



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”

July 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 from 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

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