RESTORING AMERICA'S Wildlife Refuges 2011

Assets for All Americans







The Cooperative Alliance for Refuge Enhancement (CARE) is a national coalition of 21 wildlife, sporting, conservation, and scientific organizations. Together, these organizations represent a national constituency numbering more than 14 million Americans. Working together, and with the support of more than 200 refuge Friends groups, CARE educates Congress, the Administration and the public about America's magnificent National Wildlife Refuge System. CARE also works closely with the Congressional Wildlife Refuge Caucus, a bipartisan group of 108 members of the U.S. House of Representatives from 34 states. Members of the Refuge Caucus recognize the intrinsic and economic importance of refuges and work together to secure strong investments to protect, conserve, and pass down these irreplaceable landscapes to future generations.

American Birding Association American Fisheries Society American Sportfishing Association Association of Fish and Wildlife Agencies Congressional Sportsmen's Foundation Defenders of Wildlife Ducks Unlimited, Inc. Izaak Walton League of America Marine Conservation Institute National Audubon Society National Rifle Association National Wildlife Federation National Wildlife Refuge Association Safari Club International The Corps Network The Wilderness Society The Wildlife Society Trout Unlimited U.S. Sportsmen's Alliance Wildlife Forever Wildlife Management Institute

For a copy of this report, please visit www.FundRefuges.org/CARE.html or contact CARE at: 1250 Connecticut Avenue NW, Suite 600 Washington, DC 20036 Phone: 202.292.3961

Cover photos: Main photo: Archie Carr NWR, FL | Ursula Dubrick • Bottom photos left-right: Cameron Prairie NWR, LA | Bombay Hook NWR, DE | Alligator River NWR, NC | Pea Island NWR, NC | All by Steve Hillebrand, FWS • Opposite page: Bison | Wichita Mountains NWR, OK | Justin Morris • Teddy Roosevelt | public files

EXECUTIVE SUMMARY

ore than one hundred years after President Theodore Roosevelt set aside the first national wildlife refuge on Florida's Pelican Island, the National Wildlife Refuge System is as valuable to the American people now as it has ever been. Our refuges not only conserve a vast array of wildlife, but also offer myriad opportunities for recreation and education, protect human health, and make important contributions to the U.S. economy. Representing the entire spectrum of America's diverse habitat types, the Refuge System's 553 refuges and 38 wetland management districts comprise a network of unparalleled conservation lands and waters—assets that benefit every American.

The Refuge System is critically important to the well-being of American communities.

Found in every U.S. state and territory, and within an hour's drive of most metropolitan areas, national wildlife refuges:

- Attract approximately 45 million visitors each year, with a range of activities that include wildlife-watching, hunting, fishing, photography, hiking, canoeing, kayaking, and environmental education.
- Protect clean air and safe drinking water for nearby communities.
- Generate more than \$1.7 billion for local economies and create nearly 27,000 U.S. jobs annually.

The funding challenges facing the Refuge System have never been greater.

The Refuge System has been underfunded since its inception, and the diversion of personnel to respond to the recent Deepwater Horizon oil disaster in the Gulf has only made it harder for staff to keep up. Adequate federal funding for the System is critical to:

- Address a crippling operations and maintenance backlog of more than \$3.3 billion.
- Tackle chronic understaffing, which has left more than 36% of refuges without any on-site staff.
- Address a severe shortage of law enforcement personnel that leaves only 213 officers, when 845 are needed, to patrol the System's 150 million acres, even as both visitation and crime are increasing.

 Treat more than 2.5 million acres of refuge lands overrun with non-native, invasive plants, and combat nearly 4,000 invasive animal populations that ravage millions more acres—problems that can spread beyond refuge boundaries.



Funding increases for the Refuge System in FY 2008 through FY 2010 allowed for meaningful progress toward addressing these issues and put off earlier workforce downsizing plans. To maintain this progress, CARE urges Congress to fund the Refuge System's operations and maintenance budgets at \$511 million in FY 2012. This request includes only a modest increase of \$8 million over FY 2010 funding levels and the President's FY 2012 request in order to help keep fuel in the trucks, pay for higher utilities and building rent, and cover other rising fixed costs that threaten to erode existing management capabilities. This represents a compromise, as a funding increase of at least \$16 million is the amount truly needed to address these growing costs.*

CARE urges Congress to fund the Refuge System's operations and maintenance budgets at \$511 million in FY 2012—an investment that will continue to pay returns to the American people many times over.

Although some members of Congress have proposed cutting budgets back to FY 2008 levels in order to deal with the nation's current fiscal challenges, doing so would devastate a system already under stress. No good business leader would allow their company's capital assets to deteriorate. Similarly, Congress should not pursue a budget strategy that would cause the further deterioration of assets that belong to all Americans. Such an approach simply does not make good business sense and will only cost taxpayers more in the future. Protecting our National Wildlife Refuge System with a strong investment today will continue to pay returns to the American people many times over.

* To offset rising costs and maintain management capabilities, the Refuge System generally requires an annual increase of at least \$15 million. The recent salary freeze for federal employees has reduced this annual need to \$8 million in FY 2011 and FY 2012, meaning that the Refuge System would require an increase of \$16 million from FY 2010 funding – or a minimum budget of \$519 million in FY 2012 – to truly maintain the status quo.

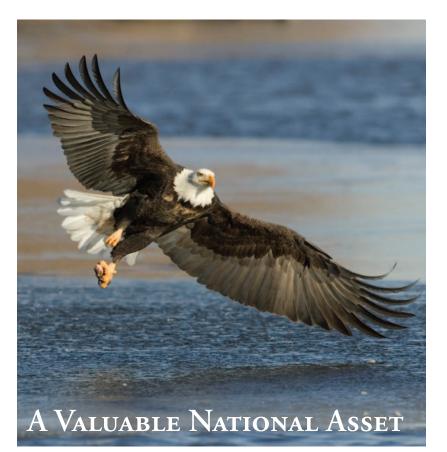


The Birdwatchers Nature View store in Wakefield, RI, is a gateway to nearby wildlife refuges. | Photo courtesy of FWS

Phil Owen, Owner, Birdwatchers Nature View, Wakefield, Rhode Island

Phil Owen, owner of the Birdwatchers Nature View store in Wakefield, Rhode Island, says the national wildlife refuges located on Rhode Island's coast are the perfect way to turn ordinary backyard birdwatchers into serious birders. That's good for his business, which sells spotting scopes, binoculars, field guides, and other nature-related gear. "Most of my customers are people who are familiar only with cardinals, chickadees, bluejays—the kinds of birds that come to their feeders at home. Then they buy their first field guide in the store and ask where they can go to see some cool birds. I send them to the refuges. My store is a gateway and a portal to the refuges and all that they offer," states Owen.

The nearby Trustom Pond, Ninigret, and Sachuest Point refuges offer incredible opportunities for birdwatching, attracting visitors from all over New England. "Osprey nest on almost all the refuges, and visitors can see other raptors, bluebirds, egrets, and herons," Owen says. "Those are birds most of my customers have never seen, and may not even be aware are out there." Owen has put his knowledge of the area's birds to work, leading public walks at the refuges for the U.S. Fish and Wildlife Service to teach about neotropical migrants, and leading birding tours that include Block Island National Wildlife Refuge off the Rhode Island coast.



Bald Eagle | Upper Mississippi River NW & FR, MN | Stan Bousson

Onservation is a truly American value, and our National Wildlife Refuge System exemplifies America's conservation leadership, which has become a model for the rest of the world. It began in 1903, when President Theodore Roosevelt established the first refuge at Pelican Island, Florida, to conserve bird populations that were being decimated for their feathers. Since Roosevelt's time, the System has expanded to include 553 national wildlife refuges and 38 wetland management districts, encompassing approximately 150 million acres of lands and waters.

Established primarily to protect wildlife and the habitat it needs to survive, refuges are home to more than 700 bird species, 220 mammals, 250 reptiles and amphibians, 1,000 species of fish, and countless invertebrates and plants. They provide a haven for some 280 endangered species, including the Florida panther, the last of the big cats to survive in the East; Kemp's ridley, loggerhead, and hawksbill sea turtles that come ashore to lay their eggs on the beaches of our Gulf Coast refuges; and the spectacled eider, a rare sea duck that breeds in Alaska's Arctic. Refuges also helped save our national symbol, the bald eagle, from extinction.

In carrying out their wildlife conservation mission, refuges protect the resources upon which people depend as well—for our enjoyment, our knowledge, and our health.

"[The public lands represent] in a sense, the breathing space of the nation."

-President Richard M. Nixon, February 8, 1974

An Asset for Recreation—Located in every U.S. state and territory, and within an hour's drive of nearly every major U.S. city, refuges provide easy access and incomparable settings for outdoor recreation. They attracted approximately 45 million visitors in 2010, and that number grows larger every year (see Figure 1). The Refuge System's abundant wildlife and spectacular scenery benefit participants of increasingly popular activities such as bird-watching, wildlife observation, and photography. And refuges provide some of the best sporting opportunities in the country, with about 400 refuge units open to hunting, fishing, or both.

An Asset for Education—Refuges are some of America's most important outdoor classrooms. Each year, approximately 750,000 students and teachers participate in formal environmental education programs sponsored by refuges across the nation. Many more students visit refuges each year to participate in outdoor events, hike on refuge trails, volunteer, fish, and hunt.

An Asset for Human Health—Healthy refuge habitats provide immeasurable benefits for human communities. They clean the air we breathe, filter storm water before it runs downstream to municipal water supplies, and often reduce flood risk by capturing excess rainwater and attenuating coastal storm surges. Without the environmental services that our national wildlife refuges provide, Americans' access to the public health benefits of clean air and water would be compromised.

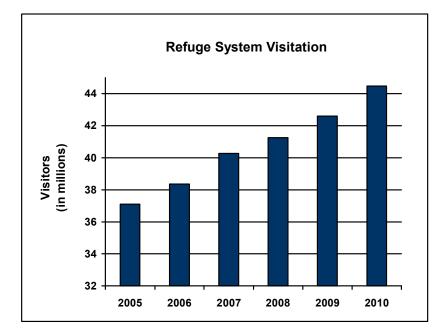


Figure 1. Refuges draw a steadily growing number of visitors each year. In FY 2010, they attracted nearly 45 million people, an increase of more than 7 million from FY 2005.



Pat Stinson, Refuge Manager of the Red River NWR, works with Kevin Sirknight (center) and other student volunteers from Bossier Parish high schools. | Photo courtesy of Zac Burson

Zac Burson and Students, Bossier Parish, Louisiana

For high school students Kevin Sirknight and Josh Blanks, of Bossier Parish, Louisiana, a youth volunteer program at the Red River National Wildlife Refuge has been a life-changing experience. Sirknight, a student at Airline High School, describes himself as "a trouble kid" before becoming involved with the refuge. Now, he gets good grades in school, stays out of trouble, and is a dedicated refuge volunteer who enjoys "being with other kids who want to do something with their lives and learn something." Blanks, a senior at Parkway High School, says that "volunteering at Red River National Wildlife Refuge has helped me look at the world in a whole different way than before."

Zac Burson, who coordinates the refuge-based volunteer program with teacher Cathey Carey of Airline High School, started the program three years ago with U.S. Fish and Wildlife Service staff and the Friends of the Red River National Wildlife Refuge as a way to involve area youth in outdoor-based community service. "I never realized how much of the work that gets done on refuges is done by volunteers," says Burson. In the last year, his students have helped remove invasive species, constructed trails, built an interpretative information booth, learned construction skills by helping to renovate refuge buildings, and helped the Friends group with community outreach events. Some program participants, says Burson, "are city kids who have never seen or experienced nature before. Now, they're learning how to take care of the land and the plants and animals that live there."



Having the Back Bay NWR in the neighborhood is a big selling point for Realtor Jim Kelly, who rents and sells homes in the Sandbridge Beach community near Virginia Beach, VA. | Photo courtesy of Jim Kelly

Jim Kelly, Realtor, Siebert Realty, Virginia Beach, Virginia

ith the Back Bay National Wildlife Refuge literally on the doorstep of the beach- and bay-front properties he sells and rents, Realtor Jim Kelly of Virginia Beach, Virginia, has a surefire sales tool at his disposal. Kelly works with Siebert Realty, a local company specializing in home sales and rentals along a five-mile stretch of Sandbridge Beach, directly adjacent to the Back Bay refuge. "The refuge is one of southern Virginia's greatest treasures," says Kelly. "I am always amazed at the wide variety of wildlife and delighted to show this to all of my prospective clients. The reactions I receive are always nothing short of amazement. I can confidently say that having the Back Bay Wildlife Refuge nearby has been the deciding factor for many happy home-buyers who have chosen Sandbridge Beach over other seaside communities." Kelly, his wife, and six-monthold daughter should know. They're in the process of selling their city home and buying their own house in the refuge's back yard. "Having a successful, healthy wildlife refuge at our back door is one of the greatest attractions of having a home here," he says.



Alligator River NWR, NC | Steve Hillebrand, FWS

National Wildlife Refuges: Economically Important, Efficiently Managed

Economic Engines for Local Communities

Outdoor recreation is big business. In 2006, 33.9 million U.S. sportsmen spent a combined total of \$76.7 billion on hunting and fishing. Even more popular, wildlife watching was enjoyed by 71.1 million Americans, who spent \$45.7 billion that same year.¹ With a diverse collection of habitats, a mandate to prioritize wildlife-dependent recreation, and a steadily growing number of visitors, the National Wildlife Refuge System provides an expansive base of lands and waters on which to support this booming industry.

According to 2006 data, recreation on America's refuges has been estimated to generate \$1.7 billion in annual sales for local communities alone, creating nearly 27,000 U.S. jobs and \$543 million in employment income, and contributing more than \$185 million in tax revenue.² By those numbers, **every dollar invested in our Refuge System by the federal government returns an average of \$4 to local communities,** though that figure is likely much higher when factoring in the ripple effect as recreation expenditures flow through the economy.

Local communities benefit from more than recreation, though. Numerous studies have shown that property values are higher near parks and open space.³ Refuges are no exception. For example, homes close to Great Meadows National Wildlife Refuge in Massachusetts are valued \$984 higher than those just 100 yards away, and they generate more local tax revenue.⁴ By protecting ecological processes that filter our water, pollinate our plants, buffer us from storms, and control mosquito populations, refuges also reduce infrastructure costs to governments and taxpayers.

Using Taxpayer Dollars Efficiently

FY 2010 appropriations provided the Refuge System just \$3.36 per acre , less than any of the other federal land management agencies. While this is far below what is truly needed, a dedicated staff stretches these dollars as far as they can go and continues to work toward improving management efficiency by:

- **W** Restructuring administrative staff at the Refuge System's headquarters to improve expertise, productivity, and accuracy.
- **W** Streamlining administrative reporting requirements so refuge staff have more time for habitat management and public use projects on the ground.
- Finisting volunteers, who contribute an estimated 20 percent of the work done on national wildlife refuges.
- Forging partnerships with interested stakeholders, which enable the Refuge System to leverage additional dollars and work, accomplishing shared goals that would otherwise be impossible.
- Streamlining the way refuge inventory and monitoring data are collected and shared in order to facilitate management decisions that tackle such issues as invasive species, fire management, and water quality.



Bear River Migratory Bird Refuge, UT | Preston Hone



The Alamo Inn sign welcomes bird watchers from all over the world, including these recent visitors from the United Kingdom. | Keith Hackland, Alamo Inn

Keith Hackland, Owner, The Alamo Inn, Alamo, Texas

For Keith Hackland, owner of the Alamo Inn B&B, the National Wildlife Refuge System is both a livelihood and a consuming passion. His inn is located in the center of Alamo, Texas, which has a new logo touting the city as "Refuge to the Valley." The Alamo Inn serves as home base for birders and butterfly watchers who come from all over the world to see the 521 bird species and 330 species of butterflies that can be found on the nearby Santa Ana and Laguna Atascosa National Wildlife Refuges and other nearby lands. Hackland also runs Alamo Outdoor, a store that sells binoculars, spotting scopes, field guides, and other bird and wildlife watching gear, and supports local naturalists by connecting visiting birdwatchers with private guides to help them find rare birds on the refuges.

"More than 90 percent of my guests are birders, and they spend their money in Alamo at local restaurants, stores, and gas stations," says Hackland, who estimates that his business alone helps generate full- and part-time jobs for 30 local people. "When I first opened 11 years ago, I had four suites and no visitors," Hackland relates. "Now, with 16 suites, I'm turning people away." The City of Alamo, its Chamber of Commerce, and its Economic Development Corporation recognize the special contribution nearby refuges make to the local economy. Hackland, who also serves as president of the Friends of the Wildlife Corridor and is a board member of the Friends of Laguna Atascosa NWR, is proud that the Alamo business community recently provided funds to the Friends group to create an attractive new website for refuge visitors.



Young students investigating plants at DeSoto National Wildlife Refuge in Nebraska. | Todd Wick

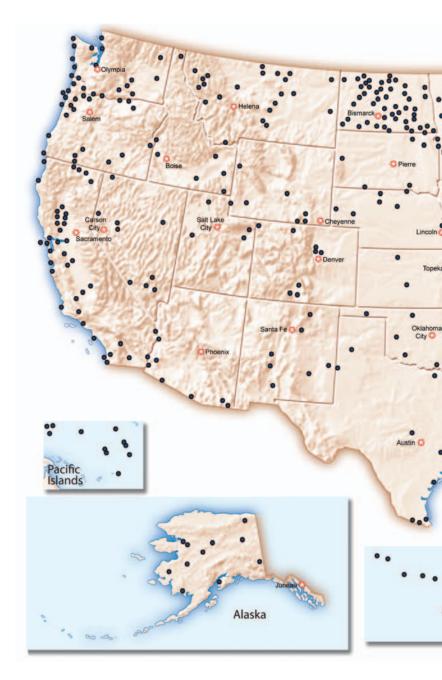
Todd Wick, Fifth-Grade Science Teacher, Blair School District, Nebraska

For Todd Wick, a fifth-grade science teacher for the Blair School District in Blair, Nebraska, the nearby DeSoto National Wildlife Refuge is an invaluable teaching tool. The refuge, which straddles the border between Nebraska and Iowa, provides an outdoor classroom throughout the school year, where Wick's students study wildflowers and native grasses, observe the refuge's eagles and other birds, learn about animal tracking, and conduct "BSI" (Beaver Scene Investigation) inquiries about resident mammals. Each fifth-grade student keeps a naturalist's journal throughout the school year, and refuge studies help students to meet state learning standards for science and writing. Similar refuge-based studies are part of the curriculum for the district's 3rd, 6th, 7th, 8th, and 11th graders as well.

"The refuge makes a difference in how kids view nature and how they view life," says Wick, who has seen problem students transform to being "fully engaged, with their hands always up and always wanting to share what they've learned." The refuge "makes learning real," he says. "It's real life, real science—and that has meaning to the kids." A measure of the program's success is that many of Wick's students have shared their refuge experiences with family members and friends, bringing them to DeSoto on weekends to share what they've learned.

The Refuge System at a Glance

- 77 Managed by the U.S. Fish and Wildlife Service
- Mission is to conserve the nation's wildlife and their habitats for present and future Americans
- **W** Made up of approximately 150 million acres of lands and waters, including:
 - 553 refuges, with at least one in every U.S. state and territory
 - 38 wetland management districts, which oversee 3.5 million acres of waterfowl production areas



- Protects more than 700 bird species, 220 mammals, 250 reptiles and amphibians, and 1,000 fish species
- Provides recreational opportunities for sportsmen, wildlife watchers, photographers, and students
- 77 Offers hunting on 322 refuges and fishing on 272 refuges
- 77 Attracted approximately 45 million visitors in FY 2010
- Generates an estimated \$1.7 billion in annual sales just to local communities, creating nearly 27,000 U.S. jobs and \$543 million in employment income, and adding more than \$185 million in tax revenue
- Operated with a budget of only \$3.36 per acre in FY 2010, the least of all federal land management agencies





Art Morris has led bird photography tours to Bosque del Apache NWR every November for the past 16 years. Morris started the annual "Bosque Open Windows" volunteer program to make the refuge more photographer-friendly. Robert O'Toole Photography

Art Morris, Wildlife Photographer, Indian Lake Estates, Florida

Wildlife photographer Art Morris, whose "Birds As Art Bulletins" and photography blog generate 800,000 web page views every month, has taken some of his most stunning photographs at national wildlife refuges, particularly Bosque del Apache in San Antonio, New Mexico, one of his "favorite places on the planet." Every November for the past 16 years, Morris has led groups of students to the refuge to teach them the art of bird photography in a field classroom that offers spectacular views of snow geese, sandhill cranes, ducks, sunsets, and "blast-offs" of thousands of birds. It's critical to Morris that a refuge like Bosque is managed "for the birds *and* for the people."

Photographers pay more than \$3,200 to spend seven days with Morris at Bosque. And the money they spend on rental cars, gear, lodging, and meals gives a boost to San Antonio's rural economy. "Over the course of the last 16 years, I have inspired thousands of people to visit the refuge and can confidently say that they have spent millions of dollars while they were there," he says. Morris's connection with the refuge also led him to create the "Bosque Open Windows" volunteer project in 2008. Every year since then, Morris and a crew of fellow photographers have spent a week each fall working with refuge staff to cut back vegetation that can interfere with capturing the perfect shot of Bosque's spectacular bird life. It's good for the refuge, and it's good for the photographers.



An Alaska Wildland Adventures raft carries wildlife watchers along Alaska's Kenai River into the designated Wilderness of Kenai NWR. | Photo courtesy of Kyle Kelley, Alaska Wildland Adventures

Kyle Kelley, General Manager, Alaska Wildland Adventures, Cooper Landing, Alaska

strong refuge for us means strong business for us," says Kyle Kelley, General Manager of Alaska Wildland Adventures in Cooper Landing, Alaska. Kelley is a guide who has been leading nature and rafting tours into the backcountry of Kenai National Wildlife Refuge for many years. His company brings visitors into the refuge wilderness via rafts and drift boats on the Kenai River to experience the spectacular scenery, fish for salmon and trout, and catch glimpses of moose, brown bear, lynx and other wildlife. Visitors stay at the Kenai Backcountry Lodge, located on a five-acre inholding within the refuge. "The refuge's spectacular scenery and wildlife and its protected, pristine environment create a strong economic system for tourism and habitat protection needed for commercial salmon fishing," Kelley says. Backlogs in funding for maintenance at the remote refuge have created challenges with trail maintenance and upkeep that Kelley would like to see addressed. "These challenges make it difficult for some of our guests," he notes.

A CRIPPLING \$3.3 BILLION BACKLOG

\$2.7 Billion Maintenance Backlog

Due to insufficient funding, the Refuge System's list of deferred maintenance projects has ballooned to more than \$2.7 billion. Repairs to roads and parking lots, bridges and trails, dams, levees, and other water control structures are among the most common maintenance needs. In addition, seven national wildlife refuges established since FY 2000 are former military sites, whose acquisition came with enormous demolition, management, and public safety needs—adding \$65.5 million to the maintenance backlog. Nearly 13,000 of the System's 44,475 facilities are now in need of some repair, and many of these pose serious safety threats for refuge visitors, staff, and wildlife.

\$677 Million Operations Backlog

The Refuge System's operations backlog includes 5,598 project needs that have been delayed due to a lack of funds. Among these are staff and equipment necessary to perform routine and mission-critical activities related to habitat management and restoration, public use, planning, and wildlife research and monitoring. Once more than \$1 billion, this backlog has been reduced by using new staffing models, updating project information, and leveraging partnerships—efficiencies that underscore the remaining \$677 million of operations projects that can only be addressed with greater funding.

Many years of inadequate budgets have led to the current operations and maintenance backlog, totaling more than \$3.3 billion. This number will continue to soar unless Congress appropriates sufficient funds to cover the Refuge System's annual budget needs, including:

Maintenance—Industry experts recommend that businesses annually invest 2-6% of a facility's total value towards its maintenance. The Refuge System manages approximately \$24.3 billion in constructed facility assets, but current budgets only provide about \$108 million for their maintenance each year, less than one-half of 1% of their value. *To invest just 1% in annual maintenance, the Refuge System needs \$243 million each year.*

Mission-Critical Projects and Staffing—The Refuge System has identified approximately 3,500 mission-critical operations needs, including many fundamental projects to manage refuge habitat, provide visitor services, and enforce laws. And despite a steady increase in the number of refuges and visitors, the Refuge System operates today with 100 fewer permanent, full-time employees than it had in 2004. This has left the System without essential refuge management, administrative, maintenance, and communications employees. *Funding projects and staff identified as "mission critical" will cost nearly \$359 million annually.* **Taw Enforcement**—According to the International Association of Chiefs of Police (IACP), the Refuge System needs 845 full-time law enforcement officers to protect visitors and respond to drug production and smuggling, wild-life poaching, illegal border activity, assaults, and a variety of natural resource violations. In 2011, however, the Refuge System has only 213 law enforcement officers on patrol, a number that threatens officer safety and leaves vast areas without coverage. *To provide just half of IACP's recommended positions, an additional 209 law enforcement officers are needed at an additional annual cost of* \$31.4 million.

Invasive Species—Of the more than 2.5 million acres of refuge lands estimated to be overrun with non-native, invasive plants, the Refuge System was able to treat only 325,000 acres (13%) in 2010, and repeated treatments are usually needed before these plants are "controlled." Millions more acres are ravaged by an estimated 3,850 invasive animal populations. *To treat just one-third of its infested plant acreage and begin merely low-level control of harmful invasive animal populations, the Refuge System needs at least \$25 million dollars per year.*

W Oil and Gas Activities—As early as 2003, the Government Accountability Office (GAO) called attention to the Fish and Wildlife Service's inability to effectively manage oil and gas activities on 155 national wildlife refuges. Since then, there has been a dramatic increase in oil and gas exploration and drilling. *To adequately manage oil and gas activities on wildlife refuges, including hiring staff to manage oil and gas activities, inventorying and monitoring oil and gas sites, and cleaning up degraded areas, \$15 million per year is needed.*

The need for the Refuge System's inventory and monitoring Capacity—The need for the Refuge System's inventory and monitoring program was made clear by the Deepwater Horizon oil spill, which forced Fish and Wildlife Service staff to hastily survey Gulf Coast refuges in order to measure and recoup the cost of damaged resources owed to American taxpayers. Without adequate baseline data, most refuges are illprepared to assess or respond to such impacts, and a standardized inventory and monitoring program is needed to fill these widespread information gaps across the U.S. *Continuing the Refuge System's recently initiated inventory and monitoring program will require at least \$20 million annually.*

Marine Refuges—Former President George W. Bush's designation of four vast marine monuments in the Pacific Ocean added more than 50 million acres to the Refuge System, but the System has not received a proportionate increase in funding to go along with these important additions. The Refuge System cannot address ecological threats, purchase needed patrol and research vessels, support vital partnerships, and fill essential staff positions without significant resources. *To meet its new responsibilities to manage, restore, and provide law enforcement on these expansive lands and waters will cost between \$18 million and \$35.5 million annually.*

Planning—The Refuge System is required to complete a Comprehensive Conservation Plan (CCP) for each refuge by the end of 2012 and revise them every 15 years. As of April 2011, 424 CCPs had been completed, 114 were under way and 16 remained to be started. Each CCP costs an average of \$220,000, not including the salaries of staff who research and write the plans. *At this rate, the Refuge System needs approximately \$13 million per year to complete the CCP process on time.*



Student Christina Newman is part of the research team from Southeastern Oklahoma State University that bands and monitors populations of prothonotary warblers at Tishomingo NWR. | Prothonotary Warbler | Atchafalaya NWR, LA | Timothy Vidrine - Inset photo courtesy of Doug Wood

Doug Wood, Ph.D., Associate Professor of Biology, Southeastern Oklahoma State University, Oklahoma

Ornithologist Doug Wood, Ph.D., an associate professor of biology at Southeastern Oklahoma State University, found an ideal research partner in the Tishomingo National Wildlife Refuge, located 35 miles from campus. "The refuge is one of the few wild places available for field research," says Wood. When Wood visited the refuge for the first time in 2003 and noticed prothonotary warblers flying and singing near the edge of Cumberland Pool, "I was fascinated by the fact that this species was at the western end of its range, and apparently doing quite well," he says.

That discovery was the beginning of a mutually beneficial partnership between Wood, his students, the refuge's Friends group (TREES—the Tishomingo Refuge Ecology and Education Society), and the Tishomingo NWR staff. Wood and his students have established a banding program, and have banded and tracked some 1,200 prothonotary warblers since the study began in 2003. The research team has put up 80 nest boxes for the warblers on the refuge, conducted mist-netting bird surveys during spring migration, and assisted TREES by conducting bird-banding demonstrations and informational workshops at the refuge's annual nature festival. Wood's ongoing research provides refuge biologists with data they might not otherwise have the resources to collect, and the refuge provides an ideal field ornithology research station for Wood and his students.



Hunters Lester Langley and John Hanks use the national wildlife refuges of northern Louisiana to hunt a variety of waterfowl and game. | Photo courtesy of John Hanks

John Hanks, Hunter, Angler, and Biologist with Louisiana Department of Fish and Wildlife, Louisiana

I ohn Hanks has been a hunter for as long as he can remember, beginning at the age of five when he started accompanying his father, grandpa, and uncle on hunting and fishing trips. By age 9, he was taking waterfowl and game himself, and he now spends "one hundred percent of my recreation time outdoors," much of it hunting and fishing on the five refuges that make up the Northern Louisiana Refuge Complex. Hunting is not just a pastime in northern Louisiana, "it's a cultural thing," says Hanks, who earns his living as a biologist with the Louisiana Department of Fish and Wildlife. "Having a place available where anyone can hunt and fish and use the outdoors is a perfect example of what American freedoms are. I would not be in the profession I'm in today if I hadn't had these opportunities."

Louisiana's refuges provide some of the state's only opportunities to hunt and fish without paying steep hunt-club leasing fees. "Having a National Wildlife Refuge System that I can use at little or no cost is just invaluable to me," Hanks notes. "Refuges also are the only lands managed primarily for wildlife, and they're just about the only remaining places in Louisiana that have bottomland hardwood forest habitats," he adds. "A lot of the other land available for hunting is either agricultural or single-species pine forest that's managed primarily for timber." As a biologist, Hanks also sees hunting as a means to protect refuge flora by keeping species like deer in check. "Hunting is a very valuable tool for wildlife managers," he notes.

The Cost of a Catastrophe

The Deepwater Horizon oil disaster that began in April 2010 put tremendous pressure on the resources of a Refuge System already stressed by a crippling backlog of unfunded needs. With wildlife refuges along the Gulf Coast in the direct path of the spreading oil, the U.S. Fish and Wildlife Service quickly dispatched staff from refuges across the nation to inventory wildlife resources before the oil arrived onshore and to help deal with the unfolding disaster.

More than 500 of the Refuge System's approximately 3,700 employees were involved in responding to the oil spill. Combined, these workers spent more than 150,000 hours dealing with the disaster, equivalent to nearly 3,800 work weeks away from important projects at other refuge units and offices. Invasive species control, fire management, public safety improvements, visitor services, volunteer programs, and scientific studies at refuges around the country were put on hold or canceled as staff were pulled from their regular duties to join the Gulf spill response.

Although the oil finally stopped gushing, the impacts remain for refuge managers and for the wildlife that depend on the refuges along the Gulf Coast. While some Refuge System employees are still being deployed to the Gulf to deal with the aftermath of the spill, those that have returned struggle to catch up on all the work that went undone while they were away. For a system already stressed by budget and staffing shortfalls, the disaster is far from over.



Fishing at Breton NWR in Louisiana just a few days before oil from the Deepwater Horizon disaster arrived | Linda DiLorenzo Zubrowski

What Happens if Funding Backslides TO 2008 LEVELS?

alls by some Congressional leaders to slash appropriations to FY 2008 levels, if heeded, would be a devastating blow to the Refuge System. Cuts of this magnitude would reduce refuge operations and maintenance funding by approximately \$69 million, or nearly 14%, compared with FY 2010. Unfortunately, a budget of that size means much less than it did a few years ago. Without additional funds, rising costs since 2008 will erode the System's



Invasive Johnson Grass | Big Muddy NWR | Steve Hillebrand, FWS

System's recently initiated inventory and monitoring program-of clear importance in light of the 2010 Deepwater Horizon oil spill-to a skeletal operation.

Cutting many visitor service programs. The Refuge System would be forced to close an estimated 54 visitor centers and halt plans to open 11 more currently under construction. This would greatly limit the quality and quantity of visitor services, including hunting and fishing programs, environmental education and interpretive programs, and volunteer and community partnership programs. Visitor safety would also be compromised as law enforcement positions are eliminated.

Slowing planning processes. The Refuge System's ability to complete planning documents, including Comprehensive Conservation Plans needed for effective and consistent refuge management, would decline substantially. The result would be fewer planning documents completed on time and less public involvement, potentially leading to additional disputes and lawsuits that hamper operations.

Growing the backlog. Returning to FY 2008 funding levels would severely limit the Refuge System's ability to carry out some of its most basic functions, forcing the deferral of many essential projects and further exacerbating the growing operations and maintenance backlog.

management capabilities, making the true cut to refuges much deeper. The implications of this include:

W Eliminating several hundred staff positions. While the Refuge System could cope with less severe budget cuts through attrition of the workforce alone, a rollback to FY 2008 funding levels would require furloughs and reductions in force.

W Scaling back wildlife and habitat management projects. These cuts would significantly lower capacity for refuges to monitor wildlife populations and habitats; restore wetlands, forest, grassland, and marine habitats; and actively manage habitats to support migratory waterfowl and combat invasive species. They would also reduce the Refuge



Wildlife Refuge in Idaho. | Photo courtesy of Tim Reynolds

Tim Reynolds, Rigby, Idaho

Rirds—observing, banding, and hunting them—are a central part of Tim Reynolds's life, and the refuges of the D Southeast Idaho National Wildlife Refuge Complex offer him great opportunities to follow his passions. The refuges, particularly Camas in Hamer, Idaho, "provide an opportunity for me to escape, to be refreshed, to recharge my batteries," says Reynolds, who calls Camas's lakes, ponds, aging cottonwoods and marshlands "an oasis in the middle of a sagebrush desert." Each year, refuge wetlands seasonally attract tens of thousands of snow geese, cranes, ducks, and migrating waterbirds. An extensive network of canals, ditches, and wells supplement the refuge's natural water supply to assure that wetlands remain available for the birds during dry months.

However, federal funding pressures could end Camas's active water management and dry up its healthy wetland habitats. "It costs \$60-90,000 a year to operate all that plumbing," says Reynolds, "so Camas is considering managing the refuge purely as upland habitat." What would that mean? The spectacular flights of snow geese and cranes that now fill the refuge's skies would no longer delight birders like Reynolds, and it would almost certainly mark the end of waterfowl hunting at Camas. "The birds would have to go somewhere else, and so would the hunters" Reynolds says.



Brigham City, Utah's, pride in the nearby Bear River MBR is clear for all who visit the city to see. | Photo courtesy of Brigham City, Utah.

Dennis Fife, Mayor, Brigham City, Utah

The first thing you'll notice when visiting Brigham City, Utah, is a huge archway across the city's main downtown street proclaiming: "Welcome to Brigham, Gateway to the World's Greatest Wild Bird Refuge." Brigham City (pop. 19,000) is located about 60 miles north of Salt Lake City, and the city's Mayor, Dennis Fife, is clearly proud of his community's strong connection to the nearby Bear River Migratory Bird Refuge. Brigham Cit y business owners get "quite a bit of local business from refuge visitors," according to Fife, who grew up in Brigham City and has lived there much of his life. The popular refuge contributes to local employment for hotel, restaurant, and gas station workers, as well as those who sell hunting, fishing, and bird-watching gear used by Bear River visitors.

The community, in turn, has been very active in supporting the refuge. Among other projects, the city applied for and received a grant of \$25 million from the Federal Highway Administration to improve the road that connects the city and the refuge. "We have a great working relationship with the refuge," says Mayor Fife, who meets regularly with the refuge manager to discuss plans and concerns. "The city annexed the land on which the refuge visitor center sits, and supported the building of the new center." The city also sponsors a wide variety of joint programs with the Bear River refuge, and pays for bus transportation for local schoolchildren who visit the refuge for field trips. The city supports the refuge Friends group, and sponsors hunting and fishing programs on the refuge, among other programs.

Conclusion

The National Wildlife Refuge System is an incomparable asset that belongs to all Americans, and which we hold in trust for future generations. Each year, a growing number of people from every state and around the world come to our national wildlife refuges to hunt, fish, watch and photograph wildlife, learn, and simply experience the best of America's natural resources. Many more benefit from the contributions these refuges make to their jobs, their economy, and their health, sometimes without even knowing it. While these benefits are undeniably significant, the Refuge System's potential remains largely untapped and unquantified.

Protecting—and adequately funding—the lands, waters, and wildlife of our 553 national wildlife refuges must be a bipartisan priority for the 112th Congress. These refuges face a long list of challenges, and failure to confront them will be a loss for America's wildlife and people alike. That is why CARE urges Congress to provide \$511 million for Refuge System operations and maintenance in FY 2012, ensuring that progress made in recent years is not reversed by backsliding budgets. Even as we deal with the current fiscal crisis, the National Wildlife Refuge System is a worthwhile investment in America's economic recovery and our future.



Bon Secour NWR, AL | Steve Hillebrand, FWS

¹U.S. Fish and Wildlife Service. 2006. National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. http://www.census.gov/prod/2008pubs/fhw06-nat.pdf

- ² U.S. Fish and Wildlife Service. 2006. Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation.
- http://www.fws.gov/refuges/about/pdfs/BankingOnNature2006_1123.pdf
- ³ Trust for Public Land. 2009. Conservation: An Investment that Pays. http://www.tpl.org/content_documents/EconBenefitsReport_7_2009.pdf
- ⁴ Neumann, B.C., K.J. Boyle, and K.P. Bell. 2009. Property price effects of a national wildlife refuge: Great Meadows National Wildlife Refuge in Massachusetts. *Land Use Policy* 26: 1011-1019. http://www.floridacoastalstrategies.org/pdfs/Property-Price-Effects-of-a-National-Wildlife-Refuge.pdf

"If we've learned any lessons during the past few decades, perhaps the most important is that preservation of our environment is not a partisan challenge; it's common sense. Our physical health, our social happiness, and our economic well-being will be sustained only by all of us working in partnership as thoughtful, effective stewards of our natural resources."

—President Ronald Reagan, July 11, 1984

CARE's member organizations are available to provide further information about their programs and their ongoing commitment to protecting and funding refuges.

American Birding Association Jeffrey Gordon 719-884-8226 jgordon@aba.org

American Fisheries Society Elden Hawkes 301-897-8616 x. 215 ehawkes@fisheries.org

American Sportfishing Association Alyssa Hausman 703-519-9691 x. 244 ahausman@asafishing.org

Association of Fish and Wildlife Agencies Mark Humpert 202-624-3637 MHumpert@fishwildlife.org

Congressional Sportsmen's Foundation Gary Kania 202-543-6850 x. 16 garyk@sportsmenslink.org

Defenders of Wildlife Julie Kates 202-682-9400 jkates@defenders.org

Ducks Unlimited, Inc. Caroline Garrett 202-347-1530 cgarrett@ducks.org Izaak Walton League of America Scott Kovarovics 301-548-0150 x. 223 skovarovics@iwla.org

Marine Conservation Institute Emily Douce 202-546-5346 Emily.Douce@Marine-Conservation.org

National Audubon Society Mike Daulton 202-861-2242 mdaulton@audubon.org

National Rifle Association Susan Recce 703-267-1541 srecce@nrahq.org

National Wildlife Federation Bentley Johnson 202-797-6826 johnsonb@nwf.org

National Wildlife Refuge Association Desiree Sorenson-Groves 202-292-3961 dgroves@refugeassociation.org

Safari Club International Nelson Freeman 202-543-8733 nfreeman@safariclub.org The Corps Network Sean Garcia 202-737-6272 SGarcia@corpsnetwork.org

The Wilderness Society Alan Rowsome 202-429-2643 Alan_Rowsome@tws.org

The Wildlife Society Laura Bies 301-897-9770 laura@wildife.org

Trout Unlimited Steve Moyer 703-522-0200 smoyer@tu.org

U.S. Sportsmen's Alliance Bill Horn 202-659-5800 whorn@dc.bhb.com

Wildlife Forever Tim Richardson 301-770-6496 tlrs@erols.com

Wildlife Management Institute Steve Williams 717-677-4480 swilliams@wildlifemgt.org



1250 Connecticut Ave., NW • Suite 600 • Washington, DC 20036 Phone: 202.292.3961 www.FundRefuges.org/CARE.html

