

# Stewardship Assets, Investments, and Deferred Maintenance

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## Introduction

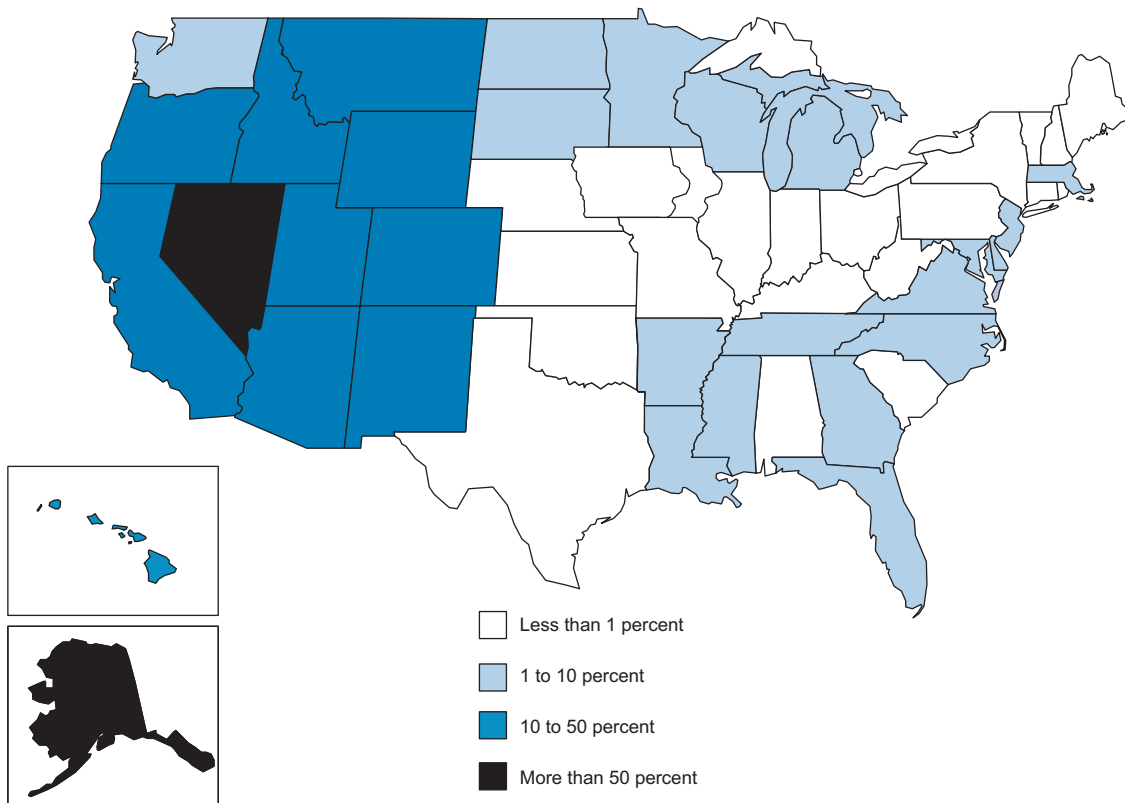
The Department of the Interior serves as steward for approximately 436 million acres of America's public lands and for the natural and cultural resources associated with these lands. The agency also supervises mineral leasing and operations on over 634 million acres of mineral estate that underlie both federal and other surface ownerships. These stewardship assets are valued for their environmental resources, their recreational and scenic values, the cultural and paleontological resources they contain, their vast open spaces, and the resource commodities and revenue they provide to the federal government, states, and counties.

## Stewardship Lands

Most of the public lands managed by Interior were once a part of the 1.8 billion acres of public domain lands acquired by the Nation between 1781 and 1867. Land currently managed by Interior represents about 19 percent of America's land surface and approximately 67 percent of all federally owned land (*Figure 33*). Each of America's 50 states, the Pacific Islands, the Virgin Islands, Guam, and Puerto Rico contain lands that are managed by the Department of the Interior.

**Figure 33**

**Percentage of Each State's Acreage Managed by Interior  
(as of September 30, 1999)**



## Use of Stewardship Lands

Interior-administered lands include the National Wildlife Refuge System, the National Park System, and the vast expanses of public land managed by the Bureau of Land Management (BLM). In addition, the Bureau of Reclamation (BOR) manages a nominal acreage (approximately 5.8 million acres) of stewardship land. The Fish and Wildlife Service (FWS) manages lands primarily to conserve and protect fish and wildlife and their habitat. The National Park Service (NPS) manages lands to conserve, preserve, protect, and interpret the nation's natural, cultural, and recreational resources. The Bureau of Reclamation manages lands to develop and protect water and related resources in an environmentally and economically sound manner for the American people. The Bureau of Land Management is guided by the principles of multiple use and sustained yield in managing its public lands. Congress has defined multiple use as management of the public lands and their various resource values so they are utilized in the combination that will best meet the present and future needs of the American people. The resources and uses embraced by the multiple use concept include mineral development; natural, scenic, scientific, and historical values; outdoor recreation; range; timber; watersheds; and wildlife and fish habitat.

## Types of Stewardship Lands

Figure 34 shows the acreage of Interior stewardship lands by land type. In addition to the 88.5 million acres shown for the National Wildlife Refuge System, there are approximately 5 million additional acres within the system that are not federally owned; these are managed by the Fish and Wildlife Service cooperatively through agreements with landowners and other partners. The National Park System also contains lands that are not federally owned (approximately 6 million acres owned by state and local governments and private landowners). The National Park Service has no management responsibility for this land except in cases where cooperative agreements with landowners authorize direct federal land management.

America's parks, refuges, and other public lands consist of rangelands; forestlands; riparian areas and wetlands; lakes, reservoirs, and streams; grasslands; swamps; marshes; and seashores, as well as mountaintops, glaciers, barren mountains, sand dunes, playas, and deserts.

## Management Units of Interior Stewardship Lands

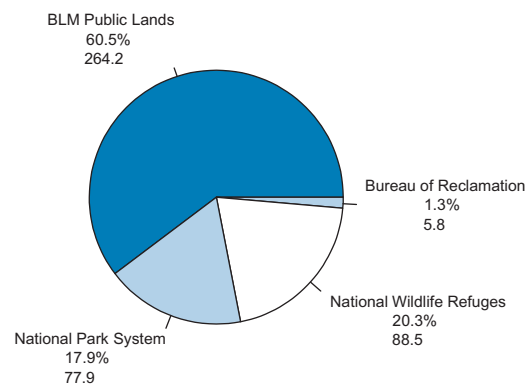
There are unique management requirements associated with approximately 59 percent of the lands managed by the Department of the Interior because of their congressional or administrative designations. These management units are shown in Figure 35. The acreage included in these units is a subset of Interior's 436 million acre total.

## Condition of Stewardship Lands

**Public Lands Managed by the Bureau of Land Management:** The Bureau of Land Management assesses the condition of the lands it manages based on the land type and the multiple use and sustained yield goals identified through its land use planning process. Figure 36 shows condition by land type. In adhering to its mandate for multiple use and sustained yield, the BLM's land management programs include significant efforts to restore riparian wetlands; preserve significant cultural and natural features; create opportunities for commercial activities; protect endangered species; develop opportunities for recreation and leisure activities; protect public health, safety, and resources; manage wild horses and burros; manage wildlife habitat and fisheries; administer mining laws;

Figure 34

Types of Interior Stewardship Lands  
(acres in millions)



Total Federal Acreage - 436.4 million

Figure 35

<b>Management Units of Interior Stewardship Lands</b>						
<b>Bureau of Land Management Public Lands</b>						
<i>Management Unit</i>	<i>Number</i>	<i>Federal Acreage</i>	<i>Non-Federal Acreage</i>	<i>Total Acreage</i>	<i>Miles</i>	
National Wild and Scenic River Segments	34	998,468	0	998,468	2,038	
National Wilderness Areas	136	5,243,332	0	5,243,332	-	
Wilderness Study Areas	622	17,298,430	0	17,298,430	-	
National Conservation Areas	8	11,692,190	0	11,692,190	-	
National Scenic Area	1	101,000	0	101,000	-	
National Recreation Area	1	1,000,000	0	1,000,000	-	
National Historic Trails	8	-	-	-	3,533	
National Scenic Trails	2	-	-	-	568	
National Recreation Trails	26	-	-	-	429	
Outstanding Natural Area	1	100	0	100	-	
Herd Management Areas	200	36,069,895	0	36,069,895	-	
National Monument	1	1,880,000	0	1,880,000	-	
Areas of Critical Environmental Concern	740	13,111,829	0	13,111,829	-	
Research Natural Areas	152	347,214	0	347,214	-	
Lake Totodoten Special Management Area	1	37,579	0	37,579	-	
National Natural Landmarks	43	599,042	0	599,042	-	
National Back Country Byways	64	-	-	-	3,518	
Globally Important Bird Areas	2	1_	0	1_	-	
BLM Special Management Area Subtotal	2,042	88,379,079	0	88,379,079	10,086	
National Multiple Use Lands	-	175,795,666	0	175,795,666	-	
Bureau of Land Management Subtotal	2,042	264,174,745	0	264,174,745	10,086	
<b>National Wildlife Refuge System</b>						
<i>Management Unit</i>	<i>Number</i>	<i>Federal Acreage</i>	<i>Non-Federal Acreage</i>	<i>Total Acreage</i>	<i>Miles</i>	
National Wildlife Refuges	521	87,627,516	3,018,000	90,645,516	-	
Refuge Coordination Areas	50	197,049	119,000	316,049	-	
Waterfowl Production Areas	200	715,200	1,929,000	2,644,200	-	
National Fish Hatcheries and Other Fish Facilities	83	16,083	6,000	22,083	-	
Fish and Wildlife Service Subtotal	854	88,555,848	5,072,000	93,627,848	-	
<b>National Park System</b>						
<i>Management Unit</i>	<i>Number</i>	<i>Federal Acreage</i>	<i>Non-Federal Acreage</i>	<i>Total Acreage</i>	<i>Miles</i>	
International Historic Site	1	23	22	45	-	
National Battlefields	11	11,944	1,179	13,123	-	
National Battlefield Parks	3	8,042	1,632	9,674	-	
National Battlefield Site	1	1	0	1	-	
National Historic Sites	76	19,524	4,695	24,219	-	
National Historic Parks	38	114,714	48,175	162,889	-	
National Lakeshores	4	145,648	83,287	228,935	-	
National Memorials	28	8,041	490	8,531	-	
National Military Parks	9	35,169	3,090	38,259	-	
National Monuments	73	1,901,074	164,579	2,065,653	-	
National Parks	54	49,647,714	2,291,940	51,939,654	-	
National Preserves	16	21,410,193	2,268,750	23,678,943	-	
National Recreation Areas	19	3,403,534	320,266	3,723,800	-	
National Reserves	2	10,830	22,277	33,107	-	
National Rivers	6	311,094	112,835	423,929	-	
National Wild and Scenic Rivers	9	72,761	146,727	219,488	-	
National Scenic Trails	3	157,087	68,436	225,523	-	
National Seashores	10	478,339	116,251	594,590	-	
Parks (other)	11	37,723	1,266	38,989	-	
Parkways	4	164,039	7,421	171,460	-	
National Park Service Subtotal	378	77,937,494	5,663,318	83,600,812	-	
<b>Bureau of Reclamation Project Lands</b>						
<i>Management Unit</i>	<i>Number</i>	<i>Federal Acreage</i>	<i>Non-Federal Acreage</i>	<i>Total Acreage</i>	<i>Miles</i>	
Reclamation Project Lands	-	5,774,376	-	5,774,376	-	
Bureau of Reclamation Subtotal	-	5,774,376	-	5,774,376	-	
<b>Department of the Interior Total</b>						
<i>Management Unit</i>	<i>Number</i>	<i>Federal Acreage</i>	<i>Non-Federal Acreage</i>	<i>Total Acreage</i>	<i>Miles</i>	
Total Interior Management Units	3,274	260,646,797	10,735,318	271,382,115	10,086	
Total Interior Stewardship Lands	-	436,442,463	10,735,318	447,177,781	-	

1\_/ The 56,000 acres contained in the two Globally Important Bird Areas are a subset of acres reported in National Conservation Areas and the Outstanding Natural Area.

Figure 36

Condition of Bureau of Land Management Public Lands					
Rangeland 1/	Forest and Woodlands	Riparian Areas	Wetlands	Aquatic Areas	
<u>Alaska</u> Late seral	All	Healthy 91% Needing restoration 9%	<u>Alaska</u> Properly functioning 91% Functioning at risk Trace Nonfunctional 1% Unknown 8%	<u>Alaska</u> Properly functioning 98% Unknown 2%	<u>Alaska</u> Good
<u>Lower 48 States</u> Potential natural community	5%	<u>Lower 48 States</u> Properly functioning 39% Functioning at risk 42% Nonfunctional 10% Unknown 9%	<u>Lower 48 States</u> Properly functioning 48% Functioning at risk 13% Nonfunctional 3% Unknown 36%	<u>Lower 48 States</u> Poor	
Late seral	30%				
Mid seral	38%				
Early seral	12%				
Unclassified	15%				

1/ This is a composite rangeland condition that rates the rangelands' ability to produce forage. Seral is a series of stages in ecological succession. A potential natural community is a relatively undisturbed vegetation community, i.e., best able to produce forage. The early seral stage is a highly disturbed vegetation community, i.e., less able to produce forage. Disturbances may be natural such as fire or be human caused.

manage rangelands; oversee forest management, development, and protection; and manage wilderness and wild and scenic rivers.

**National Wildlife Refuge System Lands:** Stewardship lands managed by the Fish and Wildlife Service include refuges, fish hatcheries, wilderness, National Natural Landmarks, wild and scenic rivers, and other special designations. These lands are used and managed in accordance with the explicit purpose of the statutes that authorize their acquisition or designation and that direct their use and management. The Service conducts activities to manage stewardship lands so that fish, wildlife, and plants that depend on these lands for habitat are benefitted over both the short- and long-term. Lands placed in the land conservation systems managed by the Service are protected into perpetuity as long as they remain in the National Wildlife Refuge System and the National Fish Hatcheries System. As new acquisitions enter these conservation systems, lands are managed to maintain their natural state, to mitigate adverse effects of previous actions by others, or to enhance existing conditions to improve benefits to fish and wildlife resources. The Service safeguards the stewardship values of the lands it administers through management actions taken on individual refuges and hatcheries; however, such actions take into consideration the needs and purposes of entire conservation systems. These conservation systems provide integrated habitat and life support for permanent resident populations as well as migratory populations needing temporary stopover sites to rest, breed, and feed and to survive their nationwide and, in some cases, worldwide seasonal migrations. While some individual units of stewardship lands can be improved at any time during their management cycles, the condition of the stewardship lands as a whole, which are protected by inclusion in both the National Wildlife Refuge System and the National Fish Hatcheries System, is sufficient to support the mission of the Service and the statutory purposes for which these conservation systems were authorized.

The Fish and Wildlife Service assesses the condition of its stewardship land and resources by monitoring habitat characteristics and determining whether management actions are needed to change those characteristics to benefit their usefulness to fish and wildlife resources. The condition of these stewardship lands is not static. Land or habitat condition may be changing, either through the application of management techniques or through natural stressors or processes acting on those lands. It is the goal of the Fish and Wildlife Service to provide habitat that optimizes the usefulness of stewardship lands to benefit fish and wildlife resources.

**National Park System Lands:** The National Park Service stewardship lands are used and managed in accordance with the statutes authorizing their acquisition or directing their use and management. The Service conducts various activities to preserve and protect land resources, and to mitigate the effects of activities conducted previously on or near parks that adversely affect the natural state of the land.

**Reclamation Project Lands:** The Bureau of Reclamation safeguards the reclamation project withdrawn lands in order to protect them against waste, loss, and misuse. They are managed consistent with their intended purposes in accordance with federal laws and regulations, and are not materially degraded while under government care. Site reviews are performed on 20 percent of the reclamation project lands each year, with 100 percent required to be reviewed within a 5-year period. Reviews for hazardous waste, improper dumping, or trespass, along with on-site reviews of concessions, provide further safeguarding of the land’s condition. While periodic reviews are performed, it is not feasible or cost effective to do full condition assessments of all reclamation project lands, a large portion of which lie under water or structures. Additionally, there are often large tracts of inaccessible wilderness surrounding the upper surface of the water’s edge, which would be difficult and costly to assess. This notwithstanding, the condition of the BOR project lands as a whole is sufficient to support the mission of the agency, and is consistent with the statutory purposes for which the lands were withdrawn.

**Net Change in Stewardship Land Acreage from 1998 to 1999**

Federally owned stewardship lands under the jurisdiction of the Department of the Interior at the end of 1999 increased by approximately 7 million acres from 1998. *Figure 37* shows the distribution of this increase, most of which is a result of the reclassification of approximately 6 million acres of Bureau of Reclamation project lands to stewardship status based on additional analysis completed in 1999.

*Figure 37*

Net Change in Stewardship Land – 1998 to 1999				
Bureau	1998 Acreage	1999 Acreage	Net Change	% Increase
Bureau of Land Management	263,621,285	264,174,745	553,460	.21%
Fish and Wildlife Service	88,410,000	88,555,848	145,848	.16%
National Park Service	77,415,476	77,937,494	522,018	.67%
Bureau of Reclamation	Not reported	5,774,376	5,774,376	N/A
<b>TOTAL</b>	429,446,761	436,442,463	6,995,702	1.63%

Excluding the reclassified Bureau of Reclamation project lands, the percentage change in Interior’s stewardship land represents a net increase of only 0.28 percent, which resulted from the net effect of acquisitions, disposals, exchanges, withdrawals, restoration transactions, and audits/reviews of records. National Park Service and Bureau of Land Management lands each increased by about 500,000 acres, while Fish and Wildlife Service lands increased by about 145,000 acres.

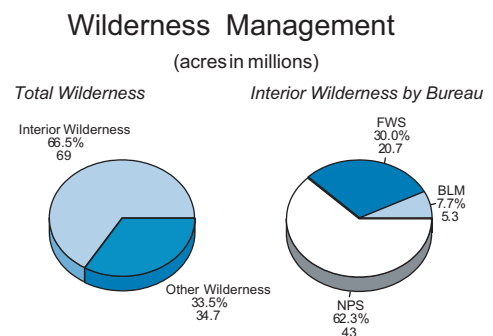
**Natural Heritage Assets**

**National Wilderness Preservation System**

The National Wilderness Preservation System was created by the Wilderness Act of 1964. A wilderness area is an area designated by Congress to assure that increasing populations, expanding settlement, and growing mechanization do not occupy and modify all areas of the United States. Designations ensure that some lands are preserved and protected in their natural condition. In contrast to those areas where humans and their works dominate the landscape, wilderness is where the earth and its community of life are untrammelled by human beings, where humans themselves are visitors who do not remain.

America’s wilderness system encompasses approximately 103.7 million acres. The Department of the Interior manages almost 66.5 percent of this wilderness system, 255 areas comprising almost 69 million acres (*Figure 38*).

*Figure 38*



## National Wild and Scenic Rivers System

For a river to be eligible for the National Wild and Scenic Rivers System, it must be in a free-flowing condition and, to a remarkable degree, it must possess one or more specific values: scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Suitability is based upon the extent of public lands in the immediate environment of the river and on the funds required for acquisition, development, and management, as well as local or state interest in acting to protect and manage the river. Wild and scenic eligibility studies are presented to Congress with a Presidential recommendation. Congress then decides whether or not to add the river to the National Wild and Scenic Rivers System.

There are 156 rivers containing 180 river segments included in the National Wild and Scenic Rivers System. Each mile of each designated segment is classified as either wild, scenic, or recreational. The total system covers 10,947 river miles. Fifty-four percent of the river miles in the National Wild and Scenic Rivers System are managed by Interior (*Figure 39*).

## National Natural Landmarks

National Natural Landmarks are management areas having national significance because they represent one of the best known examples of a natural region's characteristic biotic or geologic features. These areas must be located within the boundaries of the United States or on the Continental Shelf and are designated by the Secretary of the Interior. To qualify as a National Natural Landmark, an area must contain an outstanding representative example(s) of the Nation's natural heritage, including terrestrial communities, aquatic communities, landforms, geological features, habitats of native plant and animal species, or fossil evidence of the development of life on earth.

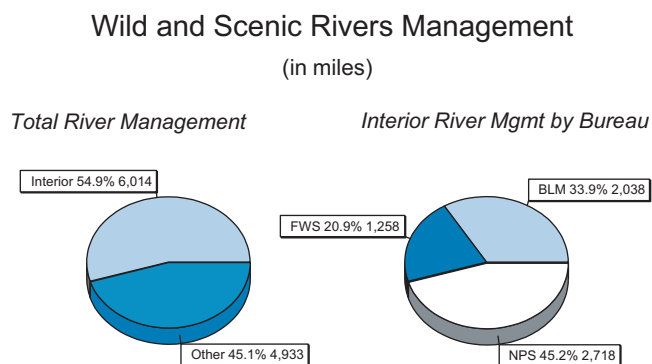
The Fish and Wildlife Service and the Bureau of Land Management each manage 43 National Natural Landmarks; these Landmarks total about 4.1 million acres. The National Park Service manages 18 National Natural Landmarks in 16 units of the National Park System.

## Paleontological Sites

Since the early 1800s, professional and amateur paleontologists have made discoveries that helped launch the new scientific discipline of paleontology in America, filling our Nation's museums of natural history with the remains of spectacular creatures that have captured the public's imagination. Today, the public lands continue to provide paleontological resources that fuel scientific discovery and evoke public wonder. Interior bureaus manage these fragile and nonrenewable resources as a public trust not only to assure preservation of their scientific values, but also to see that their educational and recreational values are realized.

While the Interior bureaus take paleontological resources into account on all public lands, the Bureau of Land Management is responsible for over 50 specially designated areas, including Research Natural Areas, Areas of Critical Environmental Concern, and National Natural Landmarks, totaling nearly 300,000 acres that are managed wholly or in part for their outstanding paleontological values. Fossils have also been located in over 137 National Park Service areas. These fossils collectively reveal a story ranging from Precambrian algae in Glacier National Park to Ice Age mammals in the Alaskan parks. The Bureau of Reclamation has also identified nine paleontological sites.

Figure 39



The Department of the Interior manages a number of publicly accessible and interpreted paleontological sites such as the Cleveland-Lloyd Dinosaur Quarry, the Trilobite Trail, the Trail Through Time, and Dinosaur National Monument. To meet public demands for recreational opportunities, the Bureau of Land Management also makes many public lands available for collecting invertebrate fossils and limited amounts of petrified wood.

**Condition of Natural Heritage Assets**

Natural heritage assets represent a subset of stewardship lands. As such, the condition of these natural assets is as good as or better than that described for each land type under the Stewardship Lands section of this report.

**Net Change in Natural Heritage Assets from 1998 to 1999**

The number of acres designated as Wilderness increased by 320 acres, while the number of Wilderness Areas remained the same. The number of river miles included in the National Wild and Scenic River system increased by 116, and the number of rivers increased by two. Twenty-six additional paleontological sites were also identified. Figure 40 shows the net change in other selected natural heritage designations from 1998 to 1999.

**Figure 40**

<b>Net Change in Other Selected Natural Heritage Designations – 1998 to 1999</b>			
<b>Special Management Area</b>	<b>Net Change in Number</b>	<b>Net Change in Total Acres</b>	<b>Net Change in Total Miles</b>
National Historic Trails			+3
Lake Todantonten Special Management Area	+1	+37,579	
Herd Management Areas	-1	+2,901,183	
Grand Staircase-Escalante National Monument		-20,000	
Areas of Critical Environmental Concern	+1	+1,800	
Wetlands of International Importance	+17		
Western Hemisphere Shorebird Network	+19		

**Cultural Heritage Assets**

The Department of the Interior is steward for a large, varied, and scientifically important body of cultural heritage assets (Figures 41 and 42). These resources include archaeological sites, historical structures, cultural landscapes, and other resources. Many are listed on the National Register of Historic Places, acknowledging their importance to American history. Some are National Historic Landmarks that are exceptional in illustrating the heritage of the United States.

Interior’s heritage assets come from public or acquired lands, historic properties under Interior’s management, and donations. The Department has a responsibility to inventory, preserve, and interpret these resources for the benefit of the American public. The Department does not normally dispose of such property. Interior bureaus have information on the numbers and types of resources and their condition. Not all resources have been inventoried and, for many resources, adequate condition information is lacking.



Figure 41

Types of Cultural Heritage Assets	
Type	Description
National Register of Historic Places	The National Register of Historic Places is America's official listing of sites important to history and prehistory. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. These resources contribute to an understanding of the historical and cultural foundations of the Nation.
Historic Structures	Historic structures are constructed works consciously created to serve some human activity or purpose. Structures are historic because they individually meet the criteria of the National Register of Historic Places or are contributing elements of sites or districts that meet National Register criteria. As such, historic structures are significant at the national, state, or local level and are associated with the important people and history of this nation. Structures that do not meet National Register criteria may be considered historic due to management responsibilities established by legislation or through management planning processes. Such structures include moved, reconstructed, or commemorative structures as well as structures that have achieved significance within the last 50 years.
National Historic Landmarks	National Historic Landmarks are districts, sites, buildings, structures, or objects possessing exceptional value in commemorating or illustrating the history of the United States. The Historic Sites Act of 1935 authorizes the Secretary of the Interior to designate National Historic Landmarks as the Federal government's official recognition of the national importance of historic properties. These places possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archaeology, technology, and culture as well as possessing a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association.
Cultural Landscapes	A cultural landscape is a geographic area, including both natural and cultural resources, associated with an historic event, activity, or person. Cultural landscapes are complex resources that range from large rural tracts covering several thousand acres to formal gardens of less than an acre. The Department of the Interior recognizes four cultural landscape categories: historic designed landscapes, historic vernacular landscapes, historic sites, and ethnographic landscapes. These landscapes individually meet the criteria of the National Register of Historic Places, are contributing elements of sites or districts that meet National Register criteria, or have value to associated communities.
Archaeological Sites	Archaeological sites are locations that contain the remains of past human activity of various sorts. Archaeological sites include prehistoric structures, middens, and roadways, such as those found on many of the lands managed by the Department of the Interior in the Southwest. Sites also include the ancient earthen mounds in the midwestern and southern parts of the nation, many of them managed by Interior bureaus. Other archaeological sites come from historic times and are associated with the settlement of the United States by Euroamericans, African-Americans, and Asian Americans.
World Heritage Sites	The preservation of a common world heritage is the objective of the international Convention Concerning the Protection of the World Cultural and Natural Heritage. This international agreement, signed to date by more than 150 nations, was adopted by the General Conference of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 1972. Its primary mission is to (a) define and conserve the world's heritage by drawing up a list of sites whose outstanding values should be preserved for all humanity, and (b) to ensure protection through a closer co-operation among nations.

Figure 42

<b>Number, Net Change, and Condition of Cultural Heritage Assets</b>			
Type of Asset	Number of Assets	Net Change in Assets 1998 to 1999	Condition
<b>Bureau of Land Management</b>			
National Register of Historic Places	255 Listings	+7	
	3,610 Contributing Properties	-15	Acceptable
Archaeological and Historical Properties	227,993 Properties	+7,193	Acceptable
National Historic Landmarks	22 Landmarks	-	Acceptable
World Heritage Sites	5 Sites	+5	Acceptable
<b>Fish and Wildlife Service</b>			
National Register of Historic Places	99 Listings	+6	Unclassified
Historical Structures	188 Structures	-	Unclassified
Archaeological and Historical Properties	11,000 Properties	-	Unclassified
National Historic Landmarks	9 Landmarks	-	Unclassified
<b>National Park Service</b>			
National Register of Historic Places	1,259 Listings	+13	Unclassified
Historical Structures	24,225 Structures	+1,058	Good 44% Fair, Poor, or Unknown 56%
National Historic Landmarks	193 Landmarks	+15	Unclassified
Inventoried Cultural Landscapes	359 Landscapes	-	Good 27% Fair 46% Poor 27%
Archaeological Sites	60,000 Sites	+9,000	Good 6% Poor 14% Unclassified 80%
World Heritage Sites	18 Sites	-	Unclassified
<b>Bureau of Reclamation</b>			
National Register of Historic Places	61 Listings	-	Unclassified
Archaeological and Historical Properties	10,724	+10,724	Unclassified
National Historic Landmarks	5	+5	Unclassified
<b>Bureau of Indian Affairs</b>			
National Register of Historic Places	35 Listings	+4	Unclassified
<b>Other Bureaus</b>			
National Register of Historic Places	9 Listings	-	Unclassified

## Museum Collections

Department of the Interior museum collections contain more than 113 million museum objects (*Figure 43*), including 69 million artifacts and specimens and 44 million documents. Disciplines represented include art, ethnography, archaeology, documents, history, biology, paleontology, and geology. Archaeology and documents account for more than 104 million of the total when documents are reported in number of objects. If converted to linear feet, the 44 million documents reported this year equal 27,500 linear feet of archival documents. The increase is due primarily to improved reporting rather than to new acquisitions. Numbers are relatively stable for all disciplines as bureaus continue to refine their estimates. Museum collections managed by Department of the Interior bureaus are important for both their intrinsic value and for their associations with federal lands and resources managed by Interior bureaus.

Highlights for 1999 included completing documentation on more than 5 million objects, improving their accountability and availability for public access. Information on accessions, deaccessions, and conditions are incomplete. Available information is provided below in individual bureau discussions.

The Branch of Museum Services, located in the Department's National Business Center, is the operations branch of the Interior Museum Program; this branch operates the Interior Museum, interprets Headquarters building, and provides departmentwide training and technical assistance to bureaus and offices. The Office of Acquisition and Property Management is the policy branch that develops departmentwide policies and strategies and provides oversight for the museum programs in all Interior's bureaus and offices.

Figure 43

1999 Data and 1998 Baseline Data for Interior Museum Collections That Are Inventoried or Part of Backlog						
	Total Collection Size	Held Within Interior	Held in Other Institutions	Number of Objects Inventoried (1998 Baseline)	Number of Objects Inventoried (1999 Actual)	Estimated Inventorying Backlog
Bureau of Indian Affairs *	453,275	24,701	428,574	0	116,718	336,557
Bureau of Land Management **	23,842,413	5,900,229	17,942,184	2,181,064	2,219,080	21,623,333
Bureau of Reclamation	8,427,501	4,658,162	3,769,339	1,960,745	3,272,444	5,155,057
Fish and Wildlife Service	4,096,210	515,954	3,580,256	1,200,000	1,200,000	2,896,210
National Park Service	76,494,942	73,670,510	2,824,432	31,018,410	34,814,431	41,680,511
Indian Arts and Crafts Board ***	12,396	12,396	0	13,943	11,480	916
Interior Museum	4,759	1,841	2,918	1,600	1,711	3,048
Minerals Mgmt Service	54	54	0	0	54	0
U.S. Geological Survey ****	39,227	12,488	26,739	63	39,216	11
Interior Totals	113,370,777	84,796,335	28,574,442	36,375,825	41,675,134	71,695,643

\* The reduction in number from 681,961 museum objects reported in 1998 reflects a reclassification of large document collections as official records.

\*\* The Bureau of Land Management reports that estimates of the collection size need to be revised, but data are not yet available.

\*\*\* The Indian Arts and Crafts Board baseline declined due to a congressionally mandated transfer of the Headquarters collection to the National Museum of the American Indian.

\*\*\*\* The U. S. Geological Survey baseline was increased to include Biological Resources collections.

The Bureau of Indian Affairs reports 453,275 museum objects, of which, approximately 95 percent are housed in 91 non-federal institutions. The remainder are distributed among 106 units in the BIA, where they support the BIA's relationships with tribes. The reduction in number from 681,961 museum objects reported in 1998 reflects reclassification of large document collections as official records. Data on 1999 accessions and condition of museum collections are not available.

The Bureau of Land Management manages most of its collections through associations with approximately 190 non-federal repositories. Total collection size was last estimated at nearly 24 million objects from the public lands; these survey numbers need to be revised. A total of 17.9 million objects are reported to be at the non-federal repositories, while 5.9 million objects and documents have been reported in BLM facilities. Data on 1999 accessions and conditions at non-federal repositories is not available, although more than 38,000 new catalog records were completed at the Bureau of Land Management's three internal repositories. The condition of collections at these three facilities are acceptable, as confirmed by a validation review conducted between February and May 1999. Data on the condition of collections in the 190 non-federal repositories is generally not recorded. An Office of Inspector General Audit was conducted during 1999. Recommendations included improved planning, oversight of contractor activities regarding newly acquired collections, and increased communication with repositories housing BLM collections. These recommendations are resolved but not implemented.

The Bureau of Reclamation reports more than 8.4 million museum objects and documents, of which 4.6 million (55 percent) are in BOR facilities and 3.8 million (45 percent) are in non-federal institutions. Data on accessions and condition is not available. The Bureau of Reclamation exceeded documentation targets by cataloging more than 1.3 million museum objects during 1999.

The Fish and Wildlife Service collections consist of almost 4.1 million objects and documents; 516,000 are managed at 150 bureau units and 3.6 million (87 percent) are managed at 210 non-federal institutions. Data on accessions is not available. The condition of Fish and Wildlife Service museum collections is estimated to be generally adequate to good, but precise data is not available for all locations holding these collections. The Fish and Wildlife Service also manages seized and forfeited wildlife specimens and products, which are lent to zoos and other institutions for educational use, and to the National Eagle Repository in Denver, Colorado, which distributes eagle parts and feathers to Indian tribes.

National Park Service collections include 36 million artifacts and specimens and 40 million archival documents. Of the total 76.5 million objects and documents, 73.7 million objects (96 percent) are housed at 332 park units. A total of 142 non-federal institutions house 2.8 million National Park Service museum objects. In 1998 (the most recent data available), the National Park Service cataloged 3.8 million items and corrected 1,940 preservation and protection deficiencies in 230 parks. The Service acquired 1,376,555 items through gifts, exchanges, purchases, field collections, and transfers. It deaccessioned 4,495 items. As of 1998, 59 percent of National Park Service objects and 33 percent of its archives have been cataloged. At current cataloging and funding levels, the collection will be fully cataloged in 2021. In 2000, the Park Service will develop a methodology to check the accuracy of condition data, identifying treatment needs in a standard way.

The Department's National Business Center's Interior Museum collections contain 4,759 objects, 1,841 of which are in the Main Interior Building; the remaining 2,918 are at a repository managed by the National Park Service. During 1999, the Interior Museum hosted an exhibit of Thomas Moran landscape paintings that are credited with encouraging Congress to designate the first National Park at Yellowstone. This was one of several activities in support of the Department's 150th anniversary. The project included upgrading environmental controls and security in the portion of the museum housing the Moran exhibit. There were no new accessions in 1999. The condition of the National Business Center's collections is generally good, although there are concerns about deterioration from environmental threats and deferred preventive conservation measures.

The Indian Arts and Crafts Board now holds 12,396 museum objects, down from 19,805 museum objects due to the congressionally mandated transfer of more than 7,000 objects making up its Headquarters collection to the National Museum of the American Indian. The Board acquired 15 objects during 1999, eight by purchase and seven as gifts. The general condition of the Board's collections is stable and safeguarded, as documented in conservation and fire protection surveys at the three Indian Arts and Crafts Board museums. Of the 12,396 objects at these three museums in Montana, Oklahoma, and South Dakota, 11,480 (93 percent) are inventoried.

The Minerals Management Service maintains a small collection of 54 objects in its administrative offices. There were no accessions or deaccessions during the year. The collection is fully documented and in stable condition. There are no deferred maintenance issues for the collection.

The U. S. Geological Survey manages 12,488 specimens in its facilities, while 26,739 specimens are housed in partnership with two non-federal institutions. This data includes Biological Resources museum property that is reported here for the first time. These collections were transferred to the Survey from the Fish and Wildlife Service. Less than one percent of the collection remains to be cataloged. The Survey acquires biological specimens through field collections each year. Data on the number of specimens acquired in 1999 is not available. There were no withdrawals from the collections. All Survey collections are in good condition, with no deferred maintenance of the collections.

For the first time, we have departmentwide data regarding the number of items inventoried to compare against baseline data collected in 1998. The number of objects reported as inventoried is a minimum number based on available data. Additional collections at non-federal repositories may have been inventoried, but precise data is not available.

Beyond basic accountability, the Department encourages increasing public access to and use of museum collections to support the Department's missions.

Figure 44

1999 Interior Museum Program Highlights	
Entity	Selected Activities
<b>Bureau of Indian Affairs</b>	<ul style="list-style-type: none"> <li>Completed draft BIA policies and procedures for managing museum property.</li> <li>Established baseline of inventoried museum property.</li> <li>Installed exhibits of BIA museum property in Washington, D.C., Phoenix, Arizona, Juneau, Alaska, and Riverside, California.</li> <li>Supported visitors and researchers at Haskell Indian Nations University (KS) and Sherman Indian School (CA).</li> </ul>
<b>Bureau of Land Management</b>	<ul style="list-style-type: none"> <li>Completed User's Guide to Dolores Archaeological Program Data (available on compact disc).</li> <li>Relocated Billings Curation Center to new quarters with improved security, environmental controls, storage space, and research space.</li> <li>Upgraded permanent exhibits at the National Historic Oregon Trail Interpretive Center.</li> <li>Revised BLM museum collections management plan.</li> <li>Refined list of non-federal institutions holding museum collections from BLM-managed lands.</li> <li>Coordinated drafting of "Draft Report of the Assessment of Fossil Management on Federal and Indian Lands."</li> <li>Upgraded interactive web sites featuring BLM curation and interpretive centers.</li> </ul>
<b>Bureau of Reclamation</b>	<ul style="list-style-type: none"> <li>Increased commitments needed to reach full accountability for museum collections by 2004, and increased number of objects inventoried from 1.96 million to 3.27 million.</li> <li>Enhanced access to collections via publications, compact discs, and other media projects.</li> <li>Partnered with the University of Nevada, New Mexico Museum of Natural History and Sciences, and the Museum of Northern Arizona to support exhibits of BOR collections.</li> <li>Developed an interpretive center at the Owyhee Irrigation District in northeast Oregon.</li> <li>Maintained web site access to BOR fine art collection.</li> </ul>
<b>Fish and Wildlife Service</b>	<ul style="list-style-type: none"> <li>Initiated conservation of 1890 fish rail car and historic Yellowstone fisheries boat, which is interpreted at D.C. Booth Historic Fish Hatchery (SD).</li> <li>Completed conservation plans for Chesapeake Bay boats, which are interpreted at Chincoteague National Wildlife Refuge (VA).</li> <li>Initiated new cooperative agreements with non-federal institutions in Idaho, North Dakota, and Oregon.</li> <li>Upgraded HVAC system at Desoto National Wildlife Refuge (IA).</li> <li>Consolidated Alaska Region collections at the Alutiiq Museum in Kodiak, Alaska.</li> <li>Partnered with tribal youth to catalog archaeological collections from the Russian River.</li> </ul>
<b>National Park Service</b>	<ul style="list-style-type: none"> <li>Cataloged 3.8 million items and corrected 1,940 planning, environmental, storage, security, and fire protection deficiencies in 230 parks.</li> <li>Issued two supplements (12 leaflets) to Conserve O Gram publication sold through the Government Printing Office.</li> <li>Posted Conserve O Gram leaflets as PDF files on the NPS web site.</li> <li>Expanded museum pages on the NPS web site to include electronic exhibits, photos, and interpretive materials. Recorded 282,000 user sessions from December 1998 through September 1999.</li> <li>Exhibited over 348,000 objects, responded to over 50,000 public research requests and over 14,000 research requests from park staff, and managed 4,500 loans for over 7.5 million objects.</li> <li>Installed 14 major exhibits in parks and completed historic furnishings installations in five parks.</li> <li>Completed archival assessments at 12 parks that identified over 2,177 previously unknown and uncataloged archives.</li> </ul>
<b>National Business Center (Interior Museum)</b>	<ul style="list-style-type: none"> <li>Exhibited two large 1870s landscape paintings by Thomas Moran, artifacts associated with John Wesley Powell (second Director of USGS), Edward Curtis photographs of Native Americans, and other "Treasures" as part of special exhibits and activities to commemorate the Department's 150<sup>th</sup> anniversary.</li> <li>Installed a new HVAC system to improve environmental controls in the Interior Museum.</li> <li>Began preparations for relocation of Interior Museum collections stored at an NPS repository in Maryland.</li> <li>Completed continuity of operations plan.</li> </ul>
<b>Indian Arts and Crafts Board (IACB)</b>	<ul style="list-style-type: none"> <li>Lent objects for exhibits in Arizona, California, and Oklahoma, reaching more than 550,000 visitors.</li> <li>Upgraded environmental and storage equipment at IACB museums in Oklahoma, Montana, and South Dakota.</li> <li>Worked with staff of the National Museum of the American Indian to plan for the congressionally mandated transfer of IACB headquarters collection of approximately 7,000 objects.</li> </ul>
<b>Minerals Management Service</b>	<ul style="list-style-type: none"> <li>Maintained exhibits at MMS headquarters and other MMS facilities.</li> <li>Completed cataloging worksheets and digital images of all MMS collections.</li> </ul>
<b>U.S. Geological Survey</b>	<ul style="list-style-type: none"> <li>Created a Steering Committee to guide management of USGS collections.</li> <li>Developed web pages to provide public access to USGS collections.</li> <li>Compiled data on Biological Resources collections transferred to USGS from FWS in 1997.</li> </ul>

## Library Collections

Interior's natural resources library is composed of two collections. The general collection consists of approximately 950,000 holdings dealing with the broad range of matters related to the Department's mission to use and conserve natural resources and to meet its trust responsibilities toward American Indians and Alaska Natives. The law collection has approximately 100,000 holdings related to natural resources and Native American laws.

The U.S. Geological Survey library collections cover all aspects of the earth sciences and related interdisciplinary subjects. The collection is comprehensive, covering as much as possible of worldwide literature in the library. Extensive sets of state and foreign geological survey publications, as well as publications from geological and other scientific societies, universities and institutions, and other government agencies throughout the world, are included in the collection. Special collections include the George F. Kurt collection of books on gems and minerals; the Alvison collection on Russian geology, minerals, and mining; extensive photographs taken during the Survey's field work; and field notebooks and additional material relating to Survey projects. This library contains 1.6 million books and periodicals, as well as 1.3 million nonbook items, for a total of 2.9 million items. During 1999, 12,000 units were added and 8,000 units were withdrawn from the Survey's library collection. Materials are acquired through extensive exchange agreements with institutions and agencies worldwide, from research projects, and through purchases from a wide variety of publishers and institutions. Items are withdrawn only after the professional library staff has made a critical analysis of the collection. Approximately 35 percent of the collection is in good condition, 40 percent is in fair condition, and 25 percent in poor condition. There is no deferred maintenance related to the library collection.

National Park Service library collections that were reported in 1998 are excluded from the 1999 report because they are circulating working collections that do not fit the criteria for heritage assets. National Park Service museum collections include some books that are retained for their long-term historic value.

## Investment in Research and Development

The U.S. Geological Survey Research and Development program was authorized by the March 3, 1879, legislation that created the U.S. Geological Survey to provide for the examination of geological structures, mineral resources, and products within and outside the national domain. Earth science research and information save lives and property, safeguard human health, enhance the economic vitality of the Nation and its people, assess resources, characterize environments, and predict the impact of contamination.

The Survey provides credible, objective, and unbiased information needed by managers of the Nation's natural resources and resource managers in Interior. This information aids in solving critical societal problems through research, investigation, and the application of state-of-the-art geographic and cartographic methods. U.S. Geological Survey research assesses and predicts biological consequences of various policies and management practices. Interior's investment in research and development for 1999 is shown in *Figure 45*.

In addition, the Fish and Wildlife Service invested approximately \$37.7 million in biological investigations that will contribute to site-specific natural resource management decisions.

**Figure 45**

USGS Investment in Research and Development (\$ in millions)		
Type of Research	FY 1998 <sup>1/</sup> , <sup>3/</sup>	FY 1999 <sup>2/</sup> , <sup>3/</sup>
Basic Research	\$62.6	\$78.0
Applied Research	506.6	672.0
Development	30.8	39.0
Total	\$600.0	\$789.0

<sup>1/</sup> FY 1998 data is based on unliquidated obligations and expenditures in lieu of expense data.  
<sup>2/</sup> FY 1999 data is based on expense data.  
<sup>3/</sup> Cost includes employee retirement benefits, health and life insurance, and Federal Employee Compensation Act benefits.

## Investment in Human Capital

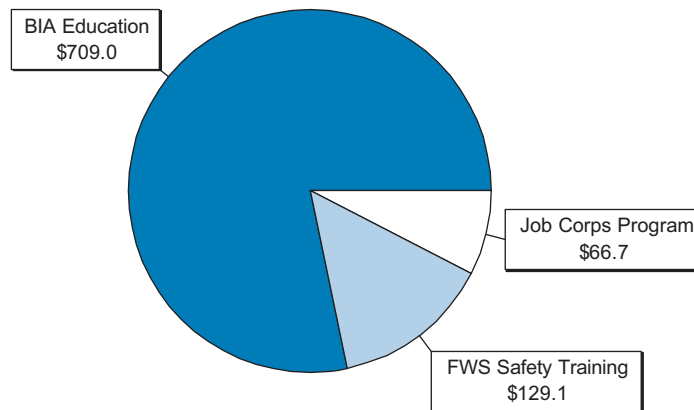
The Bureau of Indian Affairs administers its trust responsibility for education with the long-range goal of promoting healthy Indian communities through lifelong learning. This goal is achieved by providing quality educational opportunities from early childhood throughout life, with consideration given to the mental, physical, emotional, spiritual, and cultural aspects of the people served.

Through various Bureau of Indian Affairs programs, a significant investment in education has been made to help brighten the future of American Indians and Alaska Natives. In 1999, a total of \$709 million was expended for education programs benefitting American Indians and Alaska Natives.

The Bureau of Reclamation, the National Park Service, and the Fish and Wildlife Service provide residential education and job training for disadvantaged youth through the Job Corps program. In addition, the Fish and Wildlife Service expended approximately \$129.1 million for hunter safety training and other fish and wildlife safety training and outreach.

**Figure 46**

**Investment in Human Capital**  
( \$ in millions)

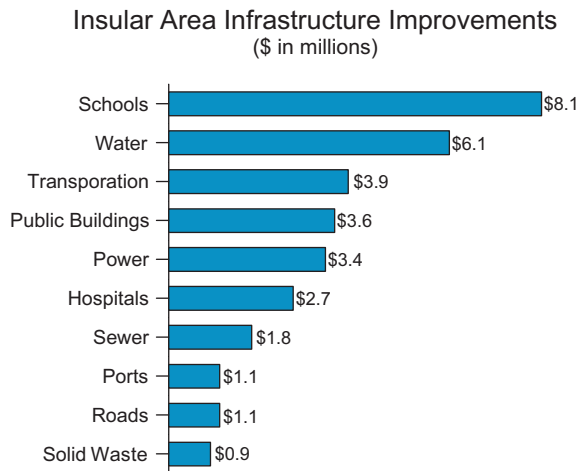


## Investment In Non-Federal Physical Property

The Office of Insular Affairs provides capital improvement grants to United States insular areas to assist the islands in developing more efficient and effective government. The capital investment in non-federal physical property in the islands was approximately \$80.3 million in 1999. This investment supported infrastructure improvements of approximately \$32.7 million and compact payments of approximately \$47.6 million in seven insular areas (*Figures 47 and 48*).

During 1999, the National Park Service identified over \$3 million in non-federal physical asset expenditures which is a significant decrease from 1998. The Fish and Wildlife Service expended approximately \$191.2 million for acquiring and improving lands and non-federal physical properties. The Bureau of Indian Affairs and the Federal Highway Administration jointly administer the Indian Reservation Roads and Bridges Program which involves construction and maintenance of approximately 49,000 miles of Indian reservation roads. In 1999, approximately \$253.7 million was expended on 1,852 projects in this program. These projects involved road construction and road maintenance work on 2,932 miles of roads and 33 bridges.

**Figure 47**



**Figure 48**

Insular Area Capital Investment (in millions)	FY 1998		FY 1999	
Commonwealth of Northern Marianas	\$9.0		\$9.7	
Republic of Palau	1.4		1.1	
Republic of Marshall Islands	0.2		0.4	
Federated States of Micronesia	1.4		2.4	
American Samoa	7.2		11.5	
U.S. Virgin Islands	0.5		3.4	
Guam	1.9		4.2	
Compact Payments in Marshall Islands	25.0		29.7	
Compact Payments in Micronesia	17.9		17.9	
<b>Total</b>	<b>\$64.5</b>		<b>\$80.3</b>	

## Deferred Maintenance

The Department of the Interior owns, builds, purchases, and contracts services for assets such as schools, office buildings, roads, bridges, dams, irrigation systems, and reservoirs. These assets are used to support the Department's stated mission. Interior's assets include some deteriorating facilities for which repair and maintenance have not been funded. Current and prior budgetary restraints require that repair and maintenance on these assets be postponed for future years. Interior refers to this unfunded repair and maintenance of facilities and infrastructure as deferred maintenance.

Inadequately funded maintenance may result from reduced budgets, diversion of maintenance funds for emergency responses, and competition for resources from other program needs. Deterioration of facilities can adversely impact public health and safety, reduce employees' morale and productivity, and increase the need for costly major repair or early replacement of structures and equipment. Undue wear on facilities may not be immediately noticeable to users, but inadequate maintenance can require that the facility be replaced or subjected to major reconstruction before the end of its expected useful life.



Due to the scope, nature, and variety of the assets entrusted to the Department, as well as the nature of deferred maintenance itself, exact estimates of deferred maintenance cannot be determined at this time, and may never be fully determinable. Interior has calculated estimates of deferred maintenance based on data from a variety of systems, procedures, and sources of data. However, the accumulation of deferred maintenance cost estimates is not the primary purpose of many of these sources, so the Department acknowledges that the reliability of these sources as a basis for deferred maintenance estimates can vary greatly.

Interior's current estimate for deferred maintenance includes property categories such as building facilities, fixed and heavy equipment, bridges and roads, dams, irrigation systems, and reservoirs. The estimate generally includes costs for items such as (1) construction contract administration and inspection; (2) construction materials; (3) transportation; (4) removal of existing appurtenances, e.g., guard rails, furnishings, and equipment items that are not physically attached to property, along with related storage, inventorying, and tagging; (5) fixed equipment; (6) employee costs; and (7) indirect cost and/or contract support cost. The estimate excludes costs for items such as routine maintenance of facilities and infrastructures. In addition, the estimate generally excludes vehicles and most other categories of operating equipment.

Initial studies indicate that the estimated amounts necessary to fund the correction of deferred maintenance throughout the Department may range from \$8 to \$14 billion (*Figure 49*).

**Figure 49**

<b>Estimated Deferred Maintenance (in millions)</b>			
	<i>Estimated Range of Deferred Maintenance General PP&amp;E</i>	<i>Estimated Range of Deferred Maintenance Stewardship PP&amp;E</i>	<i>Total Estimated Range of Deferred Maintenance</i>
Bureau of Indian Affairs	\$4,390 to \$5,940	0	\$4,390 to \$5,940
Bureau of Land Management	\$25 to \$125	\$75 to \$375	\$100 to \$500
Bureau of Reclamation	\$6 to \$16	0	\$6 to \$16
Fish and Wildlife Service	\$790 to \$1,100	0	\$790 to \$1,100
National Park Service	\$2,260 to \$5,420	\$240 to \$580	\$2,500 to \$6,000
U.S. Geological Survey	\$60 to \$100	0	\$60 to \$100
<b>Total</b>	<b>\$7,531 to \$12,701</b>	<b>\$315 to \$955</b>	<b>\$7,846 to \$13,656</b>