred by private breeders in the United States?" The answer is a resounding "NO." It just makes good common sense—any large predator that is raised with humans can never be turned loose into the wild; it is true that "the most dangerous wild animal in the world is the one that knows a human's limitations."

Anyone who believes that these non-AZA accrediting organizations and private breeders and exhibitors can control this oversaturation of tigers and cougars in private hands just has to look at how effective they have been up to this point—let them try to explain, for instance, how a white tiger cub could end up in a basement in Dayton, Ohio. I have captured and rescued hundreds of big cats in my 42 year career and have never had anyone ask, "Can I have my cougar back?" Once big cats are turned loose or escape, the people responsible for responding and protecting the community are local public safety officers, not these "accredited" facilities, which provide no help in such situations. Non-AZA accreditors' record of "policing" this problem is a key reason to not exempt them from S. 1381, and the fact that they are the primary cause of the problem is another. As I stated in Ohio, "this is like having the drug dealers help write laws to stop drug abuse." These groups are the reason that regulations and laws concerning captive big cats are necessary; common sense and a little homework will clearly tell you that.

I ask that anyone who reads this ask himself or herself what is best for public safety and for the animals. The nation's captive big cat crisis is not the animals' fault, but it is our fault if we do not do anything to help them. For additional perspective on this situation, please watch the award-winning documentary "The Elephant in the Living Room." My rescue work is the subject of the documentary and viewing it will allow you to see what is truly happening in neighborhoods across the U.S.

It is critical that Congress pass the Big Cats and Public Safety Protection Act (S. 1381/H.R. 1998) in its current form to bring an end to the widespread animal welfare and human safety risks associated with private breeding and ownership of big cats across the United States. For the foregoing reasons, I respectfully ask that the Subcommittee support S. 1381 as-is and reject any proposed amendments to the bill that would create additional exemptions.

Thank you for the opportunity to submit testimony on this important issue.

Sincerely,
Tim Harrison
Director, Outreach for Animals

Senator CARDIN. Let me thank our witnesses. As you pointed out, some came a considerable distance to be with us today and we appreciate that very much.

With that, the subcommittee will stand adjourned.

Thank you.

[Whereupon, at 4:20 p.m., the subcommittee was adjourned.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. JAMES M. INHOFE,
U.S. SENATOR FROM THE STATE OF OKLAHOMA

Chairman Cardin, thank you for holding this hearing.

Since we have a representative here from the Fish and Wildlife Service, I want to take this opportunity to talk about the problems we're having in Oklahoma with the lesser prairie chicken and the American burying beetle, and what I think we should do about it.

The American burying beetle (ABB) was listed by the Service in 1989. The Service states in its listing decision that the ABB was "once widely distributed throughout eastern North America."

At that time, there were only two known populations of the beetle—one in eastern Oklahoma and one on an island off the coast of Rhode Island. The Rhode Island population was estimated to be at about 520 beetles, and the one in Oklahoma was thought to have less than a dozen.

The listing decision did include some commentary about why the beetle's population declined, but ultimately concluded that "the cause of the species' decline is unknown."

In 1991, the Service published a Recovery Plan for the ABB. The objective of the plan was to "[protect] and [maintain] . . . the extant population in Rhode Island and the . . . populations in Oklahoma." In order to reconsider the listing status of the ABB, the Service needed to identify "three populations of [ABB that] have been reestablished (or additional populations discovered) within each of four broad geographical areas of its historical range."

The four ranges identified by the Service include the Midwest (which includes Oklahoma and most States between Texas, Louisiana, and Montana), the Great Lakes region, the Southeast region, and the Northeast region (which includes Rhode Island).

In 2008, the Service performed its first 5-year review of the ABB. It determined that the criteria for reconsidering the listing of the ABB had been met in the Midwest region, "where additional occurrences of the ABB have been discovered," and that, "as a consequence, the total number of ABB in this recovery area is believed to greatly exceed the numerical target" established under the Recovery Plan.

This is undoubtedly true. The population now known to exist in Nebraska was recently estimated to contain over 3,000 beetles, making it one of the largest known populations. Interestingly, Nebraska was not known to have any ABB in 1989 when the species was listed.

The known population in Oklahoma has also grown dramatically since the listing decision. When the Service listed the ABB, only four counties had a known ABB population; the Service now believes its range extends to 45 of the 77 counties in the State. It is now believed Oklahoma's population is numbered in the thousands.

Service documents from 2014 reveal that ABB is now found in Oklahoma, Arkansas, Nebraska, Kansas, South Dakota, Texas, Missouri, Massachusetts, and Rhode Island, the vast majority of which are located in the Midwest region.

The 2008 5-Year Review further states that "although one of four geographic recovery areas for ABB has met the criteria for reclassification, the species presumably remains extirpated in most of its historic range," and concludes that the ABB should retain its endangered status.

I completely disagree. The ABB should no longer be listed in the Midwest region, and there is strong precedence for delisting endangered or threatened species in some areas, but not others.

In 2011, the Service decided to delist the gray wolf from the endangered species list in Idaho, Montana, and parts of Oregon, Washington, and Utah while leaving it listed in Wyoming.

This partial delisting was due to the healthy population levels that were present in those States, and it was left listed in Wyoming because the Service believed additional conservation work needed to be completed. Less than 2 years later, the

delisting was extended to Wyoming, and in 2013 the gray wolf's protections under the ESA were completely removed.

There is also a strong case to be made that the ABB should be completely delisted. Beginning in 2007, the Service promulgated an official policy stating that when it evaluates the probability of a species being lost to extinction across its range, it does so within its known existing range, not its hypothetical historic range.

Knowing this, if the ABB were reconsidered as a candidate today, it likely would not be eligible for listing because the known populations are not in danger of being lost. They are, in fact, expanding. The historic range, described by the Service as being "ubiquitous" at some point, is reliant on very old data, observations, and studies, many of which are not readily locatable.

There is so little known about this newly expanded presence of ABB. We don't know if we're just better at finding them now, or if the populations are actually growing. Whatever the case, it is clear that these beetles have proven much more resilient than the Service originally thought.

With this in mind, I plan to introduce a bill next week that will delist the ABB from the Midwest region. There is no reason, especially given the lack of knowledge we have about the ABB, for it to remain as a protected species, particularly given the fact that its negative impact on economic activity expands with every new population that is discovered, especially in Oklahoma.

Now I'd like to move on to the lesser prairie chicken, which was listed as a threatened species at the end of March. The decline in this species has largely been the result of drought—so it has had very little to do with human activity. It is likely that once the drought ends in western Oklahoma and the rest of the bird's known range, the population will flourish and strengthen to the point that a listing is no longer warranted.

We've seen this recovery begin already. On July 1, when the Western Association of Fish and Wildlife Agencies (WAFWA) released its most recent annual lesser prairie chicken population survey, the bird's range-wide population showed an increase of 20 percent to 22,415 birds. To what was the increase attributable? According to WAFWA, the areas that showed the biggest improvement were "where more rain produced better prairie habitat."

The range-wide conservation plan WAFWA organized is what the Service blessed as appropriate and thorough, and it is being used as the primary means to achieve take permits under the 4d rule. This program is being administered solely by the State wildlife agencies, and it now has over 160 companies participating. These firms have collectively enrolled about 9 million acres for conservation across the five States. As part of this enrollment they have committed $43 million for habitat conservation, which will be deployed over the next 3 years.

Knowing this, it was extremely frustrating to me that the Service decided to list the LPC even while it knew that this conservation would happen whether or not a listing was made final. To me, it made sense to allow the State-driven conservation plan to take root prior to making a decision to impose Federal protection. Instead, the Service demonstrated that it is a solution in search of a problem, and it leaves me wondering why the Federal Government is so quick to insert itself in a situation where States are already appropriately addressing a problem.

To remedy this, I will also introduce legislation that delists the lesser prairie chicken for a period of about 5 years to allow the State crafted range-wide plan to take root and work. If the Service determines after this time period that the recovery goals have not been met, then it can then reassess its findings and determine whether a listing is appropriate. This legislation is a companion to H.R. 4866, which Congressman Markwayne Mullin introduced just a few weeks ago.

Again, Chairman Cardin, thank you for holding this hearing, and I look forward to working with my colleagues to enact these important bills.

STATEMENT OF HON. DIANNE FEINSTEIN,
U.S. SENATOR FROM THE STATE OF CALIFORNIA

Mr. President, I rise today to introduce the "Infrastructure Facilitation and Habitat Conservation Act of 2013."

This legislation will make it easier for communities across the Nation to improve their public infrastructure by providing access to cost effective Federal loan guarantees to mitigate the impacts of growth on the environment and endangered species.

This bill authorizes a 10-year pilot program, to be administered jointly by the Secretaries of the Interior and Treasury, making credit more readily available to eligible public entities which are sponsors of Habitat Conservation Plans (HCPs) under section 10 of the Endangered Species Act of 1973.

BACKGROUND

Habitat Conservation Plans were authorized by an amendment to the Endangered Species Act in 1982 as a means to permanently protect the habitat of threatened and endangered species, while facilitating the development of infrastructure, through issuance of a long-term "incidental take permit."

Equally important, HCPs can be very effective in avoiding, minimizing and mitigating the effects of development on endangered species and their habitats. HCPs are an essential tool, as Congress intended, in balancing the requirements of the Endangered Species Act with on-going construction and development activity.

CALIFORNIA EXAMPLE

In California, the Western Riverside County multiple species HCP is a prime example of effective habitat management. The Western Riverside MSHCP covers an area of 1.26 million acres, of which 500,000 will be permanently protected for the benefit of 146 species of plants and animals. To date, more than 347,000 acres of public land and 45,000 acres of private land have been protected, at a cost of $420 million. In the case of the Western Riverside MSHCP, as with other HCPs nationwide, this strategy for advance mitigation of environmental impacts has facilitated the development of much needed transportation infrastructure. To date, the Western Riverside MSHCP has resulted in expedited environmental approval of 25 transportation infrastructure projects, which have contributed 32,411 jobs and $2.2 billion to the county's economy.

Riverside has been one of the Nation's fastest growing counties, with a rate of growth during the last decade of 42 percent. Unless the development of infrastructure can be made to keep pace with this explosive population growth, neither environmental nor livability goals will be attained.

In recent years, the economic downturn has slowed the pace of habitat acquisition in Western Riverside and other similarly situated communities. Revenue which had been generated by development fees to finance acquisition of habitat has also slowed.

Now, ironically, signs of economic recovery in the region also signal increasing real estate prices that will make the acquisition of mitigation lands more challenging. That's why it is important to provide communities like Western Riverside ready access to capital now to help fund habitat conservation projects while real estate costs remain relatively low, saving them and other communities implementing HCPs billions of dollars.

HOW IT WORKS

Under this bill, loan guarantee applicants would have to demonstrate their creditworthiness and the likely success of their habitat acquisition programs. Priority would be given to HCPs in biologically rich regions whose natural attributes are threatened by rapid development. Other than the modest costs of administration, the bill would entail no Federal expenditure unless the local government defaulted—a very rare occurrence.

These Federal guarantees will assure access to commercial credit at reduced rates of interest, enabling participating communities to take advantage of temporarily low prices for habitat. Prompt enactment of this legislation will provide multiple benefits at very low cost to the Federal taxpayer:

- protection of more habitat more quickly,
- accelerated development of infrastructure with minimum environmental impact, and
- reduction in the total cost of HCP land acquisition.

A broad coalition of conservation organizations and infrastructure developers supports this legislation. In fact, the Senate also expressed support for this concept when it approved a similar, albeit more narrowly defined innovative financing program as part of the Water Resources Development Act (WRDA) last month. But where the WRDA provisions would be applicable to mitigate the environmental impacts related to the development of water infrastructure, this legislation would broaden that eligibility to transportation and other public infrastructure.

CONCLUSION

I urge my colleagues to support this legislation. I believe it will encourage infrastructure development and habitat conservation at minimal Federal risk. It is exactly the kind of partnership with local government that should be utilized to maximize efficient use of Federal dollars.

[Additional material submitted for the record follows:]

ALLIANCE FOR THE GREAT LAKES

ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

July 14, 2014

The Honorable Benjamin Cardin, Chair
Water and Wildlife Subcommittee
Environment and Public Works Committee
509 Hart Senate Office Building
Washington DC, 20510

The Honorable John Boozman, Ranking Member
Water and Wildlife Subcommittee
Environment and Public Works Committee
320 Hart Senate Office Building
Washington DC, 20510

RE: S. 571, the Great Lakes Water Protection Act

Dear Senators Cardin & Boozman:

On behalf of Alliance for the Great Lakes, I thank you for your thoughtful consideration of S. 571, the Great Lakes Water Protection Act, and appreciate the opportunity to outline our support for the legislation. We request that the subcommittee support this bill. S. 571 will protect the Great Lakes—and those who call it home—from sewage discharges by wastewater treatment plants.

Outdated wastewater plants spew tens of billions of gallons of combined untreated sewage and stormwater into the Great Lakes every year, closing beaches, threatening public health and undermining the quality of life for the millions of people who call the region home. These spills – called combined sewer overflows – have a clear economic and environmental impact on the lakes' ecosystem and communities. Sewage overflows into U.S. rivers, lakes, and coastal waters contain bacteria and viruses, fecal matter, untreated industrial wastes, excessive nutrients, and a host of other pollutants that can make people sick and cause harm to fish and wildlife.

The bill combats this threat in two ways. In the short term, the bill requires treatment plants to immediately notify the public of any sewage overflow. In the long term, the bill aims to stop sewage overflows altogether by increasing the fine for violations and using this extra money to fund infrastructure projects that eliminate overflows.

Improving Notification

Improvement of the federal law on sewage overflow notification and reporting is needed to protect and inform the public. Under current law, there are discrepancies in public notification of an overflow event when it occurs, and wide variation in how the states collect and report information on overflows.

150 N. Michigan Ave. • Suite 700 • Chicago, Illinois 60601 • (312) 939-0838 • alliance@greatlakes.org • www.greatlakes.org

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Public notification of sewage overflows is of particular concern at beach and recreation areas in the Great Lakes due to the large number of antiquated combined sewage treatment systems in the basin. Federal combined sewer overflow policy requires dischargers to take minimum steps to notify the public of overflows in a timely manner; however the lack of a uniform approach and absence of a clear definition of what is "timely" has led to varying approaches in different states.

Under federal rules, mandatory reporting to the appropriate environmental agency is required for overflows that exceed permit limits and for noncompliance which may endanger health or the environment. Such reports must initially be made orally within 24 hours from the time the discharger becomes aware of the circumstances and a follow up report must be written and submitted within 5 days. However, these reports are not required to be made to the general public. While EPA does require states to add public notification requirements for combined sewer overflows into sewage treatment permits, there is no uniform standard for how this must be done.

Several Great Lakes states already require notification and reporting of sewer overflows that exceed these minimal federal requirements. For example, in New York, since the state passed its Sewage Pollution Right to Know law in 2013, discharges of untreated and partially treated sewage discharges must be reported by publicly owned treatment works and publicly owned sewer systems to the state within two hours of discovery, and to the public and adjoining municipalities within four hours of discovery. In Pennsylvania, notification must occur within 4 hours, and if reasonably possible to do so the discharger must notify all downstream users. Indiana requires dischargers to develop a notification procedure and notify the affected public and anyone who requests it. Most notably, and unique among Great Lakes states, Michigan provides a detailed annual report of all sewer overflows in the state.

The public notice requirement in S. 571 is meant to overlay this existing patchwork of state and federal law. This bill requires treatment plants to give notice to the public at least 12 hours after dumping sewage. Treatment plants that have automated detection systems have 2 hours. All treatment plants must post a warning on their website as well as notify local media, health departments, and affected municipalities. The plants must then provide a follow up notice to state officials detailing the cause and volume of the overflow. The state must publish this information in a searchable database. This helps the state and public track performance and improvement of various treatment plants.

Eliminating Sewage Overflows

Long term, the bill mandates an elimination of sewage overflows in two decades and sets the maximum fine for dumping sewage at $100,000 per day after this point. We believe twenty years, or 2033, is a more than adequate timeline for complying with the requirement to eliminate sewage overflows. The larger fine is meant to serve as an added incentive to convince municipalities to make long-term investments that protect our Great Lakes quality of life. The

collected fines will go to Great Lakes states to finance the infrastructure projects that are necessary to eliminate sewage overflows.

For these reasons, we view S. 571 as a significant step forward in protecting the public from the harmful effects of combined sewer overflows in the short term and, in the long term, setting a target of eliminating overflows once and for all.

In addition to passing this bill, we emphasize that Congress must also continue to ensure that local governments have access to sustained support through the Clean Water State Revolving Fund. This fund provides low-interest loans and flexible financing options to help local governments pay for critical projects to improve their inadequate local sewer systems. These funds can help communities invest in traditional gray infrastructure as well as innovative green infrastructure solutions, such as green roofs, wetlands, trees and vegetation, which can capture rainfall and reduce the amount of stormwater sent to plants for treatment. Investments like these, which we outlined in a 2012 report, are critical to improving water quality in the Great Lakes.

Once again, thank you for your consideration and we encourage the subcommittee to support S. 571. If you have any questions or concerns, please do not hesitate to contact me at jbrammeier@greatlakes.org or 312-445-9727. Thank you.

Sincerely,

Joel Brammeier
President & CEO

NATURAL RESOURCES DEFENSE COUNCIL

July 15, 2014

The Honorable Ben Cardin
U.S. Senate
509 Hart Senate Office Building
Washington, DC 20510

The Honorable Mark T. Kirk
U.S. Senate
524 Hart Senate Office Building
Washington, DC 20510

Dear Senators Cardin and Kirk,

I am writing to express the Natural Resources Defense Council's (NRDC) support for S. 571 as part of a broad effort to protect our waters from continuing pollutions and degradation. NRDC is an international, nonprofit, environmental organization with more than 1.4 million members and online activists, including 384,580 in the Great Lakes states. S. 571 would establish a deadline to restrict sewage dumping and to fund programs and activities to reduce wastewater discharges into the Great Lakes. The bill will provide communities with additional tools to address persistent water pollution sources and threats, which close our beaches, expose citizens to illnesses and undercut the health of our water. S. 571, as part of an initiative that restores and enhances protections to the waters of the United States, can contribute to the public health and safety across the Great Lakes Basin, and help federal investments such as the Great Lakes Restoration Initiative achieve their highest ecological, public interest and economic return.

The importance of the Great Lakes cannot be understated. They form the largest surface freshwater system on Earth, containing nearly 20 percent of the world's and 96 percent of the United States' total supply of fresh surface water. More than 40 million people in the U.S. and Canada depend on the Great Lakes for drinking water, fishing, recreation and commerce. More than 1.5 million U.S. jobs are directly connected to the Great Lakes, generating more than $62 billion in annual wages. More than 160 million tons of commodities are shipped within and out of the Great Lakes Basin on an annual basis, with a total value of more than $13 billion.

The beaches of the Great Lakes are also popular recreational destinations, providing respite from hot summer days for millions of residents and supporting local economies. Unfortunately, stubborn water pollution problems continue to plague our beaches. NRDC's "*Testing the Waters*" report found that 13 percent of beach water samples taken across the Basin in 2013 exceeded the Environmental Protection Agency's most protective benchmark for assessing swimmer safety, indicating the presence of human and animal waste in the water. Stormwater runoff and combined sewer overflows are two of the main causes of these problems across the Basin, adding to the continuing problem of sewage dumping from over-taxed sewage treatment facilities.

20 N. Wacker Drive, Suite 1600
Chicago, IL 60606
TEL: (312) 663-9900
www.nrdc.org

S. 571 would help to address these problems by providing funding to communities to reduce wastewater discharges into the Great Lakes through activities such as habitat protection and wetland restoration. Restoring and protecting upstream waters has direct downstream benefits. By removing pollutants from water that passes through them, and by retaining stormwater that often causes pollution problems, wetlands and small streams help ensure that the Great Lakes remain safe for swimming, fishing and other activities that support economic growth. One acre of wetland can store as much as 1-1.5 million gallons of rainwater, preventing that water from reaching sewer systems where it can cause system and basement flooding.

The Great Lakes region has already lost approximately 66 percent of its historic wetlands; Ohio has lost 90 percent, which is the second-highest loss rate in the nation. S. 571 will help communities better protect these critical resources.

At least as important is clarifying which water bodies are covered by the Clean Water Act, which is often unclear today because of a pair of confusing Supreme Court decisions and federal policies adopted in the aftermath of those decisions. Indeed, we believe that efforts to restore the Great Lakes are unlikely to succeed without ensuring that the Act's pollution control programs apply to important water bodies. An estimated 90 percent of the wetlands remaining in the Great Lakes are at increased risk due to the uncertainty over whether they are subject to Clean Water Act safeguards. Because about 50 percent of the streams in Ohio, Michigan, Illinois, Wisconsin and Minnesota do not flow all year, they too have been at risk of increased pollution and destruction because of a lack of clarity about their status under the law.

The Obama administration's proposed Clean Water Protection Rule will improve regulatory certainty by specifying which water bodies are protected by the law and which are not. The proposal is backed by a detailed analysis of the scientific research into the connections between vulnerable water bodies and those downstream. We urge Senators that care about the Great Lakes to support the administration's effort to finalize these safeguards.

Thank you for your consideration of this important matter.

Sincerely,

Henry L. Henderson
Midwest Director

Cc: The Honorable Richard Durbin

20 N. Wacker Drive, Suite 1600
Chicago, IL 60606
TEL: (312) 663-9900
www.nrdc.org

Testimony of Dr. Rosita Worl
Chair, Subsistence Committee, Alaska Federation of Natives

July 16, 2014

Submitted to the
Subcommittee on Water and Wildlife
United States Senate
Legislative Hearing on S.1650 to amend the Migratory Bird Treaty Act

Introduction

Alaska Natives have used bird parts, including feathers, for thousands of years in the making of traditional handicrafts such as masks, garments, jewelry, clothing and dance regalia (fans, hats rattles), and hunting equipment such as spears and arrows. For just as long, these items have been bartered and sold by Alaska Natives.

The United States negotiated Protocols amending the Canadian and Mexican treaties to allow for a spring/summer subsistence harvest of migratory birds by Alaska Natives for their nutritional, social, cultural, spiritual, ecological, economic and aesthetic values. Current regulations governing the Migratory Bird Subsistence Harvest in Alaska, however, prohibit the sale or purchase of migratory bird parts, including feathers and parts of birds taken for subsistence. 50 CFR § 92.6. Alaska Natives are allowed to harvest migratory birds for food, but are prohibited from using any non-edible part from these same birds for any other purpose, including the creation of traditional handicrafts, tools, or clothing. There are no exceptions to the prohibition on sale, not even for the use of dead birds found in the wilderness.

When an Alaska Native artist was cited for creating and attempting to sell two Tlingit clan hats that had migratory bird feathers, AFN advanced language to amend the Migratory Bird Treaty Act (MBTA) to allow for the use of non-edible bird products in Alaska Native handicrafts. We hope that you will pass HR 3109, which would amend the MBTA to allow this use by Alaska Native artists.

Background and Precedent

The Migratory Bird Treaty Act of 1918 (MBTA) implements four international treaties that the U.S. holds with Canada, Russia, Japan, and Mexico. These treaties call for the conservation of protected species and groups of birds they cover. The MBTA prohibits the take of protected bird species, including, in part, to kill, capture, pursue, sell, transport, trade, or barter. In this way, the statute broadly covers the somewhat divergent requirements of the four treaties.

With the exception of the treaty with Japan, the treaties have been interpreted to provide for regulated subsistence take of protected birds by Canada and Alaskan Natives. The Mexico treaty provides more broadly that the parties will establish "close seasons" for take, sale, and transport

of protected birds. The treaty with Russia provides that the parties will establish laws to govern any exemption to its prohibitions.

The treaty with Canada provides that seasons may be established for subsistence harvest of birds, eggs, and down by indigenous inhabitants of Alaska (meaning Alaska Natives and permanent resident non-natives with legitimate subsistence hunting needs living in designated subsistence hunting areas). The 1996 revised Senate Foreign Relations Committee Protocol for the treaty with Canada further states that "Sale of these items is not permitted, except for limited sale of non-edible by-products of birds taken for nutritional purposes incorporated into authentic articles of handicraft. The harvest of such items must be consistent with 'customary and traditional uses' of indigenous inhabitants for their 'nutritional and other essential needs'."

The Protocols thus allow for a subsistence harvest of migratory birds and the limited sale of items made with their parts by Alaska Natives, however in implementing the treaties through the MBTA, Congress only allowed the subsistence hunt. Consequently, the non-edible parts are discarded, despite the provisions negotiated into the Protocols to allow their sale.

There is precedent for changing the law. The Bald and Gold Eagle Protection Act (BGEPA) prohibits killing, possessing, or selling bald and golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit. 16 U.S.C. 668(a); 50 CFR 22. Native American Religious Purposes Permits and Native American Eagle Aviary Permits are available for various religious activities. Bald and gold eagles are also covered by the MBTA, but through the BGEPA and enacting regulations, Native Americans are able to continue traditional religious practices that use the parts of those birds.

Exemptions also exist in the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA) to allow Alaska Natives to continue their subsistence practices and associated use of by-products for handicrafts and art. The ESA at 16 USC §1539(e) states that it does not apply to the non-wasteful taking or importation of endangered or threatened species by Alaska Natives for subsistence, and that non-edible byproducts of the species taken pursuant to this section may be sold in interstate commerce when made into authentic Native articles of handicrafts and clothing. The MMPA contains much the same language in its exception for Alaska Natives at 16 USC §1371(b).

Impact of Changing the Law

The creation of art, handicrafts and clothing from non-edible parts of migratory birds by Alaska Natives is a customary and traditional use of these parts. It is also an essential need for many Alaska Natives and incorporates indigenous knowledge, institutions and practices. Indeed, it is ingrained into many of our cultures not to waste any part of an animal.

Providing such an exemption would have no significant impact on the migratory bird population because currently the feathers and bird parts of migratory birds taken for subsistence are discarded. The exemption would prevent the waste of these by-products.

The possession, sale, barter, purchase, shipping, and transporting of authentic Alaskan Native articles of handicraft, clothing or art that contains migratory bird parts is consistent with the treaties for the conservation of migratory birds.

May 1, 2014

The Honorable Thomas Udall
110 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Udall:

The Alliance for Water Efficiency (AWE) and its undersigned member organizations would like to express our strong support for **S. 2225, The Smart Water Resource Management conservation and Efficiency Act of 2014**, and we thank you for sponsoring this important legislation. This bill would provide funding to the Department of Energy for pilot grants for projects demonstrating the linkage of water and energy, and is a critical step in promoting better joint management of these two important national resources at the municipal and regional level.

AWE is a stake-holder based non-profit organization dedicated to the efficient and sustainable use of water. Our members and supporters include regional, state and local water utilities, plumbing, appliance, and irrigation manufacturers, governmental planning agencies, environmental and energy advocacy organizations, water-use experts, corporations and individuals—all of whom share an interest in promoting water efficiency and sustainability in the United States and Canada.

We are very interested in the energy-water nexus and have done considerable work in this area. We stand ready to assist you in the passage of this bill.

Sincerely,

MaryAnn Dickinson

Mary Ann Dickinson
President and CEO

30 W. Adams Street
Suite 661
Chicago, IL 60606-5109
Office (773) 360-5100
Toll Free (866) 730 A4WE
Fax (773) 345-3636

allianceforwaterefficiency.org
home-water-works.org

May 15, 2014

The Honorable Thomas Udall
110 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Udall:

The Alliance for Water Efficiency (AWE) and the undersigned organizations would like to express our strong support for **S. 2225, The Smart Water Resource Management Conservation and Efficiency Act of 2014**, and we thank you for sponsoring this important legislation. This bill would provide funding to the Department of Energy for pilot grants for projects demonstrating the linkage of water and energy, and is a critical step in promoting better joint management of these two important national resources at the municipal and regional level.

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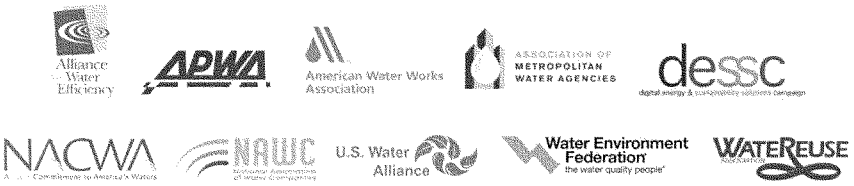
corporations and individuals—all of whom share an interest in promoting water efficiency and sustainability in the United States and Canada.

We are very interested in the energy-water nexus and have done considerable work in this area. We stand ready to assist you in the passage of this bill.

Sincerely,

Alliance for Water Efficiency
American Rivers
American Standard
Amy Vickers & Associates, Inc.
Cahaba River Society
Center for Water-Efficient Landscaping
Ecoblue
Econics
Falcon Waterfree Technologies
Global Water Policy Project
IAPMO
Kohler Co.
KWC America
Marin Municipal Water District
National Association of Water Companies
National Insulation Association
Neponset River Watershed Association
New York City Environmental Protection
Round Rock, TX, City of
SeaCo Supply Corporation
Texas Water Foundation
Toto USA
Utah Water Conservation Forum
WasteWater Education
Water Demand Management
Waterless Co.
Western Resource Advocates
Woodcock & Associates, Inc.



The Honorable Tom Udall
110 Hart Senate Office Building
U.S. Senate
Washington DC, 20510

The Honorable Saxby Chambliss
416 Russell Senate Office Building
U.S. Senate
Washington DC, 20510

July 11, 2014

Dear Senator Udall and Senator Chambliss,

On behalf of the undersigned organizations, we would like to express our support for S. 2225, *The Smart Water Resource Management Conservation and Efficiency Act*, to help increase energy and water efficiency in water and wastewater systems.

The state of water and wastewater infrastructure in the U.S. is in a serious state of disrepair—aging infrastructure, population growth, and more extreme weather events are all contributing to the breakdown of the country's water and wastewater systems. Some 2.6 trillion gallons of water are lost annually, primarily as a result of premature pipe corrosion leaks and breaks. Repairing these leaks and making the other necessary upgrades to meet Clean Water Act and Safe Drinking Water Act standards does not come without a large price tag—EPA estimates modernizing the nation's water and wastewater infrastructure over the next 20 years will cost $384.2 billion and $293.7 billion, respectively.

Water and wastewater systems are also large consumers of electricity. An estimated 3-4 percent of total U.S. energy use is consumed by extracting, treating, and conveying water. In some municipalities however, water and wastewater treatment can account for up to 35% of annual municipal energy use. Water and wastewater treatment plants have not historically been designed with energy efficiency in mind. Today, we better understand that upgrading water and wastewater infrastructure with innovative water and energy efficiency technologies can yield more effective

management of our water system outputs (making the best use of every drop of water we have), thereby easing customer rate burdens and facilitating delivery of reliable and safe drinking water.

In the era of decreasing federal assistance and increasing water and wastewater needs, utilities around the country are looking for innovative ways to make their operations more cost-effective. Your amendment, which would establish a smart water resource management pilot program to award grants to eligible entities to demonstrate innovative technology-based solutions to increase water and energy efficiency, would provide valuable assistance in testing and disseminating the innovative technology needed to transform our water and wastewater sectors to meet today's twenty-first century challenges.

Thank you for your leadership on this issue and we urge all members of the Senate to support S. 2225.

Sincerely,

Alliance for Water Efficiency

American Public Works Association

American Water Works Association

Association of Metropolitan Water Agencies

Digital Energy & Sustainability Solutions Campaign

National Association of Clean Water Agencies

National Association of Water Companies

U.S. Water Alliance

Water Environment Federation

WateReuse Association

July 15, 2014

The Honorable Thomas Udall
110 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Udall:

On behalf of Plumbing Manufacturers International (PMI), we wanted to express our strong support for **The Smart Water Resource Management Conservation and Efficiency Act of 2014 (S. 2225)**. We thank you for introducing this important bipartisan legislation with Senator Saxby Chambliss, which would support smart water system pilot projects in three to five cities. Strategic investment in smart water innovation is necessary in order to avoid unsustainable spending levels in the future. This measure creates public-private partnerships that lower the cost of innovating, identify best practices from successful demonstration projects and will result in innovative technology being adopted in communities across the United States. It is a critical step in promoting better joint management of these two important national resources -- energy and water.

As you know, it takes a considerable amount of energy to deliver and treat the water we use every day. Heating water for bathing, shaving, cooking, and cleaning also requires a lot of energy. With more than half of all indoor residential water use taking place in bathrooms and kitchens, PMI member companies are producing a wide variety of water-efficient plumbing products that are effective in saving water and in saving energy.

Efficient plumbing products help consumers and communities hold down the rising costs of additional water supply and wastewater treatment infrastructure. Saving water also reduces the energy required to pump, heat, and treat water throughout the nation. Furthermore, using water more efficiently helps maintain water supplies at safe levels and protects human health and the environment.

Our commitment to water efficiency is evident in our industry's partnership with the U.S. Environmental Protection Agency's (EPA) WaterSense Program. This voluntary program, launched in 2006, promotes water efficient plumbing products and today brings to market more than 10,000 water-efficient plumbing products from high efficiency toilets, bathroom and sink faucets to showerheads and urinals, as well as pre-rinse spray valves for commercial kitchens.

These products have been consumer and third-party tested and proven to reduce water consumption by up to 30 percent. EPA estimates WaterSense labeled products saved 271 billion gallons of water in 2013 alone and, since 2006, WaterSense and its partners have helped consumers save 757 billion gallons of water and $14.2 billion in energy and water bills.

PMI is the leading plumbing manufacturing trade association in the country representing at least 90 percent of all the plumbing fixtures and fittings sold in the United States. PMI members manufacture a wide range of high-performance, water saving products that are found in the majority of office buildings, homes, schools, restaurants, manufacturing facilities, and hotels across the nation.

Once again, thank you for your leadership in the area of energy-water nexus and in particular, water efficiency. PMI is very interested in the energy-water nexus and our members have done considerable work in this area. We stand ready to assist you in the passage of this bill. If you have any questions or need additional information, please do not hesitate to contact Stephanie Salmon in the PMI Washington Office – 202/452-1735.

Sincerely,

Barbara C. Higgens
CEO/Executive Director
Plumbing Manufacturers International
bhiggens@pmihome.org

Plumbing Manufacturers International - 1921 Rohlwing Road – Unit G
Rolling Meadows, IL 60008
Tel: 847-481-5500 - Visit us at www.pmihome.org or www.safeplumbing.org

PMI MEMBERS INCLUDE:
* American Standard Brands, Inc. * Bradley Corporation * BrassCraft Mfg. Co. * Chase Brass & Copper Company * CSA International * Delta Faucet Company * Dornbracht Americas * Duravit USA * Fisher Manufacturing Company * Fluidmaster, Inc. * Hansgrohe, Inc. * InSinkErator * International Association of Plumbing and Mechanical Officials * International Code Council Evaluation Service * Kohler Company * KWC America, Inc. * Lavelle Industries * LSP Products * Moen Incorporated * Mueller Brass Company * NEOPERL, Inc. * NSF International * Pfister * Reed Construction Data * Sloan Valve Company * Speakman Company * Symmons Industries Inc. * T & S Brass and Bronze Works, Inc. * TOTO USA * VitrA USA * Water Pik * WCM Industries, Inc. *

Union of Concerned Scientists
ucsusa.org Two Brattle Square, Cambridge, MA 02138-3780 t 617.547.5552 f 617.864.9405
1825 K Street NW, Suite 800, Washington, DC 20006-1232 t 202.223.6133 f 202.223.6162
2397 Shattuck Avenue, Suite 203, Berkeley, CA 94704-1567 t 510.843.1872 f 510.843.3785
One North LaSalle Street, Suite 1904, Chicago, IL 60602-4064 t 312.578.1750 f 312.578.1751

July 16, 2014

The Honorable Tom Udall
Committee on Environment and Public Works
U.S. Senate
Washington, DC

Dear Senator Udall:

The Union of Concerned Scientists (UCS) would like to offer support for S.2225, the "Smart Water Resource Management Conservation and Efficiency Act of 2014". The connections between energy and water, both energy use by the water and wastewater sector, and water use for energy production, are important to understand and address, and we appreciate what this bill would do to provide information and solutions.

On the power side, our electricity sector is extremely water-intensive, with the single largest share of freshwater withdraws (41%) used for cooling power plants. This water dependence can threaten the availability and quality of water resources, as well as the reliability of our nation's power plants. Such energy-water "collisions" are happening now and are likely to be further exacerbated by climate change going forward. To reduce our water vulnerabilities in the electricity sector, owners and operators of existing power plants with substantial effects on the supply or quality of water could make retrofits adding low-water cooling technologies. The use of cooling towers and treated wastewater systems are just a couple examples of the kinds of solutions that are available, and the government can play a constructive role by incentivizing water-smart technology decisions.

S.2225 makes progress towards addressing energy-water problems by incentivizing the development and deployment of energy and water efficiency technologies through a proposed smart water management pilot program. Given the many linkages between the water and energy sectors, we would encourage the bill [in Section 2(b)(2)(B), e.g.] to allow inclusion of entities proposing solutions to cut the energy and water of water/wastewater systems used in power plant cooling. S.2225 can be an important tool for accelerating advancements in the development and application of water-smart technologies currently available for the power sector as well as the water sector. For example, advances in both the water and power efficiency of recirculating cooling systems could reduce their cost and expand their use in regions where they are most suitable. And efficiency improvements for

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dry-cooling systems could reduce their costs and broaden their use as well. Hybrid wet-dry systems with lower costs and better efficiency would also become more deployable.

UCS also very much supports the notion that improvements in data collection and analysis and decision making tools can aid water-smart decision making, including in the power sector. Furthermore, new models that enable decision makers to match water needs with water sources, such as by expanding wastewater use in the power sector, can help address local water constraints. S.2225 could address this issue by incentivizing the installation of advanced automated systems that provide real-time data on energy and water.

Decisions made today about which power plants to build, which to retire, and which energy or cooling technologies to deploy and develop matter. Understanding how these choices affect water use and water stress will help ensure that the dependence of power plants on water does not compromise that resource, the plants themselves, or the energy we rely on them to provide. Government can play a role in incentivizing the development and advancement of water-smart technologies which provide decision-makers with options to make the right choices, and we support S.2225 as an important tool for achieving that end.

Sincerely,

Angela Anderson
Director, Climate and Energy Program
Union of Concerned Scientists

National Environmental Coalition on Invasive Species

Center for Food Safety, Ecological Society of America, National Parks Conservation Association, National Wildlife Federation, The Nature Conservancy

June 26, 2014

The Honorable Dean Heller
United States Senate
324 Hart Senate Office Building
Washington, DC 20510-2805

Dear Senator Heller,

The above-listed member groups in the National Environmental Coalition on Invasive Species (NECIS) are proud to support and endorse the *Protecting Lakes Against Quaggas (PLAQ) Act.* We commend you for your leadership in the important battle against the spread of invasive species like quagga mussels. The legislation is consistent with the NECIS mission, which is promoting policies to prevent harmful non-native invasive species from being introduced, becoming established and spreading in the United States.

The PLAQ Act would amend title 18, United States Code, to prohibit the importation or exportation of harmful quagga mussels. This long-overdue step will open up new tools to prevent the spread of quaggas to new regions of the United States, including waterbodies in Nevada and across the West.

Quagga and zebra mussels are causing catastrophic havoc on ecosystems across the United States. They reproduce rapidly and attach to various surfaces in freshwater ways, clogging water structures and negatively impacting commercial and recreational fishing, boating, and other activities. Together, these mussels have racked up an estimated $5 billion in prevention and control efforts since their introduction, likely from ship ballast water discharge, to the Great Lakes in the 1980s, more than any other aquatic species invader. Currently, only the zebra mussel is listed as an "injurious" invasive species—it's critical that the quagga mussel join that list as well.

Once again, our organizations thank you and Representative Heck for leading the charge in the Senate and House of Representatives, respectively, against the spread of quagga mussels. We urge you to continue to look for ways to enhance invasive species prevention and the NECIS coalition remains committed partners. Please do not hesitate to reach out to Bentley Johnson with National Wildlife Federation at 202-797-6826 or JohnsonB@nwf.org to discuss additional solutions to preventing the introduction and spread of harmful non-native wildlife and plant species.

Sincerely,

Center for Food Safety
Ecological Society of America
National Parks Conservation Association
National Wildlife Federation
The Nature Conservancy

WESTERN GOVERNORS' ASSOCIATION

John Hickenlooper
Governor of Colorado
Chairman

Brian Sandoval
Governor of Nevada
Vice Chairman

James D. Ogsbury
Executive Director

Headquarters:
1600 Broadway
Suite 1700
Denver, CO 80202

303-623-9378
Fax 303-534-7309

Washington, D.C. Office:
400 N. Capitol Street, N.W.
Suite 376
Washington, D.C. 20001

202-624-5402
Fax 202-624-7707

www.westgov.org

July 18, 2013

Honorable Joe Heck
U.S. House of Representatives
132 Cannon House Office Building
Washington, DC 20515

Dear Representative Heck:

In response to the domestic invasion of quagga mussels, American taxpayers and industry have incurred an estimated $5 billion in prevention and control costs since introduction of the species to U.S. waters in 1986. Accordingly, I am writing to communicate the support of the Western Governors' Association for H.R. 1823, the "Protecting Lakes Against Quaggas Act of 2013."

The proposed measure would add quagga mussels to the national list of invasive species covered under the Lacey Act (18 U.S.C. 42). This would invest federal and state authorities with an important tool for containing and eradicating quagga mussels by providing for increased inspections of boats crossing state lines. Such inspections for zebra mussels already occur.

Inspection and decontamination of quagga-fouled watercraft represents a common-sense approach to containment of this invasive species. To the extent that H.R. 1823 authorizes and facilitates deployment of these efforts, it represents an important defense against proliferation of the quagga mussel throughout the West.

Western Governors appreciate your efforts to craft common-sense solutions to the insidious problem of invasive species and look forward to working with you in support of H.R. 1823.

Sincerely,

James D. Ogsbury
Executive Director

cc: Honorable Mark Amodei
Honorable Suzanne Bonamici
Honorable Paul Gosar
Honorable Raul Grijalva
Honorable Denny Heck
Honorable Steven Horsford
Honorable Jared Huffman
Honorable Derek Kilmer
Honorable Ann Kirkpatrick
Honorable Rick Larsen
Honorable Ben Ray Lujan
Honorable Jim Matheson
Honorable Grace Napolitano
Honorable Steve Pearce
Honorable David Reichert
Honorable Michael Simpson
Honorable Mike Thompson
Honorable Greg Walden
Honorable Henry Waxman

Testimony of the National Wildlife Refuge Association
for the
U.S. Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife

July 30, 2014

Subcommittee Chairman Cardin, Ranking Member Boozman, and distinguished members of the subcommittee:

On behalf of the National Wildlife Refuge Association and its membership comprised of current and former refuge professionals, more than 200 refuge Friends organization affiliates and thousands of refuge supporters throughout the United States, thank you for the opportunity to share our views on two important bills, S. 2560, the Fish and Wildlife Resource Protection Act and H.R. 1300 the Volunteer & Community Partnership Improvement Act. Both bills would assist the U.S. Fish and Wildlife Service (Service) in fulfilling its mission to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people and thus, we support passage of both bills.

U.S. Fish and Wildlife Service (FWS) Resource Protection Act

S. 2560, the FWS Resource Protection Act is a much-needed authority that would provide the Service the ability to collect compensation from parties that injure or destroy resources on properties owned by the Service, including the National Wildlife Refuge System. The Service would use those funds to directly restore any injured or damaged Service resource without the need for further Congressional appropriation. Thus, the burden to restore injured or damaged resources would fall on the responsible party, not the American taxpayer.

Currently, the Service does not have the explicit statutory authority to seek compensation from responsible parties that injure or destroy Service property. This includes anything from bulldozing a road through a national wildlife refuge, tearing down fences, cutting down trees, or draining a wetland. In contrast, the National Park Service has such authority under the Park Systems Resource Protection Act and the National Oceanic and Atmospheric Administration has authority under the National Marine Sanctuaries Act. The Refuge System covers more acres than both agencies combined and has a significantly broader range of management responsibilities including hunting, fishing, wildlife watching and other wildlife dependent recreation.

Currently, the cost of replacing or restoring injured or destroyed Service resources typically is included in the Refuge System's Operations and Maintenance (O&M) project list, which is funded with taxpayer dollars. As a result, many repair or restoration projects either get added to the deferred maintenance backlog or the funds to complete them comes out of other refuge programs. The FWS Resource Protection Act would allow the Service to recover

damages directly from the person or persons that harmed the resource, so taxpayers no longer have to foot the bill. Persons responsible for harm to refuge resources -- not taxpayers -- should pay for any injury they cause.

For instance, thirty-nine arson cases were reported in 2010, totaling $850,000 in damages – although criminal penalties were recovered in some of these cases, no funds were recouped by the Service for restoration of the damaged property. And in 2011, over 2,400 vandalism cases totaling $404,000 in damages were documented, but no funds were recouped by the Service for restoration. In each case, the Fish and Wildlife Service must choose between using taxpayer funded appropriations to pay for assessing, repairing, replacing or restoring structures, habitat and other resources injured by the responsible party or for other important refuge needs.

Under the FWS Resource Protection Act, the monetary damages collected could be used to:

- Reimburse assessment costs;
- Prevent or minimize resource loss;
- Abate or minimize the risk of loss;
- Monitor ongoing effects; and/or
- Restore, replace, or acquire resources equivalent to those injured or destroyed.

The FWS Resource Protection Act is civil legislation and would not interfere with any criminal fines, penalties or restitution money that currently goes to the U.S. Treasury. It is our understanding that the legislation aims to be budget neutral, which we support. Any funds collected for resource injuries will be used to rectify that specific injury without the need for Congressional appropriation.

Below is a summary of the Refuge System's Uniform Crime Report from 2011- 2013 that identifies the number of cases in categories where the Resource Protection Act would help recovery damages for restoration. For instance, if each case represented a damage of just $1000, the savings to taxpayers would have been $16.7 million in FY11, $19.6 million in FY12, and $17.4 million in FY13, or roughly four percent of the Refuge System's budget in those years.

Uniform Crime Report For Refuges by Year

OFFENSES BY INCIDENT	2013	2012	2011
Off Road	1233	2101	2645
Natural Resources	991	1333	1209
Hazmat	7	16	19

Timber Theft		0	95	81
Wildland Arson		3	80	57
Occupancy Trespass		2	302	450
Trespass		6846	8193	8600
Easement Violations		464	877	755
Other Resource Violations		6291	3282	456
Arson - Structural		7	4	3
Vandalism		1538	3279	2447
	Totals	**17382**	**19562**	**16722**

We believe the FWS Resource Protection Act to be much needed legislation that will give the Service the ability to recover damages directly from persons that harmed Service resources so taxpayers no longer have to foot the bill and we look forward to working with the Subcommittee to see its passage.

National Wildlife Refuge System Volunteer & Community Partnership Improvement Act:
To amend the Fish and Wildlife Act of 1956 to reauthorize the volunteer programs and community partnerships for the benefit of national wildlife refuges, and for other purposes.

Volunteers are the lifeblood of the National Wildlife Refuge System, annually adding a boost to the workforce by 20%. At a time when Refuge System budgets are operating at about $80 million less than what they had in FY 2010, the help from volunteers and refuge Friends organizations is more important than ever.

Passage of the National Wildlife Refuge Volunteer Improvement Act is intended to increase opportunities for citizens to volunteer on our national wildlife refuges and bolster the U.S. Fish and Wildlife Service's efforts to implement a national strategy for coordinating volunteer efforts. This can then turn the growing number of visitors to our refuges into passionate volunteers helping care for our public lands and waters.

Refuge visitation is growing and is expected to continue. From FY10 to FY13, the Refuge System welcomed 6.7% more visitors overall. Wildlife observation visits increased by 12%, and photography visits increased by 33%. However, due to funding cuts, refuges during that same time lost valuable staff committed to visitors and volunteers. The number of volunteers during the same time period dropped by 8.6%; a particularly troubling statistic

considering this work force is a 20% boost to existing Refuge System staff – or 702 full time equivalents. Refuges rely on volunteers for welcoming and greeting visitors, maintenance, interpretation, and much more. Volunteer service, however, is only possible if the System is reasonably staffed and thus able to extend requisite volunteer training and oversight. The ability of Americans to contribute their volunteer time and expertise is directly tied to adequate annual appropriations by Congress.

The infographic attached shows the incredible gift made by volunteers each year to the Refuge System. Based on FY 2013 information, it shows that over 38,000 volunteers contributed 1.4 million hours – a value exceeding $32 million. At refuges in Maryland, for example, last year 733 volunteers contributed 46,564 hours, the equivalent of 22 full time equivalent staff with a value of over $1 million. In Arkansas, 182 volunteers contributed 6247 hours, the equivalent of 6 full time equivalent staff with a value of $138,000. From helping with habitat conservation projects and environmental education programs to organizing recreational opportunities like hunts and fishing derbies, Refuge Friends and Volunteers are vital to our national wildlife refuges.

We feel the legislation could be strengthened slightly and we look forward to working with the subcommittee to do so.

In closing, both S. 2560 and H.R. 1300 would assist the U.S. Fish and Wildlife Service in fulfilling its mission for the American people and thus, we support passage of both bills.

○