

# Mission Area One

## Resource Protection

Interior is the Nation's principal conservation agency. We manage over 500 million acres of public lands and 56 million acres of Indian trust lands. These assets are valued for their environmental resources, recreational and scenic merits, and vast open spaces. Our responsibilities also extend to monitoring and repairing damage done by past land use practices. The well-being of our land and water is critical to the ecology of our Nation.

Successful conservation works best in partnership with the American people. Our strategy is to empower Americans to become citizen-conservationists. Thousands of different cooperative projects are on-going today across our bureaus, based on collaborations with other Federal, State, and local agencies, public and private organizations, and private landowners. Interior can offer landowners, land-user groups, environmental organizations, communities, tribes, and companies the resources and technical support needed to undertake conservation projects that advance the health of the land, benefiting all of us.

The Department is charged with protecting thousands of native plant and animal species, including more than 1,300 with special status under the Endangered Species Act (ESA). The forests, mountains, and deserts house biological diversity that is critical to nature's survival and potentially impacts our own.

Interior also conserves the cultural and heritage sites that we have inherited that reflect a past as rich and diverse as our Country. The expanse of these assets includes tens of thousands of archeological sites, historical structures, and cultural and museum asset collections.

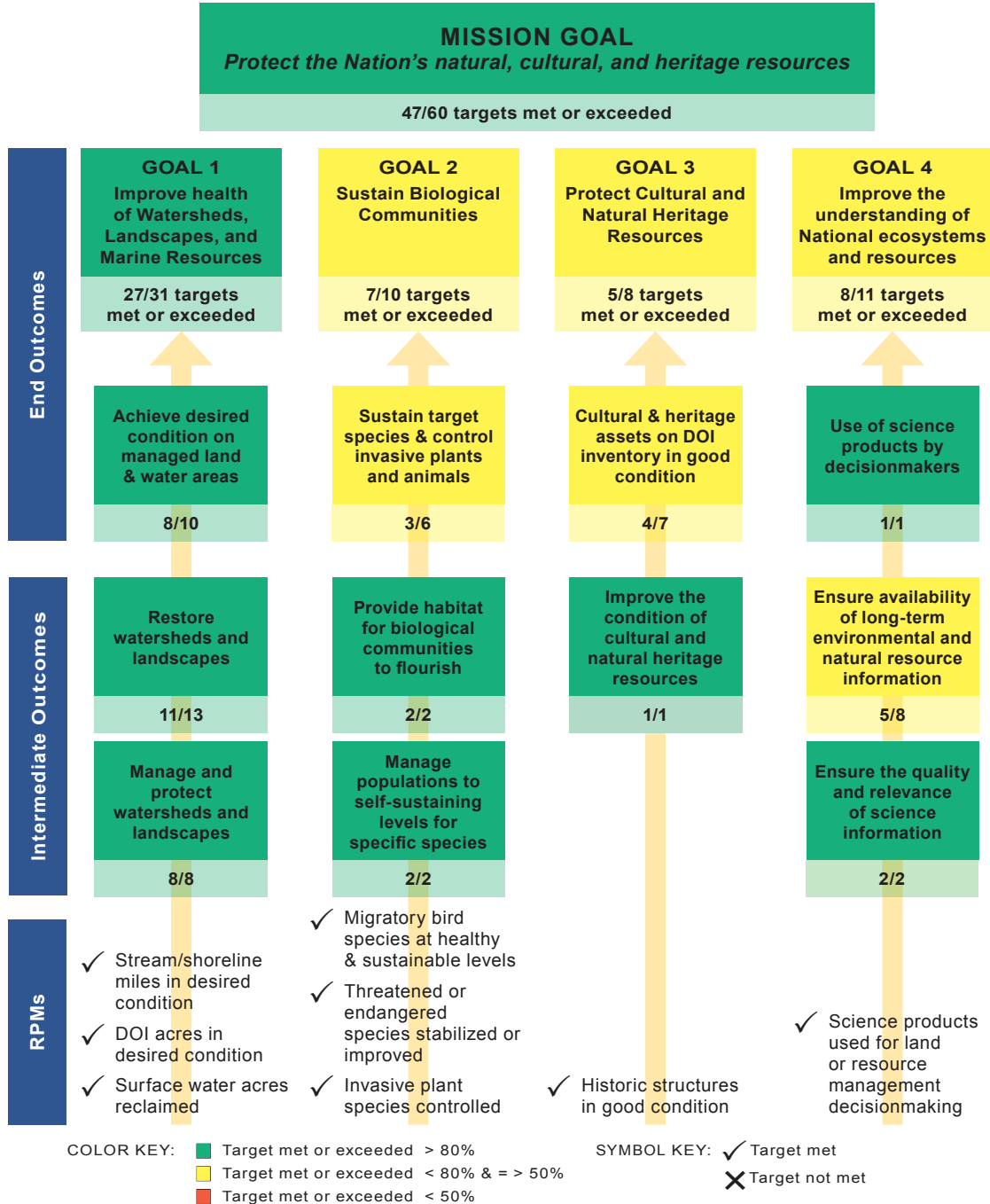
The Department is supported in the Resource Protection Mission Area by U.S. Geological Survey (USGS), the Department's principal science agency. USGS data contributes to sound land and resource decisionmaking through data collection and integration, as well as understanding, modeling, and predicting how multiple forces affect natural systems. Science lies at the foundation of our programs, including ongoing evaluation of their quality and relevance.

**Mission Area One: Resource Protection**

FIGURE 1-8

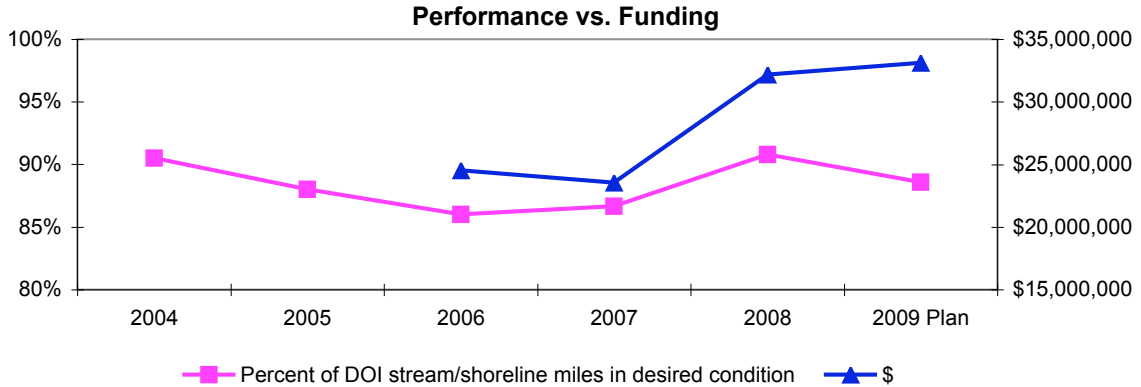
**RESOURCE PROTECTION**

*Resource Protection embodies a portion of Interior’s stewardship pact with the American people: to protect our natural resources—land and wildlife—as well as our inheritance of cultural and heritage assets. We preserve the past and protect the present with the goal of maintaining both for the future.*



Percent of stream/shoreline miles that have achieved desired condition where condition is known and as specified in management plans

FIGURE 1-9



ID #1614	2004	2005	2006	2007	2008	2009 Plan
Target				88%	89%	89%
Performance	91%	88%	86%	87%	91%	
Miles in desired condition	126,821	131,200	137,173	193,147	247,937	241,982
Miles with known condition	140,096	149,167	159,411	222,830	273,093	273,093
\$	Not Available		24,523,638	23,550,163	32,166,294	33,124,376

**Snapshot:** Performance increased this year, as did the denominator—the number of stream/shoreline miles where the condition is known. Funding has increased over time.

**Bottom Line:** The number of streams/shoreline miles whose condition has been assessed is rising due to improved ability to inventory shoreline condition. Current performance hovers around 90 percent of assessed stream/shoreline miles in desired condition. Recent funding increases should produce further improvement.

**Status:** Challenged Performance, due to the fact that performance has remained relatively flat over time as more miles are assessed and funding is on the rise. Although estimated FY 2009 funding for land condition is assumed to be greater than FY 2008, the target is lower because maintenance expenses are expected to increase more with time than the funding.

**Public Benefit:** Maintaining or improving the condition of stream and shoreline miles benefits fish populations, enhances wildlife habitat, and contributes to the balanced ecology of an area. The well-being of our Nation’s waterways is critical to the health of our land and ourselves.

There are three bureaus managing our streams and shorelines: Bureau of Land Management (BLM), National Park Service (NPS) and Fish and Wildlife Service (FWS). Overall progress is gradually inching upward, now at 91 percent. Change from a nonfunctioning riparian area to a fully functioning one takes anywhere from 5 to 20 years, so success is judged based on evidence that corrective actions taken are likely to succeed.

These bureaus are working to assess, record, and treat more and more streams and shoreline, as seen in the increasing number of miles reported in the table. The largest portion belongs to BLM with a little more than 143,000 miles. For BLM specifically, performance was flat while costs increased due to drought and the impact wild horses and burros have had on riparian areas.

FWS tracks about 67,300 miles and it showed the greatest performance improvement this past year. NPS established a new baseline in 2007, almost 63,000 miles, and it showed slight progress in improving stream/shoreline condition.

**Programs Supporting This Measure**

- BLM Resources Management
- BLM Wildlife Habitat Restoration
- NPS Natural Resource Stewardship
- FWS National Wildlife Refuge System



### Knotty Weeds

Japanese knotweed (*Polygonum cuspidatum*) is native to eastern Asia. It was first introduced as an ornamental into Europe in the early 1800s and spread to the United States by the late 1800s. Knotweed is found in over 40 states, including Alaska. It is challenging to control because it easily resprouts from even the smallest remnants of stems and roots. Knotweed is often found in moist and streamside locations forming dense stands. It can reach over ten feet in height, overshadowing and replacing native plants.

The Dickey River is located in northwest Washington flowing through Olympic National Park. Knotweed had become the dominant streamside vegetation along most of the river, including the tidal estuary flowing into the Pacific. In some locations, the knotweed mats were so dense that they altered the natural hydrology of the river system. The NPS and Quileute Tribe have joined forces to restore the river. Over the past three years, the entire length of the river has been treated, including six miles within Olympic National Park. Native vegetation of conifers, willows and carexes are beginning to come back and the river is returning to its natural course.



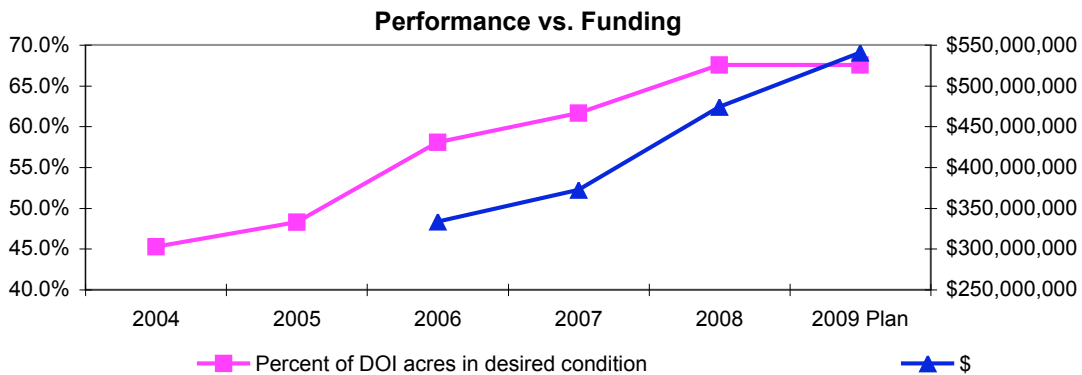
Before



After

Percent of DOI acres that have achieved desired condition where condition is known and as specified in management plans

FIGURE 1-10



ID #1465	2004	2005	2006	2007	2008	2009 Plan
Target				60.6%	66.5%	67.6%
Performance	45.3%	48.3%	58.1%	61.6%	67.6%	
Acres in desired condition	118,862,916	127,055,258	200,715,412	212,179,054	260,195,301	260,140,604
Acres with known condition	262,659,257	263,115,511	345,580,083	344,308,411	385,005,230	385,005,230
\$	Not Available		333,382,810	372,177,563	474,239,250	540,842,916

**Snapshot:** Almost 48 million more acres were determined to be in desired condition. Each year the percent of acres in desired condition has climbed.

**Bottom Line:** The 6 percent increase over FY 2007 shows an upward trend that is expected to continue in the long term, especially as more funding is applied. BLM, the bureau that manages the most acreage and portions the most funds to this activity, is expected to receive support from the Healthy Lands Initiative in FY 2009. While increasing maintenance expenses challenge performance for 2009, improvements are expected in subsequent years.

**Status:** Challenged Performance, due to the total amount of acreage Interior manages, 500 million acres, compared to the 385 million acres that have been assessed. Also, Interior bureaus continue to assess more acreage annually to determine the known condition—41 million more acres from 2007 to 2008. Increased maintenance expenses also challenge performance.

**Public Benefit:** Interior—the Nation’s principal conservation agency— manages over 500 million acres of public lands and 56 million surface acres of Indian trust lands. Land in desired condition is valued for its environmental resources, recreational and scenic merits, and vast open spaces, which contribute to public enjoyment and health.

Three bureaus contribute to DOI lands achieving desired condition: BLM, FWS and NPS. BLM manages, by far, the most acreage—256 million acres primarily in the 12 western States, including Alaska. Interior launched the Healthy Lands Initiative (HLI), a multiyear program, in 2007. The purpose of the HLI is to accelerate large-scale,

focused habitat restoration, increase productivity, preserve diversity, and respond to a multitude of pressures on public lands, one of which is the rising demand for access to energy resources. Using HLI funding, the BLM treated over 55,000 acres in FY 2008; however, all acres treated do not reach desired condition in the first year. Currently BLM has 57 percent, or over 145 million acres, in desired condition through both HLI and other funding.

FWS manages the 96 million-acre National Wildlife Refuge

**Programs Supporting This Measure**

- BLM Resources Management
- BLM Wildlife Habitat Restoration
- NPS Natural Resource Stewardship
- FWS National Wildlife Refuge System



### Wetland Restoration Work

Upper Halstead Meadow, Sequoia National Park

Halstead Meadow is a 25-acre wet meadow—a rare and highly visible wetland habitat that developed severe erosion gullies 12–15 feet deep. The gullies caused a lowered water table, drying of wetland soils, dieback of wetland vegetation, and sent tremendous amounts of sediment downstream.

NPS and partners developed a pilot restoration design for upper Halstead Meadow in 2006, and earthmoving began in Fall 2007. Contractors placed and compacted 8,000 cubic yards of fill into the gullies to restore the original topography and remove the drainage impacts. Taking a hint from nearby undisturbed meadows, NPS had the contractors drop large trees across the site, perpendicular to flow, to spread surface water and minimize channelization.

In May 2008, international volunteers from American Conservation Experience helped repair some erosional features and prepare the ground for planting. In June 2008, more than 53,000 native wetland plants were installed by contractors, volunteers, and park staff. Monitoring in 2008–2009 will help NPS evaluate pilot project methods and plan restoration of lower Halstead Meadow.



Before



After

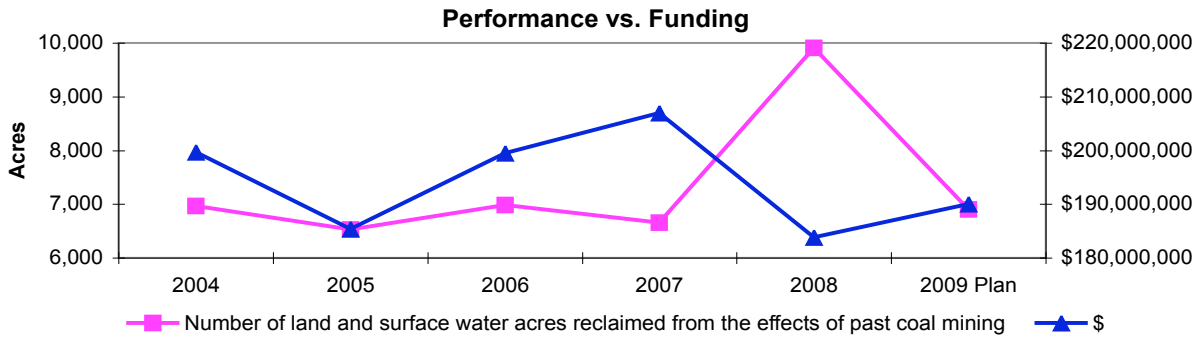
System. In FY 2008, 10 million more acres reached desired condition, for a total of more than 87 million acres or 92 percent.

NPS established a baseline last year of over 20 million acres which increased to nearly

34 million acres in FY 2008 as more parks conducted assessments of the land they manage. Eighty-two percent of Park Service acres are in desired condition.

Number of land and surface water acres reclaimed or mitigated from the effects of natural resource degradation from past coal mining

FIGURE 1-11



ID #1468	2004	2005	2006	2007	2008	2009 Plan
Target				6,900	6,900	6,900
Performance	6,965	6,533	6,983	6,658	9,909	
\$	199,722,508	185,335,814	199,514,683	206,985,032	183,813,000	190,000,000

**Snapshot:** Performance spiked in 2008 as a particular State finished an existing backlog of water line replacements. Funding declined due to reallocation of funds to other OSM activities in 2008 but is expected to rebound in future years per the SMCRA Amendments of 2006.

**Bottom Line:** Due to the time it takes to implement reclamation or mitigation actions, changes in performance are generally realized at least a year after a change in funding. Consequently, the projected FY 2009 target will remain constant.

**Status:** Sustained Performance.

**Public Benefit:** Restoring acreage to its former state benefits the communities near such sites. Reclaimed land is free of health and safety hazards to the local population and is returned to productive use.

The total magnitude of the abandoned mine problem is difficult to assess, but the Office of Surface Mining (OSM) has developed a national inventory that contains information on over 19,000 problem areas associated with abandoned mine lands, mostly coal. Coal mining disturbed more than one million acres of land prior to 1977. Environmental problems include water pollution, open portals and pits, land stripped of natural vegetation, and refuse piles. Through reclamation, our land and water resources are improved for beneficial uses such as agriculture, wildlife habitat, or development. Mine site cleanups not only improve our environment but also safeguard people and property. OSM administers the

Abandoned Mine Land Fund by collecting fees on each ton of coal produced.

OSM, through its State partners, is making steady progress in reclaiming degraded land and exceeded this year's reclamation target of 6,900 acres. The target for next year will remain 6,900 because of the anomaly in 2008 results due to a particular State's focus on water line replacements that will not continue. However, long-term performance is expected to increase dramatically to reflect the increase in mandatory funding provided to States by law under the 2006 SMCRA Amendments.

**Programs Supporting This Measure**

OSM State Managed Abandoned Coal Mine Reclamation





### Reforestation of Mined Lands

Most of the land mined for coal within the eastern United States and Pacific Northwest was once forested. The coal fields of the eastern United States lie within the largest and oldest deciduous forests on Earth. Increases in surface coal mining have led to substantial forest fragmentation, loss of wildlife habitat, and increased flooding due to higher peak runoff from reclaimed areas. OSM, in cooperation with several States, initiated the Appalachian Regional Reforestation Initiative (ARRI). ARRI is a team of State, Federal, and university employees that have partnered together to plant more high-value hardwood trees on reclaimed coal mined lands in Appalachia. Land reclamation over the past 30 years has emphasized creating smoothly graded slopes with heavy ground cover to protect against erosion. Reestablishing trees had little success. Through ARRI, OSM promotes reforestation of mined land using the scientific 5-step Forestry Reclamation Approach.

Sixteen Arbor Day events were held in 2008 and 28,000 trees were planted by 750 students. The benefits of reforestation are substantial: trees minimize soil erosion, remove carbon dioxide from the air, provide wildlife habitat and diverse plant species, and help conserve water resources.



*Before*



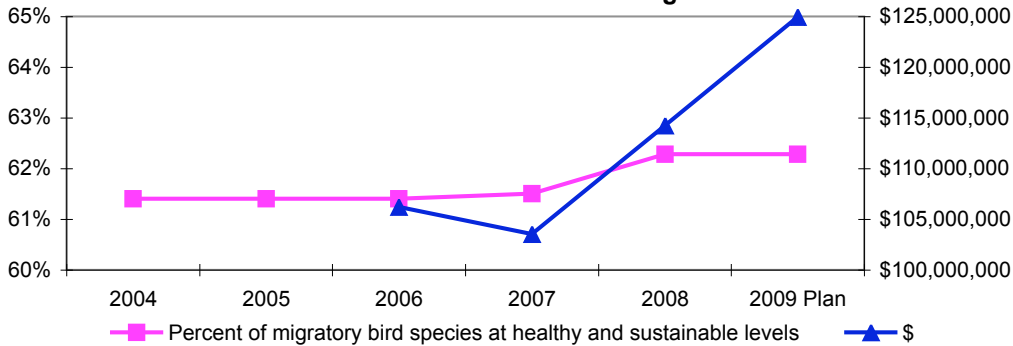
*After*

*Before and after planting 1,000 backcross American chestnut seedlings and 1,000 American chestnut seeds in Ohio.*



Percent of all migratory bird species that are at healthy and sustainable levels

FIGURE 1-12  
Performance vs. Funding



ID #1491	2004	2005	2006	2007	2008	2009 Plan
Target				62%	62%	62%
Performance	61%	61%	61%	62%	62%	
Number at healthy and sustainable levels	561	561	561	561	568	568
Number of species	913	913	913	912	912	912
\$	Not Available		106,199,619	103,520,674	114,226,169	124,936,776

**Snapshot:** Performance improved with seven more species brought to healthy and sustainable levels in FY 2008.

**Bottom Line:** Performance is steady at 62 percent while funding is rising. The potentially beneficial effects of increased funding will not be realized for several years.

**Status:** Challenged Performance, due to uncertainties about the effects that increased funding will have on program performance, as large, unanticipated changes to the natural environment can play a significant role in achieving success.

**Public Benefit:** Long-term conservation of migrating birds allows the public to study, use, and continue to enjoy them. Birds are also a valuable part of a healthy environment, which benefits everyone.

The Fish and Wildlife Service is the lead Federal agency for migratory bird conservation. In FY 2008, about 568 species out of 912 were at healthy and sustainable levels. Vital for understanding and addressing species conservation needs are reliable information on population size, distribution during breeding and nonbreeding periods, habitat requirements, survival rates and reproductive success. As with the DOI Threatened and Endangered Species measure, many years are required to make a measurable difference in population levels, which is why achieving success

on seven species in 2008 is considered a substantial accomplishment.

The Migratory Bird Management Program aims to remove or reduce harmful threats to birds and to also develop focused management action plans that will accomplish the Service’s conservation mission. Between 2006 and 2008, conservation action plans were completed on eight focal species. The plans identify threats to a species, high priority conservations needs, limiting factors, partners, and projected implementation costs.

Support for this program also comes in the form of the 96-million acre network that makes up the National Wildlife Refuge System—providing



**Programs Supporting This Measure**

- FWS Migratory Bird Management
- FWS National Wildlife Refuge System
- FWS Habitat Conservation

### Tracking Timberdoodles

Woodcock management relies on reliable annual population estimates, but woodcock are tough to find and count because of their coloration, small size, and preference for areas with dense vegetation. However, they're easy to hear. The American Woodcock Singing Ground Survey (SGS), initiated in 1968, was developed to track these reclusive birds.

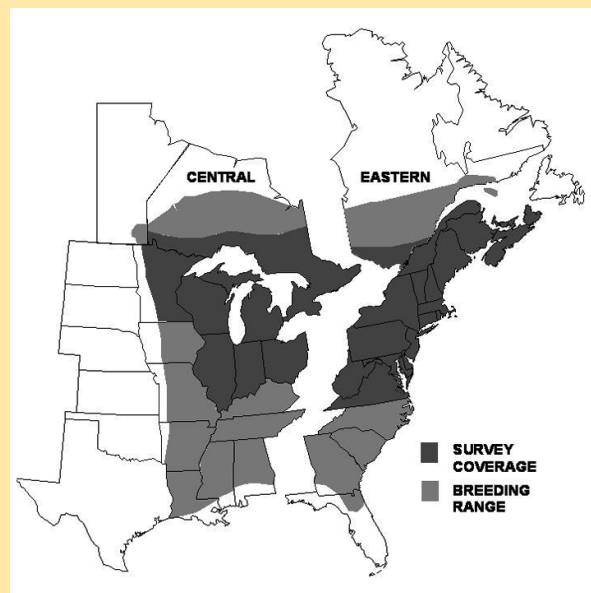
Woodcock, also called timberdoodles, mud-suckers and mud bats, are best known for their spectacular spring courtship flights at dusk. Sitting in his territory—his singing ground—the male sings a nasal “peent” every five seconds. After about 20 peents, he bursts into flight, spiraling high into the sky. He sings to waiting females, returning to the same spot after each flight, and repeats this several times.

In late April and early May, during mating season, observers drive along randomly chosen roadside routes in the central and northern portion of the breeding range and record the number of woodcocks heard peenting. The SGS consists of about 1,500 routes, each with 10 designated listening points, along 4 miles.

Woodcock populations have been in decline over the past 40 years. Most experts attribute the decline to habitat loss. Historical population levels, as derived from the SGS, form the basis of the American Woodcock Conservation Plan. The conservation plan goals are to halt woodcock decline by 2012 and achieve positive population growth by 2022. Woodcock populations have generally stabilized in most areas over the past 10 years, which coincides with the implementation of more conservative hunting seasons. The woodcock is an example of how long it takes to reverse a species in decline.



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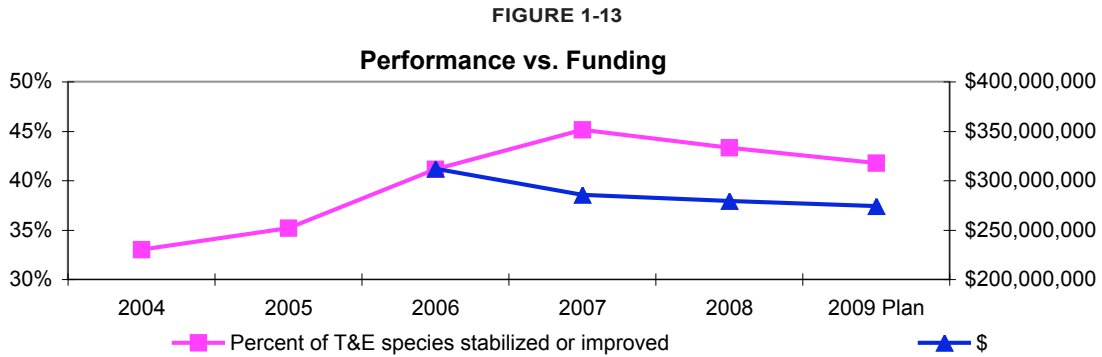


critical habitat for migratory birds. The System's wetland habitats are essential to the survival of waterfowl and other migratory bird populations.

Looking ahead to 2009, the Service will continue to implement the President's Migratory Bird Initiative.

The program has targeted almost 30 additional focal species for which it intends to complete action plans by the end of FY 2009. The refuge system will restore about 200,000 acres to benefit migratory birds and other species.

Percent of threatened or endangered species that are stabilized or improved



ID #1695	2004	2005	2006	2007	2008	2009 Plan
Target				47%	42%	42%
Performance	33%	35%	41%	45%	43%	
Species stabilized/improved	413	442	522	573	549	529
Number of species	1,252	1,256	1,269	1,269	1,267	1,267
\$	Not Available		312,030,262	285,255,306	279,195,713	274,056,314

**Snapshot:** Performance has been increasing generally with a peak in 2007, while funding being spent decreased.

**Bottom Line:** Restoring a species to the point that it is removed from the threatened and/or endangered list takes time, as typically a species is found throughout a large portion of the country. Successes are considered significant, such as the bald eagle in FY 2007 and the brown pelican this year. The application of people and effort is only part of the solution, while the availability of habitat, natural conditions, and time to reestablish a breeding population through several generations are essential elements not directly under the control of the program.

**Status:** Challenged Performance, due to the time it takes for corrective actions to be implemented and take effect.

**Public Benefit:** The Department is charged with protecting thousands of native plant and animal species, including more than 1,000 with special status under the ESA and nearly 300 candidate species. The forests, mountains, and deserts house biological diversity that is critical to overall ecosystem health, and potentially impacts our own survival.

Reducing the number of plants and animals on the Endangered Species list to a point where they are secure, self-sustaining components of their ecosystem is a challenging task. Reversing declines, stabilizing populations, and achieving recovery goals requires coordinated actions from many partners over a lengthy period. While the funding presented covers only the FWS program, ultimate success for a species involves the efforts of many beyond the FWS and the other DOI bureaus. Of the species that are listed, FWS has

recovery plans for 80 percent of them, a significant step toward Interior’s goal of Sustaining Biological Communities.

FY 2008 performance was slightly better than predicted primarily because of recent relief from the drought in the southeastern United States. For that reason, the current target for FY 2009 will be reevaluated to determine whether it should be revised.

Following delisting of the bald eagle and Idaho spring snail in 2007, this year Interior delisted the brown pelican, a species that underwent a remarkable



**Programs Supporting This Measure**

- FWS Endangered Species
- FWS National Wildlife Refuge System
- FWS Habitat Conservation



### A Wonderful Bird is the Pelican...

Initially, efforts to protect the brown pelican led to the birth of the National Wildlife Refuge System more than a century ago in central Florida, when a German immigrant, Paul Kroegel, was appalled by the indiscriminate slaughter of pelicans for their feathers for use in women's fashion, especially hats. He convinced President Theodore Roosevelt to sign an Executive Order protecting the birds on Pelican Island in 1903—the first unit of what eventually became the National Wildlife Refuge System.

The pelican's recovery is due in large measure to the Federal ban on the general use of the pesticide DDT in 1971, after former FWS biologist Rachel Carson published *Silent Spring*. When pelicans ate fish

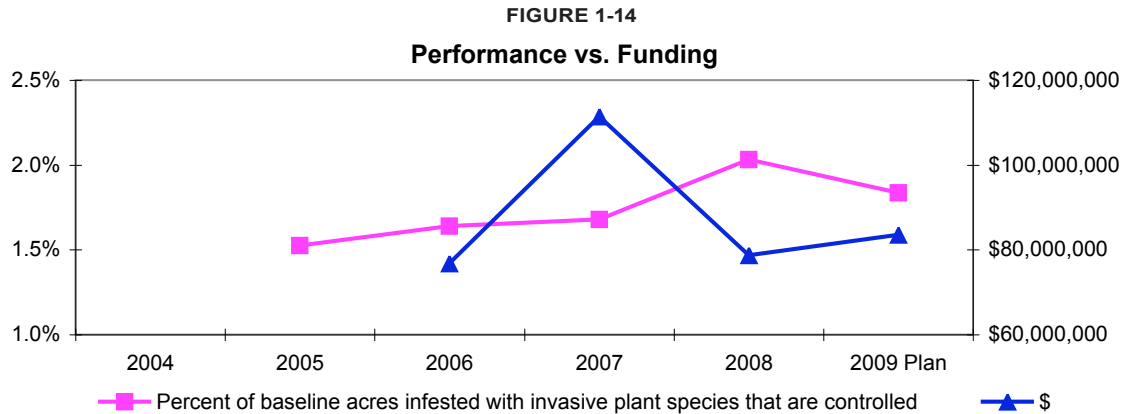
contaminated with DDT, the eggs they laid had shells so thin that they broke during incubation. The population plummeted due to lack of breeding success.

Louisiana, long known as the Pelican State, has been a key partner with FWS in efforts to recover the pelican in the Gulf Coast region. A restoration project was started in 1968 when 1,276 young pelicans were captured at sites in Florida and released at three sites in Louisiana during the 13 years of the project. The extraordinary efforts of State wildlife agencies in Florida, Texas, and Louisiana, partnering with FWS, accelerated the pace of recovery by protecting nest sites during the breeding season. FWS now estimates the global population at 650,000 brown pelicans.

recovery from the brink of extinction. FWS prepared a draft Endangered Species Strategic Plan that is scheduled for implementation in FY 2009. The Plan is a pivotal management tool for recovering and conserving imperiled species. This new plan

provides for partnering with private landowners, States, and tribes to expand collaborative conservation efforts, that reach beyond the borders of DOI lands and ask for more citizen action to meet the increased need for help.

Percent of baseline acres infested with invasive plant species that are controlled



ID #444	2004	2005	2006	2007	2008	2009 Plan
Target				1.53%	1.57%	1.83%
Performance		1.53%	1.64%	1.68%	2.03%	
Acres controlled	No Report	615,991	667,640	633,208	791,667	714,510
Baseline acres infested		40,364,819	40,725,678	37,717,610	38,943,435	38,942,918
\$		Not Available	76,723,551	111,398,575	78,705,926	83,577,859

**Snapshot:** Performance increased by almost 160,000 acres under control. It is not clear that added funding is the solution to the seriousness of the problem.

**Bottom Line:** While 160,000 acres is a sizeable area, it is only a tiny fraction of the almost 40 million infested acres. The robust nature of invasives and their ability to spread rapidly present a challenging situation, especially with a constant level of people working to combat this threat. This is an area that needs serious strategic reconsideration.

**Status:** Positive Performance.

**Public Benefit:** Invasive plants can spread into and dominate native plant systems and disrupt the ability of the system to function normally. They choke waterways, modify soil chemistry, degrade wildlife habitats, and invade grazing lands. Controlling infested acreage is critical to land and water productivity and health.

Invasives introduced into the United States from around the globe are affecting plant and animal communities on our farms, ranches, and coasts; and in our parks, waters, forests, and backyards. Human activity such as trade, travel, and tourism have all increased substantially, increasing the speed and volume of species movement to unprecedented levels. Eradication of widespread

invasive plants may not be feasible according to the National Invasive Species Council (NISC).

In FY 2008, a rundown of bureau efforts shows BLM, with by far the largest amount of land infested at 35 million acres, brought 1.25 percent, or 436,698 acres under control. The FWS refuge system controlled 341,467 infested acres out of a total 2.3 million acres, or about 15 percent. Reclamation, with about 6,700 infested acres, has a total of 95.5 percent of total acreage under control. NPS performance brought approximately 7,000 acres out of 1.6 million under control. Each bureau spends different amounts for

**Programs Supporting This Measure**

- BLM Wildlife Habitat Restoration
- BLM Resource Management
- NPS Natural Resource Stewardship
- FWS National Wildlife Refuge System
- BOR Water Management & Environmental Mitigation



### Dunes Restored

Humboldt Bay National Wildlife Refuge in California is in the midst of a 5-year, \$600,000 restoration of the Ma-le'l Dunes Unit. The restoration expands work already carried out at the adjacent Lanphere Dunes Unit—recognized as the most pristine dune ecosystem in the Pacific Northwest.

The key ingredients needed to build a dune system include a source of sand, a shoreline perpendicular to the prevailing winds and a low landscape over which dunes can migrate. In addition, plant species that are adapted to survive the drying winds and shifting sands are needed to help shape and build the dunes. Stretching along a thin 34-mile section of coast, this unique and vulnerable area encompasses a variety of wildlife habitats and is home to two endangered plant species, the Humboldt Bay wallflower and the beach layia.

The work is funded by a FWS Challenge Cost Share grants with the California Department of Corrections. At Ma-le'l Dunes, refuge staff has manually removed invasive European beachgrass, iceplant and yellow bush lupine. The invasives inhibit sand movement and upset the ecological balance. The California Department of Forestry and Fire Protection



*Before*



*After*

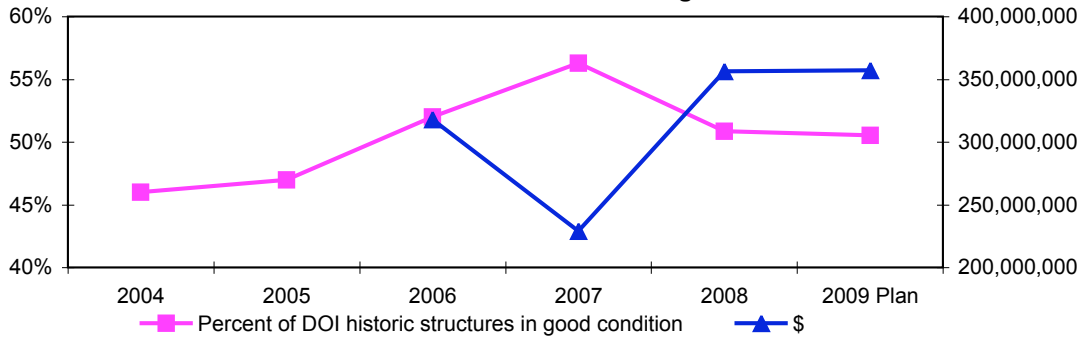
prison crews, California Conservation Corps, and volunteers are providing labor. Restoring these acres to desired condition better preserves the dunes, as well as the two endangered plant species, and the habitat of a small shorebird listed as threatened—the snowy plover.

treatment depending on where the land is located, its condition, and what species are impacted by treatments. Land located in one of our national parks might require alternative treatments and cost more per acre compared to the open spaces of BLM-managed land.

Strategies for Interior's treatment of invasive plants could change with the efforts coordinated through NISC's new 2008–2012 National Invasive Species Management Plan. Under this Plan, control and management efforts will be evaluated. At this point, the added attention to evaluation is needed to determine treatment success.

Percent of all historic structures on DOI inventory in good condition

FIGURE 1-15  
Performance vs. Funding



ID #1496	2004	2005	2006	2007	2008	2009 Plan
Target				46%	50%	51%
Performance	46%	47%	52%	56%	51%	
Structures in good condition	12,102	12,660	13,788	15,043	15,555	15,463
Structures on DOI inventory	26,585	26,879	26,630	26,731	30,586	30,604
\$	Not Available		318,018,235	229,169,045	356,208,109	357,230,747

**Snapshot:** Performance was lower in FY 2008 than in FY 2007. While funding had decreased through 2007, additional funding was provided to NPS for historic structures in 2008.

**Bottom Line:** While the number of structures in good condition has increased, the overall percentage has decreased as more structures continue to be assessed and added to the inventory. Performance is expected to start increasing once the inventories at BLM and IA are completed.

**Status:** Challenged Performance, due to lack of a complete inventory of structure conditions and competing bureau priorities.

**Public Benefit:** Interior conserves the Nation’s cultural and heritage sites that reflect a past as rich and diverse as our country. DOI safeguards our heritage for the generations that follow, to better understand our country and learn from our past.

Interior maintains over 30,000 historic structures among four bureaus—NPS, BLM, FWS and BIA. Overall aggregate performance has decreased from last year. Deterioration over time lowers the status of these sites. The drop in performance in 2008 is due to adding about 4,000 units to the inventory while less than 300 of those were rated in good condition. Good condition means that a site is intact, structurally sound, stable, and maintains its character and material. Each site must be assessed before its condition can be documented.

The largest proportion of sites is found in our national parks, where, in FY 2008, 15,176 of the 27,865 historic structures were in good condition. The National Park Service Centennial Challenge Initiative, begun in FY 2008, will continue to fund preparation for the 100th anniversary of NPS in 2016.

BLM has begun to compile a database of historic structures. The FY 2008 compilation of 362 structures shows 182 in good condition, a slight increase over 2007. The rate of performance can be attributed to the amount of work necessary to restore recent additions to the list—more time and effort is required for the structures in poorer condition.

**Programs Supporting This Measure**

- NPS Cultural Resource Stewardship
- FWS National Wildlife Refuge System
- BLM Resource Management
- BIA Trust-Real Estate Services



### Restoration of Old State House

The Old State House was the center of Boston's civic life in the 18th century and the scene of some of the most dramatic chapters leading up to the American Revolution. Within these walls, Samuel Adams, James Otis, John Hancock, and John Adams debated the future of the British colonies. Just outside the building, five men were among the first casualties of the battle for independence, in what would later be known as the Boston Massacre. The Declaration of Independence was proclaimed from the balcony to the citizens of Boston in 1776. After the American Revolution, the building served as the first statehouse for the newly formed Commonwealth of Massachusetts.

During the initial restoration phase, the wood tower was completely rebuilt and restored, and the dome and weathervane were regilded, restoring them to their 18th-century splendor. More funds have been awarded in Centennial Initiative funding to begin an additional project to repair windows and finish sealing the building against water penetration, correct the humidity problem with a redesigned heating, ventilating, and air conditioning (HVAC) system, and complete handicap accessibility.



*Old State House, Boston, Massachusetts*

History was made here, and preserving this landmark is part of the Department's mission to preserve our cultural heritage.

FWS reports 2,219 historical structures are located on refuges. Performance was minimal, with 134 structures in good condition, in that FWS' first priority is always directed toward conserving fish and wildlife.

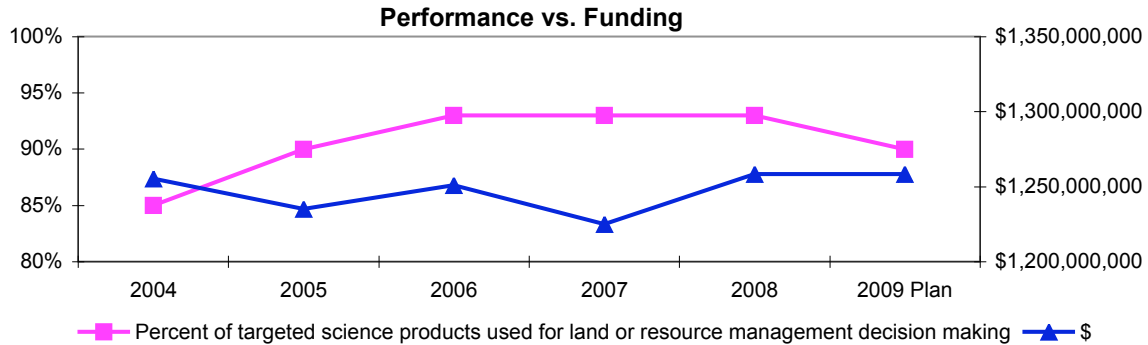
IA remains unable to report the condition of most of its historic structures at this time. Contracts, however, are underway in 3 of its 12 administrative regions to identify and evaluate which of its

approximately 1,000 candidate structures are considered historic. Fifty years or older is the mark for consideration according to the National Historic Preservation Act. A similar contract for a fourth region, with approximately 340 potentially historic structures, is expected to begin in FY 2009. In-house personnel are working on identifying which of 255 potentially historic structures distributed among the remaining eight regions qualify as historic.



Percent of targeted science products that are used by partners for land or resource management decisionmaking

FIGURE 1-16



ID #1508	2004	2005	2006	2007	2008	2009 Plan
Target				90%	90%	90%
Performance	85%	90%	93%	93%	93%	
\$	1,255,351,787	1,235,042,130	1,251,015,129	1,224,776,955	1,258,289,675	1,258,289,675

**Snapshot:** Performance continues to be in the 90th percentile. Total costs are dependent on the number and scope of the studies undertaken by USGS in any given year.

**Bottom Line:** Performance is consistently high and is tracked by surveys of customers and partners. Funding remains at a fairly constant level with a recent increase in 2008-2009. Efficiencies have been incorporated through recent advances in research and computer technology, and through streamlining analyses.

**Status:** Sustained Performance.

**Public Benefit:** USGS data contributes to sound land and resource decisionmaking, as well as understanding, modeling, and predicting how multiple forces affect natural systems. USGS expertise is instrumental to ensure the sustainability of wildlife and habitats in energy development areas.

USGS provides its findings to other DOI and Government agencies to help in their natural resource planning and decisionmaking. Most recently USGS has increased its focus on the HLI to address the challenge of conserving the Nation's most at-risk natural resources in light of explosive population growth and significant increases in energy development on public land in the West.

Starting in 2007, USGS redirected funding to support the Initiative with a focus on Green River Basin in Wyoming, one of the areas with the largest onshore natural gas reserves in the country. USGS, BLM, and FWS, joined forces to tackle the issues at this complex wildlife-energy interface using a science-driven approach.

USGS brought its portfolio of science expertise to help decisionmakers build and implement adaptive management solutions. New funds received in 2008 accelerated completion of two new systematic analyses to evaluate treatment for sage habitats and develop options for the benefit of the sage grouse. Completion of ecological assessment in future years will provide the information and knowledge to ensure the

**Programs Supporting This Measure**

- USGS Geographic Research & Remote Sensing
- USGS Water Information Collection & Dissemination
- USGS Biological Information
- USGS Water Resource Research
- USGS Coastal & Marine Geology
- USGS National Cooperative Mapping Program
- USGS Biological Research & Monitoring



### Polar Bear Survival

With changes in sea ice recently observed in Alaska, many are concerned that U.S. polar bear populations will be adversely affected. USGS scientists have already documented one change in polar bear behavior—a shift in maternal dens from pack ice to land.

The USGS assembled an international team of scientists who produced nine technical reports within six months to help inform the Secretary’s decision as to whether to list the polar bear as a threatened or endangered species. The USGS is continuing its long-term studies of polar bears to evaluate and test the models it developed in the nine reports. This work is critical as seasonal sea ice continues to recede at unprecedented rates in the Arctic. Polar bears are now listed as threatened based on the best available science, which shows that loss of sea ice threatens, and will likely continue to threaten, polar bear habitat.

The studies project a decline in polar bear populations throughout their range during the 21st century; however,



the severity of the decline will depend on local sea ice conditions. In areas like Alaska, where sea ice recedes far north of the continental shelf each summer and fall, survival will be particularly challenging. Polar bears are predicted to prosper better in areas of northern Canada and Greenland where sea ice is expected to be more stable.

long-term viability and sustainability of wildlife and habitats in energy development areas.

In FY 2008, USGS inventoried species and habitats, monitored and assessed water resources, integrated

energy resources and habitat data, and provided a robust data inventory and models to inform land-use decisions for southwest Wyoming, which can then be transferred to other HLI areas in FY 2009.