



**Testimony of Carol Browner  
Chairwoman of the Board of Directors  
National Audubon Society**

**Before the Committee on Natural Resources  
Subcommittee on Fisheries, Wildlife, and Oceans**

**Implementation of the National Wildlife Refuge System Improvement Act:  
Has the Promise Been Fulfilled?**

**October 9, 2007**

Madam Chairwoman and Members of the Subcommittee:

Thank you for the opportunity to testify regarding implementation of the National Wildlife Refuge System Improvement Act of 1997. I commend you for holding this important hearing. I speak to you today as both a former Administrator of the Environmental Protection Agency and as the Chair of the Board of Directors of the National Audubon Society.

My testimony today is offered on behalf not only of National Audubon Society but also National Wildlife Federation, The Wilderness Society, and Defenders of Wildlife. Together, our organizations represent more than six million members and supporters across the country.

Audubon's mission is to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity. Our national network of community-based nature centers and chapters, scientific and educational programs, and advocacy on behalf of areas sustaining important bird populations, engage millions of people of all ages and backgrounds in positive conservation experiences.

The dedication of National Audubon Society to the protection of the National Wildlife Refuge System can be traced to its earliest history. At the urging of early Audubon societies, President Teddy Roosevelt, in one of America's great acts on behalf of conservation, established 6-acre Pelican Island in Florida as the first federal wildlife refuge. Audubon and the federal government jointly financed the work of the first Refuge System's first employee, a warden who guarded the birds of Pelican Island from plume hunters. Audubon continues to be a stalwart defender of wildlife refuges, with a deep appreciation and respect for the system's value to the country as a national treasure, as well as its importance as a tool for bird and wildlife conservation and for protection of the ecosystems of the United States.

Unfortunately, despite its value and importance, for decades the Refuge System has been under-appreciated, under-funded, and under-prioritized. Its tremendous potential, to be the bedrock of ecosystem protection in the country, and to be a driver of habitat protection in the larger

landscape surrounding the refuges, has gone largely unrealized. In many ways, refuges have been passive recipients of a wide range of environmental threats, places where destructive activities were too often permitted, and where ecosystems were too often degraded by broader landscape-level threats such as invasive species, limited water supplies, and pollution.

In 1997, the Congress sent a strong signal that the era of under-appreciation, rampant unaddressed threats, and unrealized potential was coming to an end. The passage of the National Wildlife Refuge System Improvement Act, with unanimous bipartisan support in the House and Senate, for the first time gave the Refuge System a clear mandate to promote wildlife conservation above other uses, widely known as the “wildlife first” mission of the system. The Improvement Act also gave refuges powerful tools to begin to tackle unaddressed threats and to manage the system with an ecosystem approach.

Ten years after passage of this landmark legislation, however, implementation of several key requirements is grossly inadequate.

### **The Refuge Improvement Act is a Powerful Tool for Putting Wildlife First, but Many Conflicts are Still Unresolved**

The basic framework of the Refuge Improvement Act was very important. It established the “wildlife first” mission of the Refuge System and clearly prioritized wildlife-oriented recreation over commercial activities and other non-wildlife-oriented uses. The Fish and Wildlife Service has developed strong policies for compatibility –ensuring that uses are compatible with wildlife conservation before they can be permitted – and appropriateness – ensuring that uses are wildlife-oriented and appropriate for a wildlife refuge.

According to refuge staff with whom we spoke, the appropriate use policy is used every day on wildlife refuges across the country to implement the “wildlife first” mission. When refuge managers receive calls requesting use of refuges for auto shows, weddings, and other non-wildlife oriented uses, the appropriate use policy makes it easier for refuge managers to refuse authorization for such activities. The appropriate use policy already has been used to exclude inappropriate helicopter use on a refuge, and is applicable to borderlands conflicts affecting refuges like Lower Rio Grande Valley.

The strength of the Improvement Act as a tool for putting wildlife first also has been verified in court. For example, Little Pend Oreille is a small oasis of protected wildlife habitat in northeastern Washington that provides hunting, fishing and wildlife recreation opportunities. An attempt to reopen much of this fragile refuge to harmful cattle grazing was blocked by a federal district judge. The judge found that restricting grazing in the Little Pend Oreille under the Refuge Improvement Act was appropriate.

This was an important decision for the future of the National Wildlife Refuge System. The Improvement Act has helped this refuge to prioritize its fundamental mission to protect “wildlife first,” an encouraging sign that refuges across the country can be defended from incompatible and inappropriate uses that compromise wildlife protection.

However, much more work remains to be done to eliminate destructive uses of wildlife refuges. In 2002, the Refuge System issued a data collection effort to identify threats and conflicts within wildlife refuges. This effort identified more than 2,376 threats nationwide. The degree to which the Improvement Act has helped to address these threats in the past ten years is unclear. The last system-wide assessment of incompatible uses of the Refuge System through an independent investigation was completed by the Government Accountability Office (GAO) in 1989.

Audubon recommends that the committee request a new assessment of incompatible activities in the Refuge System by the GAO, including an assessment of the role of the Refuge Improvement Act in eliminating incompatible and inappropriate uses and if additional authorities are needed.

### **Diluting the Promise: The Service Has Selectively Ignored or Given Very Low Priority to Key Provisions of the Improvement Act**

The Fish and Wildlife Service has accomplished very little in its implementation of the plain language and clear mandates of some of the key provisions in the Refuge Improvement Act. In particular, mandates to plan and direct the continued growth of the System to conserve the ecosystems of the United States (strategic growth) and to advocate for water rights and the protection of natural hydrological systems (water quantity and quality), largely have not been implemented.

#### **Strategic Growth**

The Improvement Act calls upon the Service to “plan and direct the continued growth of the System in a manner that is best designed to accomplish the mission of the System, to contribute to the conservation of the ecosystems of the United States, to complement the efforts of States and other Federal agencies to conserve fish and wildlife and their habitats, and to increase support for the System and participation from conservation partners and the public.”

In an era of rampant population growth, intensification of agriculture, and sprawling development, the “continued growth of the system” as Congress directed, is of utmost importance to “contribute to the conservation of the ecosystems of the United States.” Yet, there are essentially no official national priorities to guide the creation of new refuges or the expansion of existing refuges.

The Service has considered a Strategic Growth policy internally but never finalized it. At the same time, the Service has operated under an informal policy that guided new acquisitions solely to inholdings, a strategic growth policy that includes neither strategy nor growth.

This “inholdings only” policy is particularly shortsighted in light of the ongoing and intensifying threat of climate change. As wildlife habitats shift in response to climate change, the Fish and Wildlife Service will need to plan for strategic growth in a manner that allows the Refuge System to adapt to climate change. Under current policy, when planning the future of a refuge, it is virtually impossible to plan for climate change without considering the buffer areas, habitat connections, and redundancies in habitat areas that will be necessary to give wildlife a fighting chance to adapt to climate change.

The Service is currently exploring a partnership with the US Geological Survey regarding the use of a strategic, science-based process for habitat conservation at appropriate landscape scales. The system begins with assessments of species life histories and habitat requirements, then extends that to condition assessments of the needed habitat areas and identifies appropriate places for habitat acquisition and restoration. Such a strategic approach will be absolutely necessary to meet the mandate of the Improvement Act and to meet the challenge of climate change.

Audubon recommends that the committee encourage the Service to implement a strategic habitat conservation system in partnership with USGS and to promulgate a formal policy directing the System to “contribute to the conservation of the ecosystems of the United States” through strategic growth in a manner consistent with the Improvement Act.

### **Water Quantity and Quality**

The refuge improvement act was firm and clear regarding water usage when it stated that “adequate water quantity and water quality” must be maintained to “fulfill the mission of the system and the purposes of each refuge.” To quote the Fish and Wildlife Service from *Fulfilling the Promise*, its 1999 strategy document for implementing the National Wildlife Refuge System Improvement Act: “The Service needs to be a strong advocate for fish, wildlife, and plants in the adjudication and allocation of water rights and the protection of natural hydrological systems. A comprehensive assessment of the availability of water supply, projected water needs, and status of existing and needed water rights should be completed for each refuge.” The Service has made very little progress in implementing this key provision of the Improvement Act.

While the Service has established “Promises Teams” to attempt to implement many of the recommendations in *Fulfilling the Promise*, no such team was ever formed to implement the water resources recommendations. Water needs are being identified at very few refuges. Water quality data are being collected in very few locations nationwide and little is being done to protect water quality on a landscape level.

The effects are being felt on refuges across the country, but the effects are particularly acute in California. As Defenders of Wildlife has reported, increasing water demands from agricultural and urban development cause the San Luis National Wildlife Refuge in California to struggle to secure enough water to sustain its wetlands. The health of San Luis NWR, an anchor of habitat along the Pacific Flyway, depends on the availability of water, and in the 1997 law, Congress declared that refuge water quality and quantity must be protected.

This problem will be exacerbated by climate change. The Refuge System should include assessments of the impacts of climate change on water availability in Comprehensive Conservation Plans for each refuge.

Audubon recommends that the committee encourage the Service to develop policy guidance for refuge managers to advocate for their legal right to secure adequate water for refuge lands.

Audubon further recommends that the committee encourage the Service to complete a comprehensive assessment of water needs at each refuge, to prioritize water needs when developing Land and Water Conservation Fund priorities, and to include an assessment of the impacts of climate change on water availability in all Comprehensive Conservation Plans.

### **Killing the Promise: Refuge Funding Crisis Kills Opportunities to Implement Core Requirements**

The Refuge System faces a crippling backlog of more than \$3.75 billion in operations and maintenance projects, killing opportunities to implement basic requirements of the Improvement Act such as inventorying and monitoring wildlife and completing Comprehensive Conservation Plans in a timely manner. The funding crisis also cripples the ability of the Service to tackle the primary threat to refuge habitat -- invasive species -- in a manner consistent with Improvement Act mandates to protect the biological diversity and ecological integrity of the system.

As the Cooperative Alliance for Refuge Enhancement has reported, the nationwide impact of funding shortfalls includes: A crippling 20 percent cut in national staffing levels, equivalent to a permanent loss of 565 essential staff positions; and more than 300 refuges operating at a loss by fiscal year 2013, assuming current funding and staffing trends.

Implementing state-of-the-art ecosystem management in a manner consistent with the Improvement Act is daunting in the face of diminishing resources that strain the ability of refuges to keep their doors open or to maintain existing programs such as environmental education.

Audubon recommends that the committee continue its oversight of the challenges facing the Service due to the crippling operations and maintenance backlog.

### **Comprehensive Conservation Planning**

Comprehensive Conservation Plans are where the elements of the Improvement Act are brought together, where individual refuge units determine their highest and best use, plan appropriate public uses, and determine the compatibility of activities affecting refuge resources.

The Refuge System is required by the Improvement Act to complete Comprehensive Conservation Plans for each of its refuges by 2012. As of early 2007, approximately 350 were unfinished or yet to be started. In the Pacific Islands Region of the Refuge System, home to Guam National Wildlife Refuge and 19 other refuges, only three CCPs have recently been released in draft form. That leaves 17 others, which contain much more daunting planning challenges, to be completed in the next five years in order to meet the statutory deadline.

To date, each CCP has cost the System an average of \$500,000, which does not include employee salaries to conduct the bulk of the work and research to write each CCP. Despite the significant cost and the Improvement Act's approaching deadline, the planning budget for refuges in recent years has been flat or going down.

Audubon cautions that the speed with which plans are completed should not be the sole focus of oversight from the committee regarding conservation planning. Frantic worry within the Refuge System regarding meeting CCP deadlines can be a distraction from the need for high quality plans that meet the best needs of the resources and provide solid guidance for management to meet those needs. There can be a tradeoff between the speed of completion and the quality and long-term usefulness of the plan.

Audubon recommends that the committee request that the GAO initiate a thorough study of Comprehensive Conservation Plans, to assess the resources truly needed to complete remaining plans, to assess the extent to which they are reflective of the requirements of the Improvement Act, and to make recommendations regarding improvements that can be made to ensure the plans are consistent with principles of ecosystem management and include strategies to cope with the impacts of climate change.

### **Basic Inventorying and Monitoring of Refuge Resources**

*Fulfilling the Promise* makes it clear that “Now and in the future, rigorous approaches to inventorying and monitoring wildlife resources are needed to provide the information critical to devise, evaluate, and refine refuge management strategies implemented to meet refuge goals and objectives.” Unfortunately, the refuge funding crisis has prevented the Service from making acquisition of this information a priority.

Basic inventory and monitoring requirements are still not accomplished on many refuges, and comprehensive knowledge is lacking even of species on refuges that are federally-listed under the Endangered Species Act as threatened or endangered.

Current approaches to inventory and monitoring of the plants, fish, wildlife and habitat within the Refuge System are also very inconsistent. According to the Fish and Wildlife Service’s *Fulfilling the Promise* Progress Report completed in 2004, the Refuge System has surveyed all refuges about current wildlife and habitat monitoring procedures and how the data are collected, stored, and managed. Refuges used more than 180 different procedures.

Audubon recommends that the committee encourage the Service to give a high priority to completing consistent and comparable basic inventories of refuge resources that are essential to development of adequate Comprehensive Conservation Plans and to implementation of Improvement Act requirements.

### **Invasive Species**

Invasive species are a top threat to refuges and a major cause of habitat loss throughout the country. More than 80 percent of refuges report problems with invasive species, and the problem now affects more than 8 million acres of refuge land.

The refuge funding crisis is crippling the response to this primary threat to the biological diversity and ecological integrity of refuges. More than \$360 million of the \$1.25 billion

operations backlog is accounted for by invasive species control projects. In recent years, only \$9 million has been allocated to addressing this \$360 million problem.

The Refuge System prepared a National Invasive Species Management Strategy for the first time in May 2004. However, most refuges have no detailed inventory or maps of invasive distributions and no means to create either. Most refuges have no means to identify potential incipient infestations of invasive populations. Although invasive species control projects are one of the fastest growing components of the operations and maintenance backlog, funding priorities are usually dominated by other System needs.

This lack of funding is particularly disheartening in the face of evidence that refuge infestations of invasive species are a solvable problem that is ripe for more attention. For example, in partnership with the State of Washington, the Service has successfully eradicated an invasive weed, *Spartina alterniflora*, that threatened to take over the sensitive wetland habitat of Willapa National Wildlife Refuge. At its peak in 2003, the infestation covered approximately 15,000 acres of tidelands, and was projected to occupy 56,000 of the 80,000 acres at Willapa Bay if left uncontrolled. After a substantial federal and state investment, the infestation has been controlled and Willapa Bay has been saved.

Audubon recommends that the committee pass HR 767, the Refuge Ecology Protection, Assistance, and Immediate Response (REPAIR) Act, sponsored by Congressman Ron Kind and Congressman Jim Saxton. The bill encourages partnerships among the FWS, other federal agencies, states, and other interests to protect habitat within the Refuge System from invasive species and establish immediate response capability to combat incipient invasions. This legislation is needed to improve the Refuge System's ability to address the primary threat to refuge habitat.

## **New Issues Facing the Refuge System: Climate Change and Borderland Conflicts**

### **Climate Change**

Climate change is the greatest threat imperiling the National Wildlife Refuge System as a whole. The effects of global warming are already being seen on sensitive refuge habitats in Alaska and on hurricane-ravaged refuges along the Gulf Coast. Future threats from climate change, such as sea level rise, decreased water availability, rising sea temperatures, and ocean acidification, gravely jeopardize the ability of refuges to meet their conservation mission in the coming decades.

More than 160 refuges sit in coastal areas sensitive to rising sea levels. Based on varying models of greenhouse gas emissions, scientific estimates range from 4 inches to 3 feet of expected sea level rise over the next century, with a mean estimated rise of 20 inches. The Environmental Protection Agency estimates that nationwide a two-foot rise in sea level could eliminate 17 to 43 percent of wetlands in the United States. Refuges such as Alligator River NWR in North Carolina, Blackwater NWR in Maryland, as well as various southeast and southwest Louisiana national wildlife refuges, are among the federal resources most vulnerable to sea level rise.

Climate change impacts are potentially devastating in Hawaii, particularly for coral reefs protected by refuges such as Hawaiian Islands National Wildlife Refuge, due to rising sea temperatures and ocean acidification that could cause widespread coral bleaching.

Despite the potentially devastating impacts to refuge resources, over the past ten years the Service has not made climate change a priority, and the agency's strategic plan does not specifically address climate change. Comprehensive Conservation Plans for individual refuge units include climate change considerations only sporadically.

A recent report by the Government Accountability Office found that resource managers in the federal land management agencies have limited guidance about whether and how to address climate change and lack specific guidance for incorporating climate change into management actions and planning efforts. The GAO also found that resource managers tend to focus on near-term, required activities, leaving less time for addressing longer-term issues such as climate change. Resource managers told GAO that their agencies need an overall mandate and a coordinated approach to address the issue, and that it will take very strong direction from high-level officials to get agencies to address the effects of climate change. It also bears mentioning that the Administration has only recently made it clear that refuge staff can talk about climate change openly.

Audubon applauds the recent action by the Committee on Natural Resources to pass HR 2337, a comprehensive energy and global warming bill sponsored by Chairman Nick Rahall. This legislation includes the language of the Global Warming Wildlife Survival Act, sponsored by Congressman Norm Dicks, Congressman Jay Inslee, and Congressman Jim Saxton, which creates a comprehensive framework for a coordinated national approach to address the impacts of climate change on wildlife. The Survival Act will ensure that federal agencies, including the Department of the Interior, develop and implement plans to reduce the impact of global warming on wildlife and habitat. The bill was subsequently included in the multi-committee New Direction for Energy Independence Act (HR 3221) passed by the House.

Audubon recommends that the committee encourage the Service to provide more affirmative direction to refuge managers regarding their duty to include climate change in Comprehensive Conservation Plans.

### **Borderland Conflicts**

Nearly one-quarter of the 1,950 mile U.S.-Mexico border lies within public lands, including valuable wildlife habitat within the Refuge System. Borderland conflicts have become the primary threat to refuge resources for several refuges along the border including Lower Rio Grande Valley, Cabeza Prieta, and Buenos Aires.

Illegal border crossings, enforcement activities along the border, and the double-layer, reinforced wall authorized by the recently enacted Secure Fence Act all threaten to destroy or fragment many miles of refuge habitat, restrict access to refuges for tens of thousands of visitors, and block access to the Rio Grande River for wildlife. In short, the border wall gravely threatens the



ecological integrity, biological diversity, and environmental health of refuges that is safeguarded by the Improvement Act.

Although the Improvement Act may provide support through the appropriate use and compatible use policies, more support is needed for refuges facing border conflicts.

Audubon recommends that the committee pass HR 2593, the Borderlands Conservation and Security Act, sponsored by Congressman Raul Grijalva, which would help alleviate the devastating impacts of illegal immigration and border enforcement activities on public lands, wildlife, and borderland communities, while providing the Department of Homeland Security with the flexibility it needs to effectively secure the borders. HR 2593 would require DHS to follow all laws intended to protect water, air, wildlife, and the health and safety of the people living in borderland communities

## **Conclusion**

Ten years after passage of the National Wildlife Refuge System Improvement Act, implementation of several key requirements is grossly inadequate. To answer the question posed by the title of this hearing, the promise has not been fulfilled.

The strength of the Improvement Act is the clear mission that it gives to the Refuge System to protect wildlife first, and the clear priority it gives to wildlife-oriented uses over incompatible and inappropriate uses that harm refuge resources. However, in implementing the Improvement Act, the Fish and Wildlife Service has failed to implement key provisions, including a mandate to direct strategic growth of the system to “conserve the ecosystems of the United States” and another to maintain adequate water quantity and water quality to fulfill the mission of the system and the purposes of each refuge. The refuge funding crisis, in the form of a crippling \$3.75 billion backlog of unmet operations and maintenance needs, has slowed conservation planning, limited even the most basic monitoring of refuge resources, and severely limited the system’s response to the highest priority threat to habitat, invasive species.

The Refuge System is the world’s premiere network of lands for wildlife conservation, and holds the potential to be a cornerstone of ecosystem protection in America. Our wildlife refuges deserve much, much better. The American people deserve to have the promise made to them kept, the promise to protect this unique heritage and national treasure for future generations.

Audubon, and the other organizations that have endorsed this testimony, have made several recommendations for committee actions including new oversight and legislative actions. I urge you to give these recommendations your full consideration, to ensure the era of under-appreciation, rampant unaddressed threats, and unrealized potential for our wildlife refuges truly comes to an end.

Madam Chairwoman and Members of the Subcommittee, this concludes my prepared statement. I would be happy to answer any questions you may have.