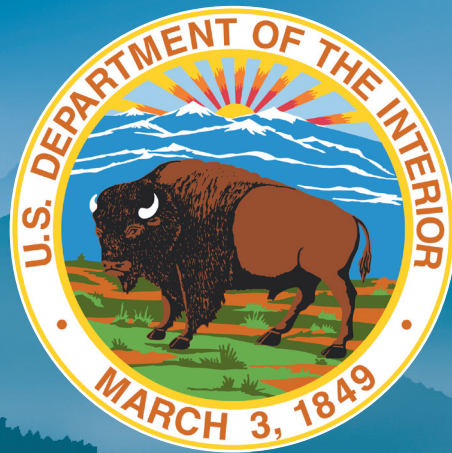


Cooperative Conservation

SUCCESS THROUGH PARTNERSHIPS







COOPERATIVE CONSERVATION: SUCCESS THROUGH PARTNERSHIPS



*President George W. Bush with Interior Secretary Gale A. Norton
at Santa Monica Mountains National Recreation Area*

“My administration will adopt a new spirit of respect and cooperation, because, in the end, that is the better way to protect the environment we all share — a new environmentalism for the 21st century. Citizens and private groups play a crucial role... Our challenge is to work in partnership. We must protect the claims of nature while also protecting the legal rights of property owners.”

President George W. Bush

Under the leadership of President Bush and Secretary Norton, the Department of the Interior is advancing cooperative conservation to achieve significant on-the-ground results. Over three years, these accomplishments include:

- A commitment to cooperative conservation to benefit resources on public and private lands through partnerships that recognize the views of local communities and individuals;
- Improved forest and rangeland health through the President’s Healthy Forests Initiative, which includes administrative improvements, increased fuels treatments, and implementation of the bipartisan Healthy Forests Restoration Act;
- Dramatic efforts to address the National Parks maintenance backlog through increased and better targeted funding focused on priority needs and a first-ever facility condition assessment program to measure progress;
- Significant partnership activities benefitting many species through thousands of acres of improved habitat and expanded coastal protection;
- Improved quality of life for over 3 million people living near dangerous abandoned coal mine lands;
- Establishing a framework to address Western water needs in the 21st century through the Water 2025 initiative and the Colorado River Quantification Settlement Agreement; and
- Continued commitment to energy and environmental conservation in Interior’s own operations, including award-winning recycling programs and the use of renewable energy.



Secretary of the Interior Gale A. Norton

INTERIOR'S RESPONSIBILITIES INCLUDE:

- Managing approximately 1 in every 5 acres of land in the United States;
- Operating nearly 900 dams and reservoirs;
- Overseeing water projects that irrigate lands producing 60 percent of our Nation's vegetables;
- Managing lands and waters that generate one-third of the Nation's domestic energy supply;
- Undertaking research and providing scientific information to advance our knowledge of our surroundings;
- Serving Native Americans, Alaska Natives, and affiliated island communities;
- Working with States to restore abandoned mine land sites and protect communities; and
- Managing 387 national park units and 544 wildlife refuges.

“Environmental progress ultimately resides in the efforts of all of us to apply a caring hand to the landscape. It resides in our actions in our own backyards, at our places of work, on our farms and ranches, and in our communities.”

Secretary Gale A. Norton



PROMOTING PARTNERSHIPS FOR CONSERVATION

The Bush Administration is promoting partnerships with the American people to advance conservation. Over the past three years, the Department of the Interior has provided **over \$1.3 billion in grants** to States, Tribes, local governments, and private landowners through programs that preserve open space, restore habitat for wildlife, and protect endangered species. These partnerships are achieving substantial conservation benefits. With our partners, we have restored millions of acres of habitat; removed invasive exotic species; replanted native grasses; improved riparian habitat along thousands of miles of streams; conserved limited water resources; and developed conservation plans for endangered species and their habitat.

These partnerships exemplify Secretary Norton's cooperative conservation vision. Seeking to foster a culture of responsibility, Secretary Norton is advancing a stewardship ethic for America that is citizen-led

and landscape-based. By focusing conservation on community cooperation and voluntary action, Interior is working with the American people to achieve healthy lands and thriving communities across the Nation.

Conservation requires more than action by the Federal government alone. By partnering with States, Tribes, community organizations, and individual citizens, the Department of the Interior is achieving Conservation through Cooperation, Communication, and Consultation — what Secretary Norton calls the 4 C's.

These partnerships are increasing in size, scope, and substance. By taking responsibility for the local lands where they live, work, and play, citizen stewards are working with us to preserve habitat for wildlife and recreation, while maintaining working landscapes that support dynamic economies across the Nation.

THE 4 C'S: CONSERVATION THROUGH COOPERATION COMMUNICATION & CONSULTATION

- **Cooperation:** Cooperation signifies the Department's emphasis on voluntary action, partnerships, collaborative work, and respect for property rights. Cooperation also represents Interior's commitment to work in concert with all partners to attain common conservation goals.
- **Communication:** Communication highlights Interior's commitment to transparency and accountability, innovation that occurs through the exchange of ideas, and the recognition that environmental progress depends to a large degree upon environmental and conservation entrepreneurs. Communication highlights the dedication of Interior to dialogue and to the tools that promote the ongoing dialogue that is the foundation for future environmental innovation.
- **Consultation:** Consultation signifies Interior's commitment to integrated decision-making, to landscape-level action consistent with legal rights and the views of local communities and constituents, and to the institutional arrangements by which economic, environmental, and community goals can be blended and sustained. Consultation stresses Interior's commitment to using local information and knowledge to address place-based conservation challenges, and to actively seek out and involve those parties whose knowledge and experience is integral to all modes of conservation.





COOPERATIVE CONSERVATION: THE PAST AS PROLOGUE



Secretary Norton is helping foster cooperative conservation. This culture of responsibility through citizen stewardship has a rich history. Aldo Leopold, a visionary 20th century conservationist, imagined a nation of citizen stewards. Environmental progress, he proposed, ultimately resides in the efforts of all of us to apply a caring hand to the landscape. It resides in our own actions, in our backyards, at our places of work, on our farms and ranches and factories, and in our communities.

The first Earth Day in 1970 was a wake-up call — an appeal to Americans that all was not well with our air, our water, and our lands. The wake-up call of that first Earth Day led to an unfurling of many of the

Nation's now-familiar environmental statutes. Over the next several years, Congress enacted the Clean Air Act, Clean Water Act, Endangered Species Act, and many more laws.

Many who aspired for a better environmental future pinned their hopes on the regulatory foundations set forth in these tools. Those regulations have achieved significant progress — the air is cleaner and rivers no longer catch fire as pollutants ignite. Yet with these successes also has come high conflict and sometimes unintended consequences.



“Aldo Leopold, one of the nation’s greatest leaders in the early conservation movement, had a vision of a nation of citizen stewards. He eloquently imagined that each of us would serve as stewards of our environment. The goal of government must be to empower people to be citizen conservationists while respecting the need to make a living off the land just as Leopold envisioned. America’s future must include both a healthy environment and a dynamic economy.”

Secretary Gale A. Norton
April 20, 2002

Over the past 30 years, this emphasis on statutes and regulations has allowed the upwelling of citizen stewards across America to go unnoticed. Step by step, Aldo Leopold’s dream of a nation of citizen stewards began to emerge. Individuals, alone and together, began to restore riverbank habitat, plant or reestablish native grasses, and innovate to prevent pollution. With their focus on conservation results, these citizen stewards embody President Bush’s vision of a new environmentalism — one built on principles of entrepreneurship, local action, and respect for private property. These same principles underlie Secretary Norton’s 4 C’s.

Most people understand that nearly all human action leaves some environmental footprint. The central challenge is how to lighten that footprint while maintaining thriving communities, enabling people to pursue their livelihood, and applying American ingenuity to promote conservation so our children and grandchildren can flourish in a pleasant and prosperous world.

What we have under way with these and other experiences in cooperative conservation is a discovery process. These efforts have resulted in a spontaneous search for answers to four questions that have been under-explored as the Nation has built the institutional foundations of environmental protection.

First, how can we better foster *innovation*? Environmental entrepreneurs engage in a continuous search for solutions tailored to locale while using new

tools. With an eye for innovative proposals, the goal is to spur new ideas and foster new land-use practices that can apply across regions and serve as models for ecologically healthy and economically vibrant working landscapes.

Second, how can we better draw upon *local insights and information* so that chosen actions take into account local circumstances? With their familiarity of local places, citizen stewards have knowledge of time, place, and situation — the devilish details that make one location different from another and put boundaries on what is doable. Citizen stewards have the sort of “on-the-ground, in-the-dirt, everyday, nose-to-the-grindstone” knowledge that improves land management decisions.

Third, how can we inspire people to join hands as citizen stewards? *Inspiration and incentives* lie at the heart of human action. Implementing policies and programs that encourage people to engage in conservation voluntarily can broaden on-the-ground results and reduce conflict.

Fourth, how can we generate more *integrated*, less fragmentary, decisions? The environmentalism of the past three decades, which centered on a suite of issue-specific statutes, has often generated piecemeal decisions and inconsistent or conflicting mandates. Protection plans unfold for one species at a time; or air-pollution plans take shape in isolation from plans to reduce water pollution. The list of segregated and isolated decisions is long and pervasive.



“There’s a different tune in the music around, Mother Nature has returned to us.”

Ron Ristimacki, Washington County farmer

Buffalo Creek, Pennsylvania

Dairy and beef cattle have traditionally wandered at will along Buffalo Creek in Washington County, Pennsylvania. Through our Fish and Wildlife Service Partners for Fish and Wildlife Program, farmers are now engaged in stream bank fencing. They are keeping the cattle out of the streams, allowing the trees and brush to regenerate, and protecting the banks from erosion. The new vegetation also provides shade for the stream that lowers its temperature, making it more hospitable for fish and other fauna and flora. Stream bank shrubs also are hosts to ground-nesting birds whose habitats had previously vanished.

What benefits do the farmers derive from this partnership? Moving the cattle out of the streams and fencing off the stream have allowed farmers to practice rotation grazing. These actions have also reduced the bacterial count in the stream from 2,500 bacterial colonies per milliliter to 25 bacterial colonies per milliliter. That means healthier cows — less waterborne hoof disease and fewer spontaneous abortions during calving season resulting from waterborne diseases.

Farmers are also planting native warm season grasses, but not where timothy and alfalfa are normally planted. Our Fish and Wildlife agents are working with farmers to find less productive areas to plant these grasses. These efforts expand forage for cows and provide better habitat for wildlife.

At Buffalo Creek we see a vision of cooperation and partnering where people are applying caring hands to the landscape. They are achieving healthy lands and waters, thriving communities, and dynamic economies.



Farmer unraveling spool for fencing

“I lost several calves over the years. Since we fenced, I haven’t lost a one.”

Ralph Nevela, Washington County farmer



Malpai Borderlands New Mexico and Arizona

Along the southwest boot heel of New Mexico and the southeast corner of Arizona, ranches have been held in the same family for four or five generations. It's a land that experiences only a few inches of rainfall a year and is home to a number of threatened species — the Chiricahua leopard frog, ridge-nosed rattlesnake, and others.

Ranchers in the Borderlands have something of a hardscrabble life; they face water challenges, erosion, and, increasingly, threats from development. Subdivisions are beginning to move out from some of the border towns. Ranches need wide open spaces.

As a result of all these issues, ranchers in the Malpai region partnered with The Nature Conservancy, an environmental group that owns and manages many environmentally sensitive lands throughout the United States. They also worked with Interior's Fish and Wildlife Service and Bureau of Land Management and others as they created the Malpai Borderlands Group. So far, the Group has developed a joint fire management plan to use controlled burns to re-establish herbaceous plant cover to improve wildlife habitat; re-seeding and best management practices programs; and cooperative relationships with research and management organizations, including university, State, and Federal government entities — all intended to benefit the watershed.

One of the most interesting accomplishments of the Malpai Group is the creation of a 300,000-acre "grass bank", a conservation easement set aside in perpetuity for grass and prairie conservation. This area also serves as an insurance policy for ranchers in periods



Gila monster



Chiricahua leopard frog

of drought. The provisions of the easement allow the ranchers to move their cattle onto the grass bank when forage on their own lands becomes sparse. Again, a cooperative approach is producing healthy lands, thriving communities, and a stronger economy.

"The Malpai Borderlands Group is proud of what our collaborative efforts with the Fish and Wildlife Service's Partners for Fish and Wildlife Program and the Bureau of Land Management have achieved. We have successfully completed projects involving prescribed fire, endangered species, and watershed protection. These accomplishments would have been considered almost impossible just a few years ago. Now both the agencies and the Malpai Group have come to expect these kinds of results from working together."

Bill McDonald, Malpai Borderlands Group



“This agreement allows us to help the Schaus swallowtail butterfly and provide educational opportunities to our customers and staff without worrying that we will be liable later.”

Julie Olsen, Cheeca Lodge, Florida

Safe Harbors

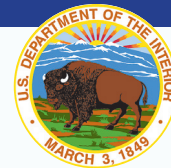
Ben Cone, a landowner and conservationist, sought to manage his forestlands to attract red-cockaded woodpeckers and other species. But there was a catch. Each time he succeeded in creating woodpecker habitat, he faced the prospect of being told he could no longer engage in logging on that land. To do so might violate the Endangered Species Act. Fortunately for Mr. Cone, others worked with him on a “safe harbor” agreement so he could enhance habitat, protect the endangered woodpeckers, and manage his lands productively. This “safe harbor” tool helped create a context in which Mr. Cone had strong incentives to proceed with his conservation efforts.



Red-cockaded woodpecker

“Norfolk Southern is proud to do its part to aid in population recovery efforts for the red-cockaded woodpecker. The Safe Harbor Agreement has allowed Norfolk Southern to increase the red-cockaded woodpecker population without incurring additional property devaluation.”

Steve Tobias, Vice Chairman and Chief Operating Officer,
Norfolk Southern Corporation.



In contrast to fragmented decision-making, consider the cooperative conservation examples set forth throughout this document, where partners are putting all the pieces together in a set of coordinated landscape decisions. Out of this discovery process centered on cooperation, a new environmentalism is emerging. The new environmentalism seeks to find ways to foster innovation, to inspire stewardship, to tap the local information of local people, and to provide more integrated decision-making. It does so with an emphasis on results.

With this new environmentalism comes new challenges. If we are to move beyond conflict toward a more cooperative approach to environmental progress, we must emphasize stewardship and partnerships. To create a culture of responsibility, we need to enhance opportunities for citizen stewards to work together. We need to generate and share scientific and other information that can inform conservation and land management decisions. We need the tools to assess results. Above all, we need partnership capacity and skills. Over the past three years, Secretary Norton has worked to build that partnership capacity and those skills at Interior to achieve conservation results.

Our accomplishments include:

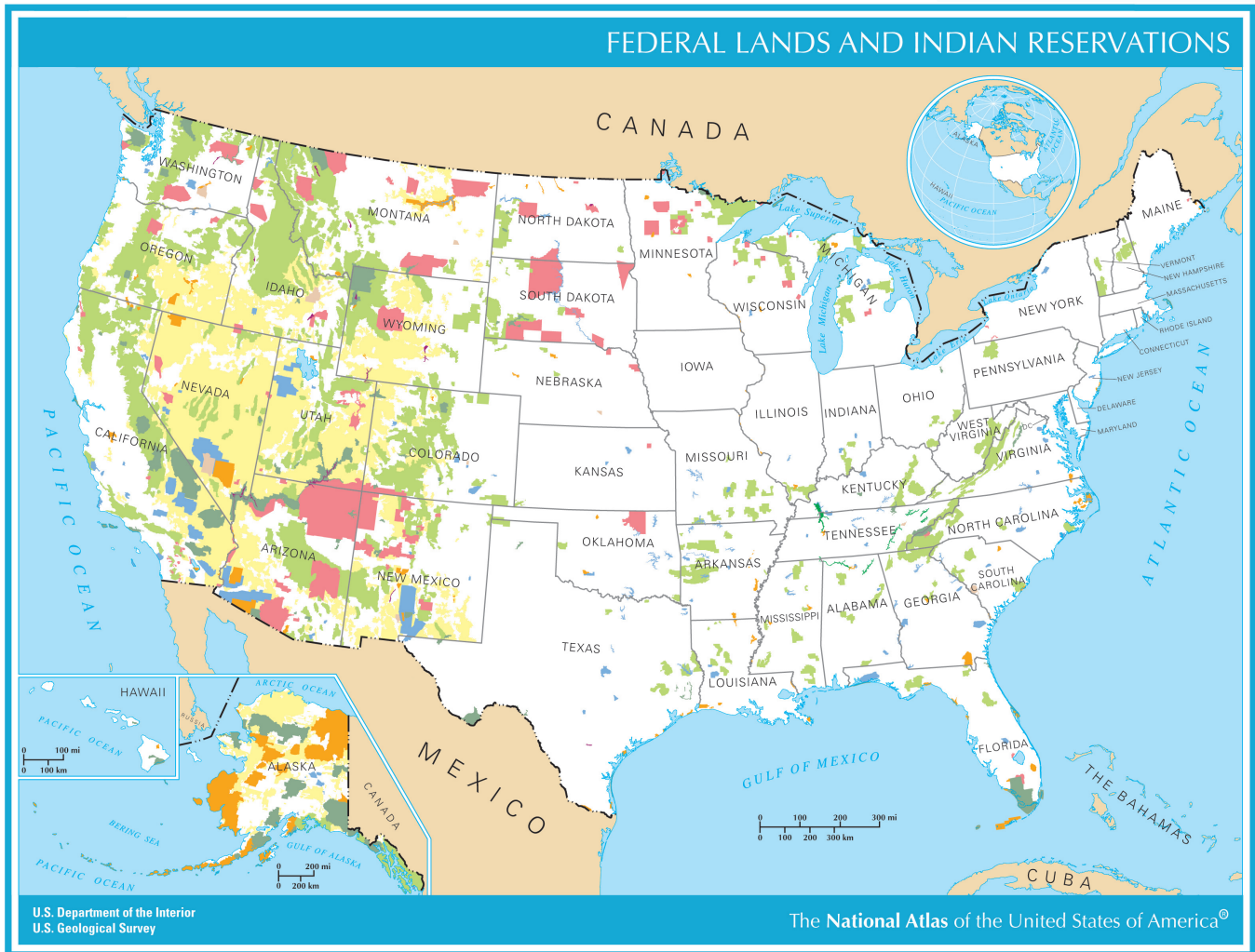
- Creating *new grant programs* and *increasing funds* for existing grant programs that invest in cooperative conservation;
- Implementing *policies to achieve cooperative conservation results*;
- *Creating partnerships and administrative actions* to address complex, landscape-level challenges; and
- *Building cooperative conservation capacity* through new science tools, more monitoring, and training.

“Most of our Nation’s civic work is being done without the aid of the Federal Government. But we believe the Federal government can work to enhance opportunities for Americans to serve their neighbors and their Nation.”

President George W. Bush,
January 2002



THE U.S. DEPARTMENT OF THE INTERIOR IS RESPONSIBLE FOR MANAGING APPROXIMATELY 1 IN EVERY 5 ACRES OF LAND IN THE UNITED STATES.



Note: Map includes Forest Service, TVA, and other agencies not under the Interior Department.

- | | |
|--|--|
| Bureau of Indian Affairs | Forest Service |
| Bureau of Land Management | National Park Service |
| Bureau of Reclamation | Tennessee Valley Authority |
| Department of Defense | Other agencies |
| Fish and Wildlife Service | |



CURRENT COOPERATIVE CONSERVATION PARTNERS

The Department of the Interior works with thousands of partners. Below is a small sample:

Alaska Flyfishers
All 50 State Wildlife Agencies
American Electric Power
Arizona Mule Deer Association
Blackfeet Community College
California Conservation Corps
Chesapeake Bay Foundation
Corvallis Audubon Society
Ducks Unlimited
Hawaii Trail and Mountain Club
Kansas Association of Wetland and Streams
Kenai River Sportfishing Association
Mecklenburg Garden Club
Mellon Foundation
Minnesota Waterfowl Association
National Fish and Wildlife Foundation
National Wild Turkey Federation
Navajo Nation
Northern Michigan University
Oregon Dept of Agriculture
Peregrine Fund
Pheasants Forever
Quail Unlimited
Rocky Mountain Elk Foundation
South Dakota State University
The Nature Conservancy
Unilever
University of Idaho
University of Washington
West Virginia University
Youth Conservation Corps



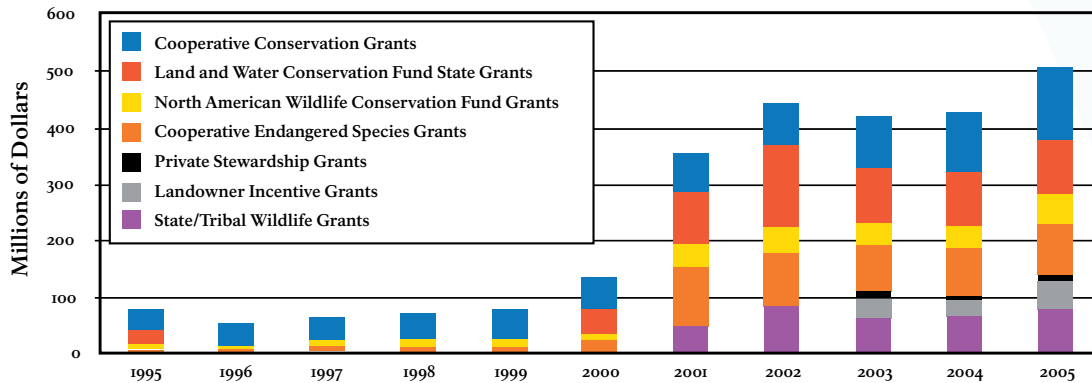


WORKING TOGETHER: COOPERATIVE CONSERVATION GRANTS

“Citizen stewards often are our most effective conservationists. President Bush’s goal — and our goal at the Interior Department — is to empower these citizens to do what the government cannot do alone”

Gale A. Norton, September 16, 2003

Cooperative Conservation Conservation Grant Programs



Nature knows no jurisdictional boundaries. Through partnerships, Interior’s land managers can work with landowners and other citizen stewards to tackle invasive species, reduce erosion along stream banks, and enhance habitat for threatened and endangered species. Over the past three years, the Department of the Interior has provided over \$1.3 billion [2002-2004] in grants to States and private landowners. Together, we have restored millions of acres of habitat; removed invasive exotic species and replanted native grasses and shrubs; improved riparian habitat along thousands of miles of streams; conserved limited water resources to benefit fish and other species; and developed conservation plans for endangered species and their habitat.

To help achieve our cooperative conservation vision, the President’s 2005 budget includes \$507 million for cooperative conservation programs, an increase of over \$371 million, or 270 percent, above 2000. These grants include:

- \$90 million for cooperative endangered species grants, an increase of \$67 million or 290 percent above 2000;
- \$80 million for State and Tribal fish and wildlife programs;
- \$60 million for the Landowner Incentive Program and Private Stewardship Grants Program, two programs initiated by this Administration;
- \$54 million for challenge cost share programs, an increase of \$38.9 million or 260 percent above 2000;
- \$54 million for the North American Wetlands Conservation Fund, an increase of \$39 million or 261 percent above 2000; and
- \$50 million for the Partners for Fish and Wildlife Program, an increase of \$19.5 million or 66 percent above 2000.



“The private lands conservation programs of the Department of the Interior are essential to our Nation. They are cost effective, form valuable partnerships, and most of all, bridge the gap between the conservation the public demands and what the private sector would normally provide.”

James L. Cummins, Executive Director, Mississippi Fish & Wildlife Foundation

Innovation through Cooperation

The Interior Department provides opportunities for the American people, working together and with Federal and other agencies, to carry the torch of conservation into the 21st century. Our cooperative conservation programs have two simple goals:

- Remove institutional barriers that limit citizen participation; and
- Provide the help that is needed to fulfill the environmental promise of citizen stewardship.

With an eye for innovative proposals, Interior is awarding grants on a competitive basis for land restoration projects, conservation programs, and collaborative partnerships to accomplish conservation outcomes. In each case, the goal is to spur new ideas and foster new land-use practices that can apply across regions and serve as models for ecologically healthy and economically vibrant working landscapes. Weaving together these purposes is a common thread: the interdependence of people and the land upon which they live, work, and play.



Gunnison sage grouse

Ochs Ranch Easement, Colorado

Haven to an at-risk population of Gunnison sage grouse, Colorado’s Ochs Ranch is the site of an innovative partnership between the Federal government, the State of Colorado, and local conservation organizations.

Called “sage chickens” by many locals, these bantam-sized birds are commonly noted for their flamboyant mating practices with males puffing up big air sacks on their necks and emitting loud booming calls while strutting for potential mates.

The goal of this collaborative partnership is to protect through permanent easement approximately 2,766 acres of important Gunnison sage grouse habitat along the Ohio Creek in Gunnison County, Colorado. The partnership purchased the Ochs Ranch and enabled eight neighboring ranch families to work the land in exchange for easements on their ranches or for cash, leading to the protection of approximately 4,500 acres. This project serves as a model that demonstrates the compatibility of habitat conservation and productive agricultural activities. The bird has been listed as a candidate for Federal threatened or endangered status.



Species Protection Partnership Program

The Interior Department protects thousands of native plant and animal species, including more than 1,200 with special status under the Endangered Species Act.

The Fish and Wildlife Service, acting on behalf of the Interior Department, has a number of specific duties under the Endangered Species Act. They include listing species as threatened or endangered; working to recover species from the brink of extinction to a healthy, self-sustaining level; protecting species that are candidates to be listed; consulting with other Federal agencies to ensure that their actions do not jeopardize listed species or destroy or adversely modify their habitat; and developing Habitat Conservation Plans with non-Federal landowners to offset the potentially negative effects that development may have on threatened or endangered species.

The President’s budget emphasizes investments that work through partnerships to help improve habitat and recover populations of at-risk, threatened, and endangered species. The Interior Department, along with State, Tribal, local and other public and private conservationists, shares a common goal of protecting threatened, endangered, and other at-risk species and ensuring that Federal activities do not further endanger these species while fostering dynamic local economies.

Building on Secretary Norton’s vision of cooperative conservation, in 2002, the Department launched two new conservation initiatives: the **Landowner Incentive Program** and the **Private Stewardship Grants Program** (referred to collectively as the **Species Protection Partnership Program**). Both programs offer incentives for private landowners to protect imperiled species and restore habitat, while engaging in traditional land management practices like farming or ranching. The Landowner Incentive Program is based on the highly successful Texas Landowner Incentive Program initiated by then-Governor Bush in 1997 to involve landowners in voluntary efforts to benefit imperiled species in several Texas counties.

Nationally, the Landowner Incentive Program offers a positive, non-regulatory opportunity for landowners and Tribes to protect at-risk and endangered species, most of which depend upon private land for habitat.

Together, the Landowner Incentive Program and Private Stewardship grants reflect a cooperative way of doing business — working in partnership with landowners. The response from landowners is overwhelmingly positive. **The President’s 2005 budget includes a \$23 million increase for these programs.**

Willamette Valley, Oregon

Flanked by the Coast Range and the Cascades, the Willamette Valley takes its name from the river that flows through it. Historic cities and towns, settled more than 100 years ago by immigrants from all over the world, are found throughout the region, but the area is perhaps best known for its diverse flora and fauna. A collaborative effort among a number of conservation partners, this innovative project is restoring riparian, prairie, and oak woodland habitat for a total of 21 separate populations of seven Federally listed species including Fender’s blue butterfly, Oregon chub, Willamette Valley daisy, Bradshaw’s lomatium, streaked horned lark, and five Federal species of concern, including northwestern pond turtle, yellow-breasted chat, and white-tip aster. In addition, the project is providing additional benefits for eight at-risk species, including the western meadowlark (the State bird) and the



western gray squirrel, and will enhance existing at-risk species benefits at five important sites in the Willamette Valley eco-region.

This cooperative conservation project is also providing a foundation of restored habitat and restoration capacity on which to base coordinated species recovery efforts on targeted private lands throughout the Willamette Valley.



In 2003, through the Landowner Incentive Program, the Fish and Wildlife Service provided \$34.8 million to States and private landowners to develop comprehensive programs to conserve and enhance habitat; provide thousands of acres of wetland habitat for breeding water birds and listed species; remove invasive plants; and provide training and technical assistance to private landowners.

The State of Oregon, for example, received \$1.7 million to coordinate its new landowner incentive program and restore important tributary riparian habitat benefiting endangered salmon.

The State of Colorado also received \$1.7 million to establish a program to provide technical and financial assistance to landowners and enter into agreements to protect 3,000 acres of habitat for the Gunnison sage grouse and protect three miles of riparian habitat critical to the recovery of the Preble's meadow jumping mouse.

On February 25, 2004, the Interior Department announced the 2004 grant awards for the Landowner Incentive Program. Forty States and one Territory received over \$25.8 million to establish or supplement their landowner incentive programs that provide technical or financial assistance to private landowners (Tier I capacity building grants) and to implement projects that protect or restore habitat for listed and at-risk species (Tier II grants). In many States, the grants will continue important conservation activities initiated in 2003.

The Private Stewardship Grant program helps communities and landowners conserve species. Through this program, the Fish and Wildlife Service provides competitive grants and other assistance to individuals and groups engaged in local, private, and voluntary conservation efforts that benefit Federally listed, candidate, or other at-risk species. A diverse panel of representatives from Federal and State governments, agriculture and private development interests, and scientific and conservation communities assess and make recommendations regarding the funding for these awards.

Under this program, the Fish and Wildlife Service provided \$100,000 grant to the Comanche Pool Prairie Resources Foundation to help continue a rancher-led initiative that has successfully enhanced mixed-grass and prairie stream habitat for at-risk species, such as the black-tailed prairie dog, the lesser prairie chicken, and the Federally listed Arkansas River shiner fish and the Arkansas darter fish. Participating ranchers will use a variety of resource management tools, such as altered grazing management, prescribed burning, cutting of invasive woody species, and stream restoration to improve habitat for these species.

Cooperative Conservation Challenge Cost Share

The **Challenge Cost Share** program emphasizes building partnerships for the conservation of natural resources and provides expanded opportunities for land managers to work with landowners and others to participate in creative conservation partnerships on lands adjacent to and among Federal, State, and private land. The goal is simple: to use the government and its resources to remove barriers to citizen participation and to provide the help that is needed to fulfill the environmental promise of citizen stewardship.

Through partnerships, citizen stewards can work in concert to tackle such tasks as eradicating invasive species, reducing erosion along stream banks, and enhancing habitat for threatened and endangered species. Also, through partnerships, Interior can build the new environmentalism called for by President Bush. The Challenge Cost Share program is the cornerstone of this vision and builds on existing conservation partnership programs that have successfully established productive relationships with local communities and citizens.

Nationwide, the Challenge Cost Share cooperative conservation program funds a wide variety of projects, including restoring wetland prairie habitat in Oregon, building water catchments for endangered species in New Mexico, and restoring forested wetlands damaged by a tornado in Maryland. In 2003, the program funded 256 projects with more than 700 partners in 40 States and Puerto Rico. The ratio of non-Federal funds to Federal funds was nearly 2:1, with the Federal portion at \$12.9 million and total funding at \$36 million. Dynamic partnerships with individuals, Tribes, States,



local governments, non-profit organizations, and others support an array of projects that restore damaged habitats and lands and achieve the conservation goals of the Department's land management agencies. Projects require a one-to-one match or better, thereby at least doubling the impact of Federal dollars.

Cooperative Endangered Species Conservation Fund

More than half of all species currently listed as endangered or threatened spend at least part of their life cycle on privately owned lands. The **Cooperative Endangered Species Conservation Fund** provides grants to States and Territories to participate in a wide array of voluntary Habitat Conservation Plans and projects for candidate, proposed, and listed species. Habitat Conservation Planning assistance grants provide funds to States and Territories to support the development of Habitat Conservation Plans, through baselines surveys and inventories, document preparation, outreach, and planning activities.

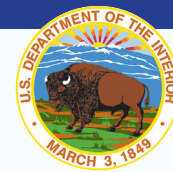
For example, through the program, a \$75,000 grant in 2003 helped fund development and implementation of the Burlington Northern Santa Fe Railway Habitat Conservation Plan in Glacier and Flathead Counties, Montana. This project provides a unique opportunity to benefit a large number of species in a geographic area adjacent to Glacier National Park and the Great Bear Wilderness area. The plan focuses on minimizing and mitigating the effects of railroad operations on grizzly bears and will minimize effects on other predators, including gray wolves, wolverines, black bears, and mountain lions. Efforts to enhance habitat will also benefit a variety of other species, including bald eagles, bull trout, west slope cutthroat trout, moose, elk, mule deer, whitetail deer, beaver, mink, otter, and waterfowl.



Karner Blue butterfly

“Cooperative conservation expands the President’s commitment to conservation through partnerships, civic involvement, and economic incentives.”

Mrs. Laura Bush, First Lady of the United States
March 3, 2003



SUCCESS STORIES

Aroostook National Wildlife Refuge, Maine

At Aroostook National Wildlife Refuge in Maine, the Fish and Wildlife Service, in partnership with the Maine Army National Guard, is treating 30 acres to remove exotic and invasive plants, thereby re-establishing native grasslands, shrubs, and forested lands. The project will improve conditions in shrub and forest habitats, benefiting several species of neotropical migratory birds as well as several species of resident wildlife, such as moose, black bear, and fisher and brook trout. Each partner is contributing \$10,000 for a total project of \$20,000.



Black Bear



Kemp's Ridley Turtle

Padre Island National Seashore, Texas

In Texas, challenge cost-share funds support the restoration of the endangered Kemp's Ridley and other sea turtles at the Padre Island National Seashore with a total of \$489,000 – one-half of which comes from partners including the National Fish and Wildlife Foundation, the National Park Foundation, the Western National Parks Association, the Alvin and Lucy Owsley Foundation, the Help Endangered Animals Ridley Turtles Norcross Wildlife Foundation, the University of Alabama at Birmingham, the College of Charleston, the Texas Parks and Wildlife Department, Shell Oil Company, Unilever, and individual volunteers. Working with these partners, NPS released 1,299 endangered Kemp's Ridley sea turtle hatchlings at the most important nesting beach in the United States.



COOPERATIVE INNOVATION

Ducktrap River, Maine

The Ducktrap River cuts through many jurisdictions and across many plots of private land. It traverses woods used by hunters, recreationists, and hikers. Along its course lies an occasional gravel pit. In some places, eroded banks spill sediment into the river.

Those hoping to conserve the many values of this river faced — as we so often do — complex challenges. How could they restore and maintain habitat? How could they stitch together so many pieces of a landscape quilt? How could they protect salmon while maintaining thriving communities and the enjoyment and use of the river?

Community entrepreneurs responded to these challenges by creating the Ducktrap Coalition, an association of 28 partners including conservationists, farmers, a local snowmobile association, the Fish and Wildlife Service, and many others. The Coalition began unpacking problems into bite-sized chunks. They applied new technologies to prevent erosion. They rehabilitated gravel pits, transforming them into vernal pools. They created an educational partnership with the snowmobile association to maintain recreational opportunities on those trails least subject to environmental impacts. They acquired conservation easements to achieve enduring protections.

This partnership is bringing miles of restoration to the river. It has produced permanent protection of land and water, blended with continued community use. It has generated data through monitoring by volunteers, recognizing that the true test of conservation resides in the results achieved and sustained.



Atlantic salmon

“Thanks to the effective partnership of 28 organizations and more than 40 landowners, the Ducktrap River Coalition has protected 82 percent of the riparian land on the Ducktrap River, home to one of eight remaining endangered Atlantic salmon populations in the United States. The Fish and Wildlife Service, one of the founding members of the Coalition, has provided the expertise, leadership, and support that has been essential to the success of our combined efforts to save this extraordinary river”.

Scott Dickerson, Ducktrap River Coalition.



CHALLENGE COST SHARE AT WORK

Under the Challenge Cost Share Program, the Bureau of Land Management funded 88 projects in 2003 to fund wetland restoration, riparian habitat restoration, and water development for wildlife. For example:

Eugene, Oregon

The city of Eugene, Oregon matched BLM's \$150,000 in Cooperative Conservation funds with \$525,000 to be used to restore the Willow Corner historic wetland and upland prairie habitat. Willow Corner, owned by the city, is in a BLM conservation easement and contains the largest known populations of the Fenders' blue butterfly and its host plant, the Kincaid's lupine, both Federally listed species.

The project activities will remove fill from 8.9 acres of historic prairie wetlands, grade it to natural levels, and plant the area with native seeds. This restored habitat will also benefit a variety of wildlife species, including neotropical migratory birds, the camas pocket gopher, the gray-tailed vole, the chorus frog, and the western pond turtle.

The National Park Service has 72 projects that will protect and restore habitat for threatened and endangered species and control invasive species. For example:

Grand Canyon National Park, Arizona

The NPS partnered in a cost share project to restore the native fish in Grand Canyon National Park by removing non-native salmonids (rainbow and brown trout) from certain key tributaries to the Colorado River. Partners including the Glen Canyon Dam Adaptive Management Program, Arizona Game and Fish Department, and the Navajo Nation cost-shared this \$557,000 project on almost a one-to-three ratio.

Trout are the most abundant and prolific exotic fish species within these tributaries and are thought to compete with native species for spawning and foraging resources. Removal of these non-native species will open the habitat for the eventual establishment of core aggregations of native species, specifically, the threatened humpback chub.

The Fish and Wildlife Service funded 98 projects dedicated to a full range of activities including invasive weed removal and establishment, or expansion of, habitat for a range of species, including water fowl. For example:

Prairie Habitat Restoration, Iowa

The project initiates FWS involvement in a region-wide conservation effort directed at helping landowners accomplish on-the-ground invasive species control and habitat restoration. Deep loess soil deposits, created by glaciers, wind, and water, in this form are only found in parts of the Missouri River bluffs of Iowa and Missouri and have since developed a unique landform including plant and animal communities. Species include cactus, yucca, Plains pocket mouse, Skipper butterflies, and Sharp-tailed grouse. This project will allow landowners, contributing labor, equipment, and materials valued at no less than \$100,000 to do fire pre-suppression and

fuel reduction work in preparation for burning. The Fish and Wildlife Service contribution of \$100,000 will assist land owners with site preparation, assist with vegetation restoration, and offer technical assistance relating to grassland management. The Golden Hills Resource Conservation District and Loess Hills Alliance will provide technical and administrative assistance. More than 500 acres of land will be improved, restored, and protected by removing invasive species, establishing fire breaks, and restoring native grasses common to the Loess Hills region.



High Plains Partnership Partners for Fish and Wildlife

Since more than 90 percent of the High Plains region is privately owned, public/private partnerships play a vital role in meeting the shared goals of conserving declining and at-risk species, while preserving and maintaining working landscapes on private lands. The High Plains Partnership is a public/private initiative across the eleven-State High Plains region to conserve declining species and habitats on private lands. In the spirit of the Secretary’s 4 C’s, this partnership is a cooperative effort between the Fish and Wildlife Service, State fish and wildlife agencies, several agencies within the Department of Agriculture, private conservation organizations, and private landowners.

In 2005, Interior has requested \$5.0 million to fully implement this initiative. The High Plains Partnership builds upon ongoing Partners and endangered species program activities in this eleven-State region as part

of a new, region-wide initiative. The High Plains Partnership will facilitate the creation of partnerships with landowners and others throughout the High Plains, focusing on restoring, enhancing, and protecting two million acres over the next ten years. In 2005, the High Plains Partnership will leverage new funding and a new, regional focus on expanded partnerships. Through these projects, Partners program biologists will restore approximately 34,000 acres of uplands, 1,000 acres of wetlands, and 1,000 acres of riparian habitat within the High Plains region. Working with other agencies and private organizations, the Fish and Wildlife Service will enroll approximately 50,000 acres into conservation agreements in 2005. Ultimately, this program will reduce the potential for listing candidate species, assisting in recovering or downlisting species, and preclude the need to list grassland species in decline.

“Our partnerships are about on-the-ground results that take into account environmental goals, thriving communities, and dynamic economies. We want healthy lands and waters, while also ensuring that we have energy to warm our homes and minerals to produce goods that make our lives comfortable and convenient.”

Assistant Secretary P. Lynn Scarlett
November 16, 2003



Partners for Fish and Wildlife

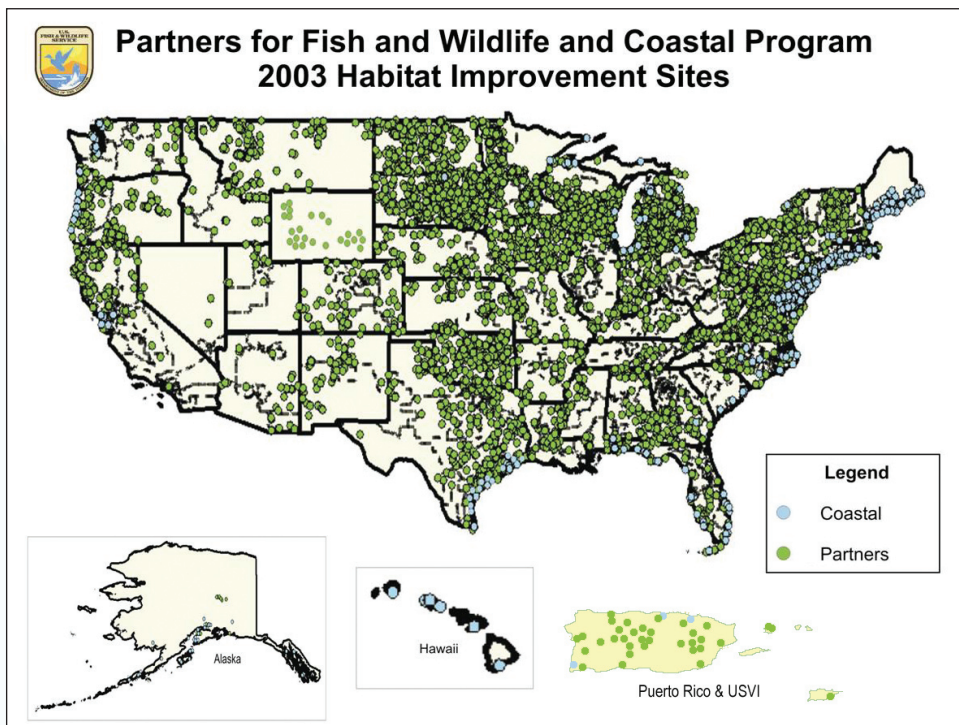
The Partners for Fish and Wildlife Program has allowed the Fish and Wildlife Service to establish productive relationships with communities, conservation partners, Tribes, and over 30,000 landowners while providing them with both financial and technical assistance. Since its creation in 1987, the Partners for Fish and Wildlife Program has established over 28,000 agreements with landowners resulting in the restoration of 1,060,000 acres of uplands, 649,300 acres of wetlands, and 4,670 miles of riparian and in-stream habitat.

Through the Partners for Fish and Wildlife Program, the Interior Department works closely with private landowners, recognizing that over 60 percent of our Nation's land is in private ownership and the health of many populations depends on habitat found on private lands. State resources agencies work closely with the Fish and Wildlife Service to help establish priorities and identify focus areas. With just a little encouragement or assistance from the Fish and Wildlife Service, our partners have undertaken thousands of restoration projects.

Partners for Fish and Wildlife Program Accomplishments FY 2001-2003

Wetland acres restored	151,097 acres
Prairie, native grasslands, and upland acres restored	703,723 acres
Stream and streamside habitat restored	2,361 miles
Fish barriers removed	156
Landowner agreements	8,957

Voluntary grant programs, such as our Partners for Fish and Wildlife Program, give landowners the tools needed to make private lands working landscapes that benefit wildlife while maintaining productive activities.





Coastal Program Accomplishments FY 2001-2003	
Wetland acres restored and protected	215,097 acres
Upland acres protected	751,852 acres
Stream and streamside habitat restored and protected	3,105 miles
Fish barriers removed	23
Partnership agreements	323



Seagrasses are nurseries for many marine species. Above are before and after photos of seagrass restoration efforts at a coastal project in Galveston, Texas.

Coastal Program

The Coastal Program leads Fish and Wildlife Service conservation efforts in bays, estuaries, and watersheds around the U.S. coastline. The Coastal Program leverages Federal funding with partners at a ratio of 1:4. Through this program, the Fish and Wildlife Service and its partners conserve fish and wildlife and their habitats to support healthy coastal ecosystems by:

- Providing assessment and planning tools to identify priority habitats that should be protected and restored;
- Conserving pristine coastal habitats through voluntary conservation easements and locally initiated land acquisition;
- Restoring degraded coastal wetland, upland, and stream habitats by working with partners to implement on-the-ground projects; and
- Focusing resources through conservation alliances that leverage the financial and technical resources of our partners and multiply the impact of the taxpayer dollar.

In Winyah Bay, South Carolina, for example, the Coastal Program partners with a task force to protect coastal wetlands. Sandy Island was identified by the Winyah Bay task force for protection because of potential development related to access by a bridge to the mainland. The task force includes diverse members such as private landowners, the Fish and Wildlife Service, The Nature Conservancy, the South Carolina Department of Natural Resources, the Historic Rice Fields Association, Ducks Unlimited, International Paper Company, and the Low Country Open Land Trust. Sandy Island supports a significant population of the endangered red-cockaded woodpecker. The Coastal Program office has worked closely with the task force to identify regionally significant habitats and to protect these areas to benefit coastal resources at a landscape scale. The Waccamaw National Wildlife Refuge was recently established with the support of the task force, and includes Sandy Island within its boundary.



“The Prairie Pothole Joint Venture is good science, it’s good policy, it’s good for the ducks, pheasants, and other wildlife.”

Joe Duggan, Vice President of Corporate Relations and Marketing
Pheasants Forever.

North American Wetlands Conservation Fund

The North American Wetlands Conservation Act program, an internationally recognized program that provides grants throughout the United States, Canada, and Mexico, is one of the key instruments for conservation of waterfowl and other migratory birds. Through voluntary grant partnerships, the program has protected and improved the health and integrity of the landscapes in which people reside and work in harmony with our fish and wildlife resources. Primarily, the grants act as catalysts in bringing partnerships together to support wetland projects and leverage non-Federal funding that fosters public and private sector cooperation for migratory bird conservation, flood control, erosion control, and water quality.

In FY 2003, North American Wetlands Conservation Act project proposals supported over 125 partnership wetlands conservation projects. Over 460 partners are participating in these projects which, when completed, **will protect over 1.3 million acres and restore, enhance, or create over 380,000 acres of habitat.** In FY 2004, the program is expected to fund approximately 95 projects that will protect, enhance, or restore over 1.1 million acres. As of April, 43 project proposals, together with over 190 diverse partners, have been approved. When completed, these approved



Before wetland restoration, Pennsylvania



After wetland restoration, Pennsylvania

projects will protect over 3 million acres and enhance, restore, or create about 190,000 acres of habitat for migratory birds and other wildlife. Up from \$37.5 million enacted in 2004, the 2005 budget request for the program is \$54 million.

“The California Waterfowl Association has applied for and received four grants through the North American Wetlands Conservation Act totaling over \$3.5 million. These grants leveraged \$57 million in partner funds, positively impacting 65,000 acres of habitat in the Central Valley. The Association’s network of programs is only possible thanks to the many partners, donors, and volunteers who offer their assistance and support. Together, we are taking a stand for the future of waterfowl, wetlands, and hunting.”

Becky Easter, California Waterfowl Association



Efforts Continue to Reintroduce Migratory Whooping Cranes in Eastern U.S.

The whooping crane, one of North America’s rarest birds, has benefited from a vibrant partnership to bring them back to the flyways of the United States. In spring 2003, 16 whooping crane chicks hatched at Patuxent Wildlife Research Center in Maryland. Following their transfer to Necedah National Wildlife Refuge in Wisconsin, the chicks spent the summer training behind ultralight aircraft and on October 16, 2003, they began their ultralight-led migration south to Chassahowitzka National Wildlife Refuge in Florida. The birds and their human support team completed the migration on December 8, 2003.

This was the third group of juvenile whooping cranes to take part in a project designed to reintroduce a migratory flock of whooping cranes to a portion of their former range in eastern North America. The eastern migratory flock of whooping cranes now has 20 adult and juvenile whooping cranes and 16 new cranes from this year’s reintroduction. All of these whooping cranes spent the winter in Florida.

The Whooping Crane Eastern Partnership — a coalition of nonprofit organizations, individuals, flyway State agencies, the Fish and Wildlife Service, and the U.S. Geological Survey — coordinates this



Cranes following ultralight

unprecedented reintroduction effort. More than 60 percent of the estimated \$1.8 million budget comes from private sources in the form of grants, donations, and corporate sponsors.

Migratory Bird Joint Ventures

The Migratory Bird Joint Ventures program, originally formed to implement the North American Waterfowl Management Plan, has broadened to include other conservation partnership initiatives, such as Partners in Flight, the U.S. Shorebird Conservation Plan, and the North American Waterbird Conservation Plan. This model for achieving migratory bird conservation goals through cooperation and consultation with partners and coordinated project implementation has increased the interest and number of potential partnerships for important habitat conservation projects. For instance, the 2005 budget will allow the Fish and Wildlife Service to accelerate operations at 15

existing Joint Ventures and fund the Northern Great Plains and Central Hardwoods Joint Ventures. Also part of the North American Wetlands Conservation Act, through the Migratory Bird Conservation Commission, the Fish and Wildlife Service announced on March 4, 2004, \$15.8 million for habitat conservation to States and other partners to benefit migratory birds, including its 500th project. The 500th project will conserve over 6,000 acres in Nebraska. **The \$15.8 million will fund 17 projects to protect or restore more than 270,000 acres of wetlands and associated upland habitats in 13 States.**



State and Tribal Wildlife Grants

The State and Tribal Wildlife Grant program assists States and Federally recognized Tribes in the development and implementation of activities that benefit wildlife. The President's 2005 budget for these grants proposes \$80 million.

The funding benefits a broad range of species, including species not fished or hunted, and their habitats. Since so many issues related to wildlife conservation are not contained by jurisdictional borders, the Fish and Wildlife Service and the States are working together to coordinate efforts to conserve endangered and threatened species, manage migrating birds, and lay foundations for good wildlife management.

For example, the Pennsylvania Game Commission is using Federal money to protect more than 30,000 bats at two mines in Pennsylvania. The State will install special gates at the entrances to the bat caves — called hibernacular or winter homes — to prevent disturbance and vandalism during periods when these species are highly vulnerable.

Of the 2005 amount, \$14 million has been proposed to reach Federally recognized Tribes. One project recently awarded the Tribal Wildlife Grant will establish, restore, and maintain a harvested lake sturgeon population in the Lac du Flambeau Chain of Lakes by the Lac du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin. The Lake sturgeon is culturally significant to this Tribe and economically important to the State of Wisconsin.



Bat gate



Sturgeon

“The State Wildlife Grants program is now the Nation’s core program for preventing species from becoming endangered in every State. In my State of Vermont, it has more than doubled the funding available for these purposes, as it has for many other States. By providing real, tangible support through funding for on-the-ground conservation, this program is letting us get ahead of the game. Instead of reacting to crises, we now have the ability to take preventive action to keep wildlife populations healthy and avoid conflicts over endangered species.”

Ron Regan, Director of Operations, Vermont Dept. of Fish and Wildlife



Working on Wildlife and Habitat Management

Under the Bush Administration, new hunting and fishing access at more than 50 National Wildlife Refuges has been approved. The Fish and Wildlife Service supports fishing through over 60 Fish and Wildlife Resource Management field stations located in 33 States. In addition to the National Fish Hatchery program, the Fish and Wildlife Service works in partnership with others to improve fish habitat and stream corridors. Interior also considers hunting to be an important tool for wildlife management. Hunting gives resource managers a valuable tool to control populations of some species that might otherwise exceed the carrying capacity of their habitat and threaten the well-being of other wildlife species, and in some instances, that of human health and safety.

Today, a total of 316 refuges are open to hunting and 275 are open to fishing. To further improve access to public lands for sportsmen and sportswomen, the Fish and Wildlife Service, Bureau of Land Management, and the Forest Service have signed an agreement with 17 organizations to improve hunting and fishing access to Federal lands. The Fish and Wildlife Service has listened to State agencies, sportsmen and sportswomen, and conservation organizations as it has worked on policies governing the operation of the refuge system, migratory birds, fish hatcheries, chronic wasting disease in deer, and other issues.

Several hunting and fishing excise taxes provide funds to States. These programs include the Sport Fish Restoration Program, which collects funds from a 10 percent excise tax on fishing equipment, a 3 percent tax on electric trolling motors and sonar fish finders, taxes on motor boat and small engine fuel, and import duties on fishing tackle and pleasure boats. Distribution of sport fish restoration funds to States is based on the land and water area and the number of fishing license holders in each State. In 2004, more than \$464 million in excise taxes have been apportioned to States.

On April 22, 2004, President Bush furthered his pledge to wetland habitat restoration by moving beyond a policy of “no net loss” of wetlands to an



overall increase of wetlands across the Nation each year. The President’s goal is to create, improve, and protect at least three million wetland acres over the next five years in order to increase overall wetland acres and quality. To meet this goal, the President’s 2005 budget request, which includes \$4.4 billion for conservation programs that include funding for wetlands — an increase of \$1.5 billion, or 53 percent over 2001. The 2005 budget proposes to spend \$349 million on the Fish and Wildlife Service’s two key wetlands programs — the Wetlands Reserve Program and the North American Wetlands Conservation Act Grants Program — which is an increase of more than 50 percent over 2001.



Take Pride in America

Re-launched by Interior on April 16, 2003, Take Pride in America empowers volunteers from every corner of America to improve our parks, refuges, recreation areas, and cultural and historical sites. Outstanding volunteer efforts are rewarded with presidential recognition. Since July 2003 there have been over 100 Take Pride in America events involving over 10,000 individuals. For example, on National Public Lands Day, the US Army Corps of Engineers of Orland, California hosted nearly 160 Boy Scouts and leaders to clean 40 miles of shoreline at a lake. And, on December 31, 2003, working with Southern California Friends of Take Pride, a New Year's Resolution Volunteer Pledge Drive was initiated to solicit 10 hours per volunteer for work on vast areas devastated by wild fires in the fall of 2003. Volunteers will help plant trees, clean up recreation sites, restore trails, and perform tasks needed to rehabilitate damaged land. These 400,000 volunteer hours are equivalent to more than 190 full-time employees working for one year.

Through the program, agencies also work with governors and other partners to launch volunteer conservation projects. Over 40 governors are participating and have appointed liaisons to work with the national Take Pride in America office. Through these liaisons, Federal and State land managers identify volunteer opportunities and enlist public service commitments from citizens. In addition, Senators and Representatives have responded to Take Pride's call to action and will participate in Take Pride at events in their States and districts in 2004.

More than 100 charter partners — including major corporations, conservation groups, service organizations, and trade associations — have signed on to help Take Pride. By establishing formal partnerships with State governments, Federal and State land managers work to identify volunteer opportunities and to enlist public service commitments from citizens. These and other organizations assist by sponsoring Take Pride in America cleanup days and by committing blocks of volunteer service time for local restoration efforts.

Part of President Bush's USA Freedom Corps volunteer service initiative, Take Pride in America strives to dramatically increase the number of volunteers by expanding participation among youth, senior citizen,



TAKE PRIDE[®] IN AMERICA



Secretary Norton with Take Pride in America volunteers

Hispanic- and African-American, faith-based, and union organizations. Take Pride also emphasizes service to inner city and urban sites, such as parks, trails, historic monuments, and playgrounds.

Volunteers help maintain and sustain our national parks, national wildlife refuges and fish hatcheries, BLM public lands, water resource management activities, and assist in carrying out our scientific research programs. This program has a track record of success. During the initial launch from 1986 to 1993, volunteers logged an estimated 10 million hours in service to our public lands. Since the program was re-launched, Take Pride in America continues the tradition of citizen stewards. This past year an estimated 200,000 volunteers — almost three times the number of employees in our paid workforce — contributed their time and effort on lands managed by Interior. The high quality work they perform results in significant savings to the American people and allows us to offer more programs and services to our Nation's citizens.



ACHIEVING RESULTS: NEW TOOLS FOR COOPERATIVE CONSERVATION

Complementing funding increases for cooperative conservation, the Interior Department is broadening its policy toolkit to support citizen stewardship and partnerships. These efforts target key conservation challenges including forest and rangeland health and endangered species protection. They also build partnership opportunities for individuals, organizations, and communities. New efforts to enhance results include: the President’s Healthy Forests Initiative, strengthening efforts for protecting endangered and threatened species, improving the National Environmental Policy Act, and resolution of long-term conflicts.

Healthy Forests Initiative

On December 3, 2003, after months of working with a bipartisan coalition of Members of Congress, President Bush signed into law the Healthy Forests Restoration Act of 2003 to reduce the threat of catastrophic wildfires, improve forest and rangeland health, and encourage public participation in project selection and implementation. This law builds upon the President’s Healthy Forests Initiative, announced on August 22, 2002. The Act:

- Strengthens public participation in developing high priority forest health projects;
- Reduces the complexity of environmental analysis, allowing Federal land agencies to use the best science available to actively manage land under their protection; and
- Provides a more effective appeals process by encouraging early public participation in project planning.

Forest Health Benefits of Forest Thinning: Lessening fuel loads improves the health of forests, woodlands, and rangelands in two ways. First, by reducing hazardous fuels, the Healthy Forests Initiative helps prevent such unwanted fire-caused environmental changes such as excessive, widespread, and undesirable mortality in wildlife and plants; habitat destruction; erosion; siltation in streams, lakes, ponds, wetlands, and reservoirs; and damage to the physical structure of soil and the death of soil organisms. Second, removal

of hazardous fuels improves landscape conditions by, among other things, promoting biological and habitat diversity, protecting spawning areas, and protecting water quality.

Benefits of Forest Thinning



Untreated





Treated





“I saw that firsthand when we were flying over Oregon, magnificent trees just exploding as we choppered by. The resulting devastation damages the habitats of endangered species, causes flooding and soil erosion, harms air quality, oftentimes ruins water supplies. These catastrophic fires destroy homes and businesses; they put lives at risk, especially the lives of the brave men and women who are on the front line of fighting these fires.”

President George W. Bush
December 3, 2003



President Bush inspecting Squires Fire damage in Oregon

In Nevada’s Great Basin, for example, pinyon pine and juniper trees as well as highly flammable non-native cheatgrass have expanded their ranges over the past several decades, resulting in loss of biological diversity, dramatic changes in stream and riparian habitat, and a significant reduction in streamflow over large areas. By facilitating removal of these fuels from Great Basin landscapes, the Healthy Forests Initiative will improve shrubland and woodland environments.

With the steady accumulation of fuels, fire danger in our forests has increased over time, and forests have become more dense. Around 190 million acres of Federal forests and rangelands face high risks of catastrophic fire. Drought conditions make these lands even more vulnerable to hot, fast-moving fires. With more and more people living near these forests, firefighting challenges mount in order to protect people and their homes.

Our firefighters do an outstanding job, controlling 98 percent of wildland fires on initial attack. But when fires escape initial efforts to control them, they create damaging, destructive fires. The key task lies in reducing fuel build-up to lower the risk of catastrophic fires and return our forests to healthy conditions. Some forests now have tree densities more than 15 times greater than historic conditions. Timber thinning and removal of dense build up of underbrush can ensure thriving forests while reducing risks of catastrophic fire.

Millions of acres need restoration work. These areas require extensive, sustained effort and partnerships to restore forests. Partnerships with forest management enterprises through stewardship contracts can augment available resources and expertise. The exchange of forest management by-products (small-diameter timber, underbrush, and other biomass) for services to thin forests and remove underbrush makes possible forest and woodland restoration that would otherwise be too expensive for agencies to undertake.

Good governance is a key part of the solution. Procedural delays and paperwork overload can stall fuel-thinning projects. Maintaining healthy forests requires active management and timely decisions.



Interior, working with the Forest Service, the Western Governors Association, the National Association of Counties, local governments, and Tribes has developed a 10-year comprehensive strategy to rejuvenate our forests. Finally, Interior and the Forest Service are implementing a number of changes to expedite planning, development, and implementation of projects that will reduce fuel loads in priority forests and rangelands.

Administrative Improvements: Under President Bush's leadership, the Federal land management agencies have implemented several administrative initiatives to help expedite projects to restore forest and rangeland health, as called for under the HFI, including:

- New procedures, provided for under the National Environmental Policy Act, to now allow priority fuels reduction and forest restoration projects identified through collaboration with State, local, and Tribal governments and interested parties to move forward more quickly;
- Guidance to Federal agencies makes consultations under the Endangered Species Act more timely and better accounts for long-term benefits to threatened and endangered species; and
- Guidance from the Council on Environmental Quality improves environmental assessments (EAs) for priority forest health projects. By early 2004, the agencies had completed EAs using the enhanced process on 13 of 15 pilot projects.

Stewardship Contracting: In December 2002, Congress enacted legislation expanding stewardship contracting authority, a key component of the HFI. The legislation allows Federal agencies to enter into long-term (up to 10 years) contracts with small businesses, communities, and nonprofit organizations to reduce wildfire risk and improve forest health.

- Long-term contracts foster a public/private partnership to restore forest and rangeland health by giving contractors the incentive to invest in equipment and facilities needed to productively use material from forest thinning to make useful wood products or to produce biomass energy, all at a savings to taxpayers; and

- The Forest Service and Bureau of Land Management have approved stewardship contracts using the new authority requested by the President and provided by Congress. In 2003, the Forest Service awarded more than 30 stewardship contracts and expects to award an additional 60 in 2004. BLM expects to carry out 39 stewardship contracts in 2004.

Record Amounts of Hazardous Fuels Restoration Work: With new tools, strong management, more funds, and better tracking of performance, agencies are accomplishing more on-the-ground results.

- In 2002, Federal land management agencies restored a record 2.25 million acres, an increase of a million acres over FY 2000 levels;
- In 2003, the agencies exceeded that level, restoring 2.7 million acres, including 1.6 million acres in the wildland urban interface; and





“Conservation, and especially the conservation of imperiled species, must be a partnership between the American people and their government. By making these grants, we are empowering citizens to restore habitat on their land and take other steps to protect and recover endangered, threatened, and at-risk species.”

Gale A. Norton, May 28, 2003

- From 2001-2003, agencies treated a total of 7 million acres. In FY 2004, the agencies plan to treat an additional 3.7 million acres (2.6 million under the National Fire Plan and 1.1 from other related activities), bringing the combined total since 2001 to nearly 11 million acres.

Improved Coordination: In 2002, the Departments of Agriculture and Interior formed the Wildland Fire Leadership Council to further implement the National Fire Plan and to combat wildland fires more effectively. The Council provides a coordinated, seamless management structure to all aspects of wildland fire policy under the Healthy Forests Initiative and integrates Federal fire activities with those of States, Tribes, and local governments, including land restoration and rehabilitation.



President Bush signs the Healthy Forests Restoration Act



Endangered and Threatened Species: Strengthening Incentives

Conservation Banking: In May 2003, Interior issued the first comprehensive Federal guidelines designed to promote the establishment of conservation banks, which ensure perpetual protection for endangered species that are adversely affected elsewhere. The banks are lands acquired by third parties, managed for specific endangered species, and protected permanently by conservation easements. Banks may sell a fixed number of mitigation credits to developers to offset adverse effects on a species elsewhere. Traditionally, developers have been asked to preserve a portion of the developed area, which can translate into scattered, small parcels of land. Conservation banks provide for much larger acreage, where species protection is more effective as well as more efficient.

Safe Harbor Improvements: In addition, Interior has proposed rule changes that provide greater private landowner protections under safe harbor agreements and improve procedures relating to enhancement of survival permits (actions intended to improve survival or habitat of a species). The safe harbor permit improvements will make the process easier to understand and will provide participating landowners greater certainty regarding their responsibilities as they protect species.

National Environmental Policy Act: Best Practices

Interior is incorporating administrative improvements and existing best practices into its National Environmental Policy Act processes across the Department. These improvements will help reduce conflict, enhance public participation, and expand “on-the-ground” results. The reforms cover a number of areas, including:

- Consensus-based management;
- Public participation;
- Community-based training;
- Use of integrated analysis;
- Adaptive management; and
- Tiered and transferred analysis.

Each of these concepts gives field staff tools to tailor their approach to the NEPA process to local needs and interests. These concepts will provide field staff with tools to tailor the NEPA process to community needs and interests. For example, the 500,000-acre Steens Mountain Cooperative Management and Protection Area will be collaboratively managed by the BLM and a new Steens Mountain Advisory Council to conserve, protect, and manage the long-term ecological integrity of the Steens Mountain area. Within this area, cooperative and innovative management projects will be maintained and enhanced among the BLM, private landowners, Tribes, and other public interests. Sustainable grazing and recreational use, including fishing and hunting, will continue where consistent with the purpose of the enabling legislation. The best known example of consensus-based management on BLM lands is the Las Cienegas



*Las Cienegas National
Conservation Area*

National Conservation Area near Tucson, in southeast Arizona. In the early 1990s, the BLM initiated a traditional planning process for creation of the Empire-Cienegas Resource Conservation Area. Poor planning, lack of public participation, and exclusion of private and State trust land parties in the process cut short the Federal process. Shortly afterwards, citizens, local government, and conservation groups concerned over



the health of Cienegas Creek Watershed and believing that any comprehensive approach to its restoration required inclusion of State trust and private lands, joined with the BLM to establish (with Congressional approval) the Las Cienegas National Conservation Area. Unlike other National Conservation Areas, the creation of Las Cienegas was driven from the bottom-up — by the collaborative Sonoita Valley Planning Partnership. It is a voluntary association of Federal, State, and local agencies, communities, organizations, and people who share a common interest in the future of land resources in the Sonoita Valley.

Grazing Rule Improvements

The Bureau of Land Management lands are managed for many recreation and productive uses, including grazing. The BLM manages 261 million acres of public land, of which about 160 million are authorized for grazing by some 18,000 permit and lease holders. The actual acreage grazed during any one-year period is less than 160 million acres because grazing use is affected by such factors as drought, wildfire, and permittee business decisions.

In December 2003, the BLM issued draft grazing regulations that will improve grazing management, enhance stewardship of the public lands, and allow for improved public participation in the planning process. The BLM continues to work with ranchers, recreation enthusiasts, the conservation community, and others to manage public lands in ways that accommodate both ranching and wildlife habitat needs on grazing lands.

The proposed rule would, among other things, ensure that BLM managers consider and document the social, cultural, and economic consequences of decisions affecting grazing. In addition, the rule would:

- Remove the current three-consecutive-year limit on temporary non-use of a grazing permit by allowing livestock operators to apply for non-use for up to one year at a time (whether for conservation or business purposes); and
 - Make clear how the BLM will authorize grazing if a grazing permit decision is stayed (postponed) pending administrative appeal.
- Allow the BLM and a grazing permittee to share title of permanent range improvements, such as a fence, well, or pipeline;
 - Require assessments and monitoring of resource conditions to support BLM evaluations of whether an allotment is meeting rangeland health standards;
 - Allow a more realistic timeframe (24 months rather than the current 12 months) for deciding on grazing-related actions needed to achieve rangeland health standards;



Abandoned Mine Lands Reclamation

Since enactment of the Surface Mining Control and Reclamation Act in 1977, Interior has partnered with States, Tribes, local governments, and others to reclaim over 225,000 acres of damaged and dangerous mine lands. Despite these accomplishments, dangerous abandoned coal mines remain within one mile of the homes of more than 3.5 million Americans. In Pennsylvania alone, at least 45 deaths and 19 injuries at abandoned mine sites have occurred in the past 30 years.

The primary impediment to completing reclamation of abandoned mines is the fundamental imbalance between the goals of the 1977 Act and the requirements for allocating funds under the Act. The statutory allocation formula limits the ability of the Office of Surface Mining to meet its primary objective of abating the highest-priority abandoned coal mines. The majority of funding in the program is distributed to States on the basis of current production. Yet there is no relationship between current coal production and the number of priority clean up sites in each State, which is a function of pre-1977 production.

Over the past 25 years, the allocation formula has enabled some States and Tribes to complete reclamation of all abandoned coal mines. Others are decades away from completing work on the most critical, high-priority sites. It is estimated to take 60



In eastern Tennessee, this photo from the early 1970s shows an unreclaimed contour mine. Without any reclamation, the dangerous unstable highwall is exposed and left to erode and pollute nearby streams.

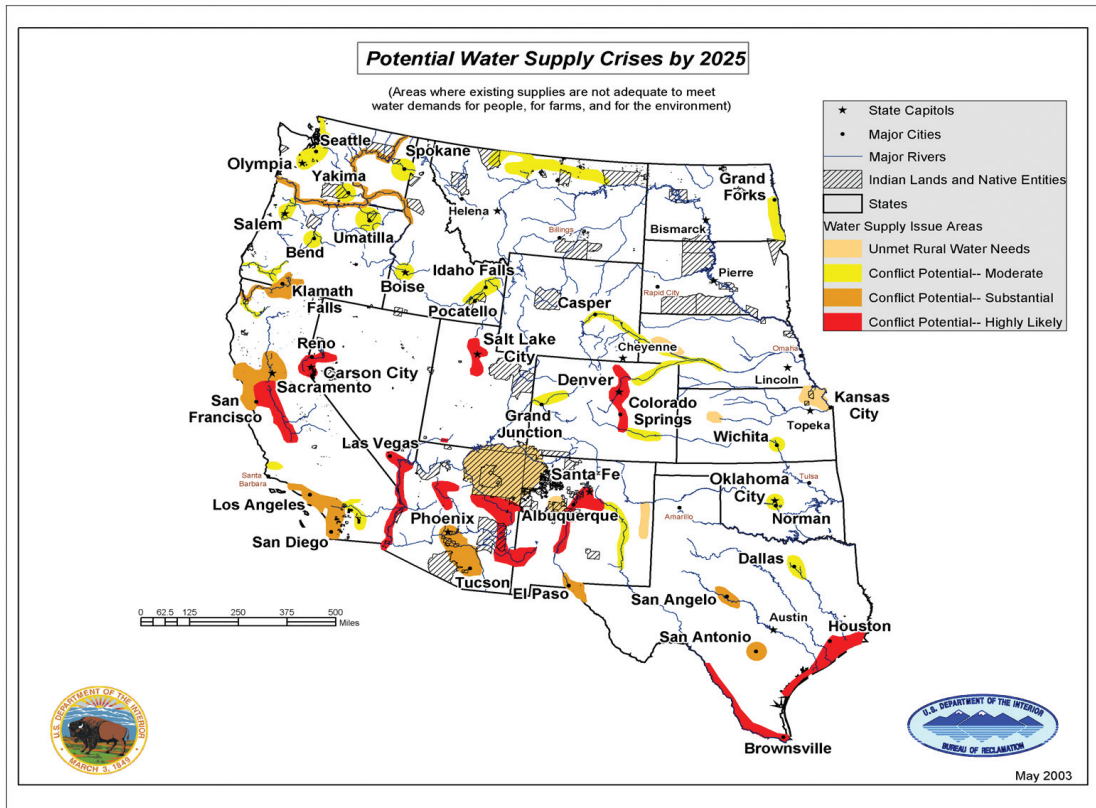
years to reclaim dangerous abandoned mine sites in Pennsylvania and 50 years in West Virginia under the current formula.

The Office of Surface Mining has proposed to correct this problem. Through proposed legislation, we will direct reclamation grants to sites where the danger is greatest. **The proposal will allow all States to eliminate significant health and safety problems within 25 years and would remove 142,000 people from risk annually.** At the same time, by shifting funds to speed resolution of serious health and safety problems, the proposal will reduce fee collections and spending by more than \$3 billion over the life of the program.

Under the proposal, States and Tribes that have certified completion of high-priority projects will be paid their accumulated State share balances in the abandoned mine lands fund as of September 30, 2004. These payments will be made over a ten-year period. Going forward, the grants would be distributed for high-priority mine reclamation projects.



Reclamation of an abandoned steep-slope mine under the AML program. The project eliminated the safety and environmental problems and restored the natural beauty of the area.



Expected water crisis areas by 2025 highlighted in Red, Orange, Yellow, and Brown.

Water 2025

Some areas in the Western United States receive less than one-fifth of the annual precipitation than other areas of the country. Adding explosive urban growth to existing uses in these areas increases pressure on a limited resource — water. Chronic water supply problems in the West will continue to challenge the Nation in the coming decades. Crisis management is not an effective way to address long-term water-supply challenges. Recent crises in the Klamath River and Middle Rio Grande River basins, where water shortages have affected Native Americans, farmers, urban residents, and fish and wildlife, vividly demonstrate the consequences of failing to address strategically the problem of competing demands for constricted water supplies. Water conflicts can have serious social, economic, and environmental impacts. Through Water 2025, the Department of the Interior will use these key

tools to help prevent future conflict and crises over water in the West:

- Water conservation and efficiency;
- Markets;
- Collaboration;
- Technology; and
- System optimization.

Improved water management requires knowledge of basin-specific problems. The Bureau of Reclamation analyzed potential water supply crises and conflicts by the year 2025. This analysis is based on a combination of technical and other factors, including population trends and potential endangered species needs for



water. The Department of the Interior has sought extensive input from States, Tribes, and the public on this analysis and expects that it will be revised and improved through this effort.

Water 2025 will foster conservation, enhance water supplies, and manage water resources in cooperation with States, communities, and Tribes. In some cases, collaborative approaches and market-based transfers can help communities meet emerging water needs.

Federal investments in research and development will provide more affordable water treatment technologies, such as desalination, to increase water supplies in critical areas. The 2005 budget includes \$20 million for the Bureau of Reclamation and \$1 million in the U.S. Geological Survey to implement Water 2025.

“Water 2025 provides a basis for public discussion of the realities that face the West, so that decisions can be made at the appropriate level in advance of water supply crises.”

Assistant Secretary Bennett Raley,
January 26, 2004



ACHIEVING RESULTS THROUGH PARTNERSHIPS

Everglades Restoration

The intergovernmental effort to restore the Everglades is the largest watershed restoration program in the world and is a model for collaborative conservation. In partnership with Federal, State, Tribal, and local governments, the Department of the Interior is moving forward with numerous projects to restore habitat, protect species, and improve conditions on hundreds of thousands of acres in southern Florida.

The Interior Department is achieving on-the-ground results. For example, the National Park Service has acquired virtually all the lands at Everglades National Park, thereby providing permanent protection for this important resource. At Dry Tortugas National Park, with the extensive involvement and support of commercial fisherman, a no-take zone/Research Natural Area was established to ensure the conservation of marine resources. At A.R.M. Loxahatchee National Wildlife Refuge, the State is partnering to increase efforts to control invasive exotics and restore habitat. Last year we treated 18,000 acres and plans are in place to treat 36,000 acres in 2004. A similar effort is underway at Everglades National Park where a partnership with Miami-Dade County is restoring 6,200 acres of habitat at a total cost to the county of \$75 million dollars. Furthermore, the invasive melaleuca plant has virtually been eliminated and reduced to controlled levels at Big Cypress National Preserve.

Improvements for water quality, water management, and endangered species require significant collaboration among many parties to achieve effective solutions. For example, implementation of agricultural best management practices and completion of storm water treatment areas are cleaning up the pollution and elevated nutrient levels entering the Everglades. Among many other collaborative efforts, we have worked with Indian River County to develop the county's first Habitat Conservation Plan to address the critical threats of coastal erosion on beach front properties and the conservation needs of nesting sea turtles. A Safe Harbor Agreement in the Florida Keys has been developed for the Schaus swallowtail butterfly and have initiated recovery efforts for the Key deer through population translocation.

The FY 2005 President's Budget proposes \$231 million for Interior and Army programs, an increase of \$24 million in total federal Everglades funding. The proposal for

Interior is \$106 million, which is \$36 million over 2004. With these funds, Interior agencies will continue to collaborate with our partners to preserve and improve natural habitat; protect and recover endangered and threatened species; support Tribal partners; and obtain the necessary science to guide decision-making.



Klamath River, Oregon

Klamath Basin Initiatives

Interior is working to find a long-term resolution to the conflict in the Klamath Basin involving water needs for farmers, endangered species, and Tribes. The President created the Klamath Basin Working Group in March 2002 to provide advice "on immediate steps and long-term solutions to enhance water quality and quantity, and to address other complex issues."

Accomplishments include:

- A proactive Trinity River flow release of approximately 33,000 acre feet of water in the fall of 2003 to aid salmon migration;
- A commitment to expand the water bank in 2004 and 2005;
- A pilot project with the Klamath Basin Rangeland Trust to test potential water savings and water quality improvement from irrigation reductions and cattle management in the Wood River Valley;



- Studies to evaluate options for increasing water storage capacity;
- Installation of fish screens to prevent entrainment; and
- Research to improve our understanding of the behavior and environmental needs of threatened and endangered species.

Through partnerships, Interior is restoring streams and wetlands in the upstream and downstream reaches of the Klamath River and its tributaries; removing the Chiloquin Dam, which impedes passage of endangered suckers and other fish to spawning habitat on the Sprague River; acquiring land to allow habitat restoration and increased water storage on land adjacent to Agency Lake Ranch to restore fisheries habitat and to create water banking; and enhancing water supply and water quality activities.

The Upper Klamath River Basin restoration initiative is an ongoing cooperative effort involving Federal, State and local agencies, tribal governments, public organizations, and individuals to restore the Klamath Basin ecosystem while fostering economic vitality. Watershed restoration activities in the Upper Klamath Basin emphasize on-the-ground activities, including erecting fences to control cattle grazing, excavating swales to reconnect oxbows to the river, and planting native trees and shrubs for shade and stream bank stabilization. These projects directly restore habitats for the Federally endangered Lost River and short-nose suckers, and the sensitive redband trout.

As part of our efforts in the Klamath Basin, the Partners for Fish and Wildlife program will restore 1,555 acres of wetlands and 55 miles of stream and shoreline. The Fish and Wildlife Service will also provide technical assistance to private landowners, resulting in improved water quality and potentially increasing water quantity.

Preserve America

On March 3, 2003, Mrs. Laura Bush, First Lady of the United States, announced the Preserve America initiative to encourage and support community efforts for the preservation and enjoyment of our cultural and natural heritage. In conjunction with the Advisory Council for Historic Preservation, the Department of the Interior, and Department of Commerce, Preserve America advances greater shared knowledge about the Nation's past, increases local participation in historic preservation, and acts as a stimulus of local economies through heritage tourism.

This call for citizen stewards will support community efforts to demonstrate sustainable uses of their historic and cultural sites, along with the economic and educational opportunities related to heritage tourism. Currently, 26 States have some form of heritage tourism program, a strong economic development tool that creates jobs and increases property values and tax revenues.

Preserve America acknowledges exceptional community examples by designating them as a Preserve America community, which provides national recognition for



Mrs. Laura Bush, First Lady of the United States

“Our Nation’s cultural and natural resources are important parts of our heritage. Preserve America will promote historic and cultural preservation and encourage greater public appreciation of our national treasures.”

Mrs. Laura Bush, First Lady of the United States
March 3, 2003



“Invasive species impact the lands and mission of the Interior Department across the Nation. Invasive weeds cover 1.5 million acres of National Park Service lands alone. Invasive species are a leading cause of species being listed as threatened or endangered with extinction. They diminish the value of BLM grazing lands, destroy wetlands in our National Wildlife Refuge System, and disrupt water delivery by the Bureau of Reclamation. They also impact our ability to enjoy recreational opportunities including hunting and fishing both on public and private lands.”

Gale A. Norton, October 30, 2003

communities that protect, use, and celebrate their heritage assets. Since First Lady Laura Bush announced the Preserve America community designation awards on September 15, 2003, approximately 150 applications have been received. As of May 1, 2004, close to 60 communities had been designated, representing approximately half of the 50 States.

Invasive Species Partnerships

Invasive species threaten the ecological and economic health of the Nation. Threats posed by the uncontrolled spread of invasive species include native species diversity loss and alteration of ecological structure and function. The costs associated with invasive species exceed an estimated \$100 billion per year. Invasive species eradication is difficult; an estimated 5,000 – 6,000 invasive species have already become established in the United States. In some cases, eradication will require traditional approaches as well as molecular, biological, and/or chemical defenses that have yet to be discovered. Strategies for the early detection of invasive species, spread prediction, and constricting pathways to introduction are important to prevent the establishment of further invasive species.

New High-Speed Models Improve Tracking and Forecasting of Invasive Weeds in Colorado

USGS, NASA, Colorado State University, and the Colorado Agriculture Experiment Stations developed the high-performance computing infrastructure required to analyze past, present, and future distributions of harmful invasive species in Colorado. The cooperators synthesized more than 30 different datasets for invasive weeds in the State and used a suite of predictive geostatistical models in a cluster-computing environment to document, map, and predict the locations of noxious weeds. The approach increased model performance by more than 1,000 times. Spatial models that took 16 days to run are now completed in less than five minutes. The investigators also developed and tested methods that successfully enabled several predictive models to run at the smaller scales used for decisions on management responses to weed invasions. These major technological advances are also facilitating development of a point-and-click process for assimilating data from new species reports, and re-running the models to obtain real time updates of weed distributions. When testing is completed, the project will provide the State’s first integrated database on weed distributions and a model for a national system for tracking and forecasting invasive weeds.



Invasive Species Success Stories within DOI

Tamarisk Treatment in Nevada

The Bureau of Land Management, in cooperation with local communities, the Fish and Wildlife Service, and “Outside Las Vegas”, a nonprofit organization, treated five acres of tamarisk in 2003 using mechanical methods. Because this area is part of the Southwest Willow Flycatcher nesting area, the treatment was planned and coordinated with the Fish and Wildlife Service. Limited treatment was done in 2003 due to the Southwest Willow Flycatcher-nesting season. This project was a high priority because the vegetation is in Condition Class 3. Fire regimes on these lands have been significantly altered from their historical ecosystem components, the threat from fire is high, and the fire threat to the wildland urban interface is high. The treatment also benefited other threatened and endangered species to the area such as the Wound Fin Minnow, Virgin River Chub, Yuma Clapper Rail, and Desert Tortoise. The project is the first in a ten-

part strategy to reduce hazardous fuels in the wildland urban interface along the Virgin River. A total of 95 acres of treatments are scheduled for 2005 and 100 acres per year for the next several years thereafter.



Tamarisk trees in lower Grand Canyon

Tide Turning in War on Melaleuca in Florida

The National Park Service at Big Cypress National Preserve recently celebrated the completion of the initial treatment of the exotic plant melaleuca within the 729,000 acre preserve in south Florida. Since efforts began, approximately 14.5 million stems have been eradicated. The battle will, however, continue.

Melaleuca was introduced to Florida in 1906 as an ornamental tree from Australia and was planted extensively to create forests in the swamp in the 1930s. It grows rapidly to 50-80 feet, soaks up large quantities of water, and out-competes native vegetation.

Also, in the Everglades, the mostly treeless “river of grass”, in some places has become the “river of trees”, a completely alien habitat to the plants and animals that have evolved to live in the Everglades. However, progress has been made. At one point, melaleuca infested more than 500,000 acres of the Everglades. Due to an effective multi-agency effort on Federal and State lands in the Everglades protection area, the infestation has been reduced to about 350,000 acres. The National Park Service has teamed up with the Florida Department of Environmental Protection for two projects that will allow for follow-up treatment and eventual total eradication of melaleuca. With initial treatments completed, follow-up treatments,



Melaleuca tree located in Big Cypress National Preserve, Florida

such as this partnership example, are imperative in order to protect our initial investments and prevent new growth from reaching a seed bearing state and re-infesting an area. To date, 1.4 million stems have been treated through the follow-up process, and with the two challenge cost share projects, approximately 3.5 times the acres originally envisioned will be treated.



Carbon Sequestration – Lower Mississippi Valley Initiative

The Fish and Wildlife Service is leading an effort which recognizes that hardwood forests are highly effective at naturally removing carbon dioxide from the atmosphere and sequestering it in forest biomass.

The Fish and Wildlife Service, in conjunction with private, State, and Federal conservation partners associated with the Lower Mississippi Valley Joint Venture, has achieved restoration of nearly 65,000 acres of bottomland hardwood forests involving over 120 projects on State and Federal refuges across the Southeast since 1999. Building on this success, the Fish and Wildlife Service has identified roughly 150,000 acres of inholdings within the established boundaries of National Wildlife Refuges in the Lower Mississippi Valley where they could enter into partnerships with industry to reforest the properties. Several projects are underway, and others are under consideration.



Before and after reforestation at Bushley Bayou, Louisiana

“With the generous support of our partners, we will be able to better manage wildlife habitat and provide recreational and educational opportunities for the public.”

Sam D. Hamilton
Southwest Region Director of the
Fish and Wildlife Service



BUILDING CAPACITY & MEASURING RESULTS

Monitoring Programs

Protecting the Nation's natural resources requires monitoring the relative health of flora, fauna, water quality, and air quality on public and other lands. The National Park Service, the Bureau of Land Management, the Fish and Wildlife Service, the U.S. Geological Survey, and the Bureau of Indian Affairs monitor and track the health of various plant and animal species and air and water quality throughout the lands managed by Interior. Monitoring programs assist Interior in identifying and addressing factors that cause detrimental impacts to natural resources. These programs also enable natural resource managers to make well-informed decisions while anticipating the potential implications for the vitality of the natural resources under their purview. In 2005, the President's budget request funds for the Natural Resource Challenge; funds the USGS Geographic Analysis and Monitoring Program; provides new funding to launch the BLM Resource Monitoring program; and increases funding for monitoring through the Fish and Wildlife Service Migratory Bird Management program.

Natural Resource Challenge

Through the NPS Natural Resource Challenge, the Department monitors conditions within park boundaries. Two key initiatives of the Natural Resource Challenge include vital signs monitoring and water quality monitoring. Vital signs monitoring tracks measurable features of the environment that indicate the health of park ecosystems, as well as the health of individual plant and animal species. Water quality monitoring tracks water conditions to preserve pristine waters and improve impaired waters in parks and surrounding areas. The NPS has developed a system of 32 multi-park, multi-agency vital signs and water quality monitoring networks sharing similar geographical and natural resource characteristics to complete this task.

The 2005 budget requests an additional \$4.1 million and \$500,000 for vital signs and water quality monitoring, respectively. The requested increase for vital signs monitoring will provide funding for six additional networks, or a total of 28 of 32 networks altogether. The 2005 budget increase for water quality monitoring will complete funding for the remaining seven of 32 water quality monitoring networks.



USGS Geographic Analysis and Monitoring Program

The U.S. Geological Survey's Geographic Analysis and Monitoring Program conducts geographic assessments to improve the understanding of the rates, causes, and consequences of natural and human-induced processes that shape and change the landscape over time. Scientists use socio-economic information, land remote sensing, and other natural science data to quantify rates, identify key driving forces, and forecast future trends of landscape change. Studies are conducted within a geographic context and at a range of spatial and temporal scales so that investigations provide comprehensive information needed to understand the environmental, resource, and economic consequences of landscape change.

The need for better information about causes and implications is especially evident for changes induced by fire, agricultural production, urbanization, forests maintenance, and other factors operating at broad regional scales. Studies are also being conducted about land surface change, environmental and human health, fire and urban ecology, and natural hazards.



Improved understanding and information about the consequences of landscape change are needed to help decision-makers in land-use planning, land management, and natural resource conservation.

BLM Resource Monitoring

Monitoring lies at the heart of cost-effective, accountable resource management informed by scientific information. The 2005 BLM budget request proposes a \$4 million increase to enhance BLM resource monitoring capabilities.

Successfully executing its multiple-use mandate and sustainably managing its natural resources require that BLM maintain information and trends on resource health. This information assists BLM in developing and revising long-term resource management plans and forms the basis for day-to-day, on-the-ground operational and permitting decisions. Recurring monitoring enables BLM to ensure that land use plans and management decisions are having their intended effect. It also allows BLM to practice adaptive management by providing feedback to resource managers so they can adjust actions, as necessary, to achieve the desired outcomes. The monitoring proposal builds on the \$1.9 million for resource monitoring included in the 2004 President's budget. It will build capacity for comprehensive monitoring of resource conditions is needed to support management decisions and to assess the impacts of restoration activities.



Pintails during migration

Migratory Bird Management

Currently, 38 percent of migratory bird populations face some sort of risk. The proposed \$4.6 million increase for this program in 2005 will provide more resources for the Migratory Bird Management program to fulfill its leadership role in conserving and managing migratory birds and their habitats at self-sustaining levels.

The year 2005 marks the 50th anniversary of the Fish and Wildlife Service Migratory Bird Management program, making these data sets among the longest running for any wildlife species on this continent. The primary purpose of the surveys is to collect information on population status that is necessary to make scientifically based regulatory decisions, especially in establishing annual hunting seasons for migratory game birds. Only through knowledge of the status and trends of species and their habitats can managers take appropriate actions. Proper management requires information such as population size and trend, geographical distribution, annual breeding effort, the condition of their breeding and wintering habitats, and for hunted species, the number of hunters and the anticipated harvest.

The data collected by the Migratory Bird Management program have been widely used by scientists from within and outside the Fish and Wildlife Service to understand both the importance of habitat integrity to maintaining healthy bird populations and how bird populations respond to annual and long-term variations in weather and climate. The long-term nature of these datasets makes them an invaluable tool for monitoring the health of the environment.

The 2005 proposal includes a \$2.1 million increase for survey and monitoring activities such as surveying, monitoring, and assessing shorebird, water bird, and land bird needs; improving migratory game bird harvest strategies and adaptive harvest management procedures; and expanding national migratory bird survey, monitoring, and assessment operations.



CONCLUSION

Thirty-four years after the first Earth Day, it is now time for the focus to be directed towards on-the-ground results. Cooperation and entrepreneurship — in the workplace, on the lands, in our forests — lie at the heart of environmental progress. Interior is encouraging environmental innovations like the use of ultralight aircraft to assist whooping cranes through their flyways to technological innovations in alternative energies to the many other opportunities for lightening our environmental footprint through new ideas and practices.

For generations, Americans have turned to their public lands for the recreation and enjoyment that they provide. The American people are giving back their time, effort,

and devotion to the same lands through their efforts in cooperative conservation. By doing so, they are fostering a culture of responsibility.

With a new environmentalism centered on cooperation, Interior and its many partners are finding common ground. As the next generation of Americans become involved, our Nation will have healthier lands and self-motivated citizen stewards.



King Salmon River

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