TESTIMONY OF CHARLES WOOLEY, ACTING REGIONAL DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

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Mr. Chairman and Members of the Subcommittee, I am Charles Wooley, Acting Regional Director of the U.S. Fish and Wildlife Service's (Service) Midwest Region. I am pleased to have the opportunity to provide you with an update on progress toward improving water quality in the Great Lakes and its relationship to one of the Administration's environmental priorities, restoring and protecting the Great Lakes. Specifically, I would like to discuss the Service's ongoing commitment to restore, protect and enhance the water quality of the Great Lakes, including progress regarding the Great Lakes Interagency Task Force.

The Great Lakes are the largest single source of fresh surface water in the Western Hemisphere. The Great Lakes ecosystem drainage covers over 288,000 square miles, with approximately 9,000 miles of shoreline, 5,000 tributaries and 30,000 islands. The Service's survey data indicate that fishing, hunting and wildlife watching generate nearly $18 billion in annual revenue in the Great Lakes region, including $1.5 billion from sport fishing alone. In collaboration with federal, state and provincial agencies, conservation organizations, and private landowners, the Service addresses natural resource issues that affect the fish, wildlife and habitats of the Great Lakes Basin, as well as the 35 million people who live there.

In pursuing our mission of conserving, protecting, and enhancing fish and wildlife and their habitats, the Service recognizes the critical connection between clean water and healthy fish and wildlife resources. We apply our authorities and numerous species- and habitat-based programs to a range of issues that affect water quality and, in turn, our trust fish and wildlife resources, throughout the Great Lakes. In addition, the Service recognizes its tribal trust responsibility and the important role of the tribal nations in protecting the Great Lakes. The Great Lakes region is the ancestral homeland of 33 federally recognized Indian tribal nations whose reservations are located in the basin or who retain treaty-guaranteed rights to hunt, fish or gather in the basin. Tribal communities rely on Great Lakes natural resources to meet their subsistence, economic, cultural, medicinal, and spiritual needs.

In May 2004, the President signed Executive Order 13340 affirming the federal government's commitment to address environmental and resource management issues in the Great Lakes Basin. The Service is a strong supporter and participant in the Great Lakes Interagency Task Force created by the Executive Order, including our involvement on the Aquatic Invasive Species and Species and Habitat priority issue teams. We continue to engage in a number of efforts initiated by the Executive Order through the Interagency Task Force, and work closely with the Great Lakes Regional Collaboration.

The programs and projects discussed below highlight partnership efforts among members of the Great Lakes Interagency Task Force and others concerned with Great Lakes wetlands conservation, invasive species, contaminants, and other important basin-wide issues.

Habitat and Fish and Wildlife

The Great Lakes region has lost more than half its original wetlands and 60 percent of its forest lands, and the region has only small remnants of other native habitat types such as savannah and prairie. These changes are of concern because of their impact on native fish and wildlife communities, which play a critical role in maintaining ecosystem health and function and contribute to the social and economic vitality of both the region and the nation.

In 2004, the President announced an initiative to restore, enhance, and protect three million acres of wetlands nationwide over five years. Specific to the Great Lakes region, federal, state and private partners have joined in an equally shared effort to protect, restore, and enhance 200,000 acres of wetlands in the Basin over the next several years.

In support of this effort, the Service coordinated a request for all Federal agencies in the Basin to quantify their contributions of wetland acres protected, restored, and enhanced based on the methods to collect such information nationally for the President's annual Council of Environmental Quality wetlands status report. Information collected from the Federal agencies show that a total of 64,000 acres of wetlands have been protected, restored, and enhanced in the Great Lakes since January 2006. Of this total, the Service contributed almost 39,000 acres – about 60 percent – of the total. This level of contribution to shared goals highlights the significance of the Service's authorities, programs, and field-presence to work with partners to identify and implement important projects that benefit both water quality and fish and wildlife.

In the Great Lakes, the Service oversees a number of programs that have a direct relationship to water quality and fish and wildlife health. Service staff in our 58 field stations within the Great Lakes Basin, as well as two regional offices and the Washington Office, coordinate with partners on a day-to-day basis to identify, plan, implement, and monitor projects, and leverage resources. Typically, these programs focus on habitats, such as wetlands, that provide positive benefits to water quality including filtering sediments and attenuating wave action, and essential fish and wildlife habitat. Other programs take action to identify and address sources of contamination impacting water quality and fish to restore affected resources. Through these programs, the Service provides technical and financial resources to create, protect, improve, and restore thousands of acres of wetlands in the Great Lakes Basin each year.

Within the Great Lakes Basin, foremost among the programs the Service oversees is the North American Wetlands Conservation Act (NAWCA), which encourages public-private partnerships to protect, enhance, restore, and manage wetlands and other habitats for migratory birds and other wildlife resources in North America. Since 1991, the Service has awarded 182 NAWCA grants totaling $76 million, to restore, protect and enhance 422,000 acres in the Great Lakes Basin. Partners have contributed additional funds of more than $227 million to these projects.

In addition to matching grants provided under NAWCA, the Service provides technical and financial assistance through the Partners for Fish and Wildlife Program (Partners). The Partners program works directly with agencies, outside organizations, and private landowners to deliver cooperative conservation in the Great Lakes Basin. Since 2002, the Service's Partners Program has helped restore more than 5,400 acres of wetland and upland habitats on private lands and improve more than 407 stream miles in the Basin. Partners' biologists also provide biological

expertise to the U.S. Department of Agriculture regarding agriculture conservation programs and facilitate Farm Bill activities by assisting private landowner enrollment. Water quality, a key factor in healthy fish populations, is vastly improved by Farm Bill conservation programs that reduce erosion and sedimentation. Farm Bill programs also restore aquatic habitats by removing barriers to fish passage and re-establishing streamside vegetation, which serves as a natural filter to reduce the amount of nutrients and sediments entering streams.

Similar to the Partner's program, the Service's Coastal Program features non-regulatory, innovative partnership-based efforts to identify and protect some of the most valuable fish and wildlife habitat and species in the Great Lakes Basin. In 2006, the Great Lakes Coastal Program funded 26 projects that protected, restored, or enhanced 5,600 acres of coastal fish and wildlife habitat and eight miles of stream habitat. The most extensive Coastal Program wetlands restoration in the Great Lakes is taking place in western Lake Erie, where the Service is working with state and local government to control invasive plants on nearly 6,000 acres of wetlands.

To complement these activities, the Service also awards National Coastal Wetlands Conservation Grants to States to acquire, restore, or enhance coastal wetlands for long-term conservation benefits to wildlife and habitat. This competitive program is funded under provisions of the 1990 Coastal Wetlands Planning, Protection and Restoration Act. In 2007, the Service awarded more than $2.7 million to Great Lakes states. Partners contributed $2.4 million in additional dollars to conserve more than 5,000 acres of coastal wetland habitat.

Another important Service program in the Great Lakes is the Service's Environmental Contaminants program. This program is the *primary* Federal technical assistance program providing expertise in fish and wildlife eco-toxicology. The program contributes to the maintenance and improvement of Great Lakes water quality by making this expertise available to help agencies, tribes and stakeholders understand and address water quality issues arising from pollutant inputs. This includes efforts to prevent pollution from spills, investigation of sufficient water quality standards necessary to support fish and wildlife resources, and any subsequent restoration of fish and wildlife habitats and resources injured by releases of hazardous substances (Natural Resource Damage Assessments or NRDA). For example, the Service is working with partners including the Environmental Protection Agency and the U.S. Geological Survey on several NRDA cases that have recently demonstrated significant cleanup and restoration progress, including the Fox River/Green Bay, Wisconsin; Grand Calumet River, Indiana; Kalamazoo River, Michigan; Saginaw River and Bay, Michigan; and Ashtabula River and Harbor, Ohio. Through settlements reached under our NRDA and Restoration Program, the Service restored and enhanced 955 acres of wetlands in 2005, and another 3,300 acres in 2006. In Wisconsin, the NRDA program is helping to acquire and restore valuable habitat to replace natural resources injured due to the release of PCBs into the Fox River and Green Bay.

Finally, through the Great Lakes Fish and Wildlife Restoration Act (Act), reauthorized by Congress in 2006, the Service continues to lead activities related to invasive species, fish and wildlife habitat restoration, and collection and management of related information and ecosystem health indicators. In 2006, the Service approved two projects that will restore a total of 350 acres of coastal wetlands in Sandusky County, Ohio, and St. Clair County, Michigan. These

projects will provide high-quality spawning, feeding and rearing habitat for a wide variety of fish and other aquatic species, as well as waterfowl and other wetland-dependent wildlife.

Invasive Species

Introduction and establishment of invasive species in the Great Lakes is occurring at an alarming rate. More than 160 non-native aquatic species are established in the Great Lakes, and during the last several decades, populations of non-native species have been discovered at an average rate of one every eight months. Invasive species can inflict ecological damage – 42 percent of the threatened and endangered species in the United States are affected by invasive species. Prevention of invasive species introductions and control of established populations of invasive species are critical to sustaining and enhancing ecosystem integrity and the social, economic and cultural uses the Great Lakes ecosystem supports.

As co-chair of the Aquatic Nuisance Species (ANS) Task Force, along with the National Oceanic and Atmospheric Administration, the Service provides technical and financial assistance to the ANS Great Lakes Regional Panel to help States develop ANS management plans and to support prevention, control and outreach activities in the region. In November 2007, the ANS Task Force approved a National Management and Control Plan for the Asian Carp. One component of the plan includes our recent addition of both black and silver carp to the list of injurious wildlife under the Lacey Act (18 U.S.C. 42). Biologists are concerned that these species could spread and compete with native species for food and habitat, having both ecological and economic impacts and threatening the multimillion-dollar Great Lakes fishery, and those of other watersheds. Adding silver and black carp to the list of injurious wildlife prohibits the importation and interstate transport of the species. However, an injurious wildlife listing does not prohibit intrastate transport, use, or possession of the species within States.

In addition to the Asian carp, the Service works to combat the spread of other invasive species in the Great Lakes, including the round goby, zebra mussels, and sea lampreys. Working with our partners through outreach programs such as the Stop Aquatic Hitchhikers! Campaign and the 100th Meridian Initiative, the Service supports efforts to educate the public on ways to prevent the spread of these harmful organisms. In turn, these outreach programs support Service control efforts, such as a program begun in the 1950's to reduce the abundance of sea lampreys. This control effort has paved the way for recovery of self-sustaining populations of native lake trout in portions of the Upper Great Lakes. While total elimination of sea lamprey populations from the Great Lakes in unlikely, historic sea lamprey populations have been reduced by 90 percent and control will continue to become more important as lake trout restoration activities expand in the Upper Great Lakes.

The Service is also working with the Midwest Natural Resources Group, a partnership of 13 federal agencies, to develop an action plan to coordinate and develop inventories, mapping and treatment for terrestrial invasive species in the basin.

Information and Indicators

The Service believes a successful restoration strategy for the Great Lakes must also include an informed decision making process based on consistent methods to measure and monitor key

indicators of the ecosystem's function. Such measurements need to occur before and after the initiation of restoration efforts implemented on local and basin-wide scales. Once collected, information must be compiled and communicated consistently to inform the restoration process, decision makers and the public. These activities will provide resource managers, elected officials and other stakeholders with the timely, accurate and cost-effective information necessary for making objective, science-based decisions for the protection and restoration of the Great Lakes ecosystem, and to sustain healthy societies, economic activities and natural systems.

The Service's National Wetlands Inventory (NWI) has the primary responsibility for mapping and inventorying all wetlands and surface waters of the United States. The Emergency Wetlands Resources Act of 1986 (Act) and subsequent amendments to the Act define the responsibilities of the NWI, which include determining, mapping, and inventorying the status, extent, characteristics, and functions of wetland, riparian, deepwater and related aquatic habitats to promote the understanding and conservation of these resources.

Knowing where and what types of wetlands and deep water aquatic habitats are currently on the landscape is critical when targeting, planning, and implementing Great Lakes basin and coastal wetland restoration and protection projects. The NWI is a mapping and management tool widely used by many, from landowners to Congress, to understand the nature and extent of our wetlands and surface water systems. NWI is vital to a variety of applications; including transportation planning, flood management, water supply management, recreation, wildlife management, pollution prevention, and land management and development.

In the past, the mapping process utilized small scale, high altitude aerial photography, which was adequate to start mapping wetlands for the states. However, the advent of geospatial information systems (GIS), coupled with the increased regulatory program needs for higher resolution maps, has challenged NWI to meet the expanding demands of users.

Progress is being made in updating NWI maps in the Great Lakes. Since June 2006, Wisconsin is allowing the conversion of its existing Wisconsin Wetland Inventory maps to NWI for the state with a few counties being updated per year. Ducks Unlimited has teamed up with NWI to partially update maps for parts of Ohio, Michigan, Illinois, and Indiana. The current, national update rate for NWI is about one percent per year.

We have learned that wetlands clean and filter our waters, as well as sequester and store vast amounts of carbon. Restoring more wetlands means that more carbon is stored. Water quality is also a function of wetland quality and quantity - healthy, intact wetlands in the basin will mean better water quality for the Great Lakes.

The Service's NWI Program in the Great Lakes is working with Canadian agencies to use radar mapping approaches to not only map wetlands and surface water but to also track water level changes across all water and wetland features in the Basin. In addition, the Service is partnering with the U.S. Environmental Protection Agency to conduct a new National Wetland Condition Assessment starting in 2011 to provide a baseline assessment of the quality of our wetlands. There may be enough information with this new study to provide an assessment of the Great Lakes Basin, as well.

Conclusion

In closing, the Service is committed to working with our many partners to ensure healthy fish and wildlife resources in the Great Lakes and to enhance and restore the health of this ecosystem.

This concludes my testimony. I appreciate the opportunity to appear before the Subcommittee, and I am pleased to answer any questions.