

**Activity: National Wildlife Refuge System**

		2009 Actual	2010 Enacted	2011 Request			Change from 2010 (+/-)
				DOI-wide Changes & Transfers (+/-)	Program Changes (+/-)	Budget Request	
Wildlife and Habitat Management	(\$000)	199,859	230,778	-2,377	+3,834	232,235	+1,457
	FTE	1,308	1,443	0	+17	1,460	+17
Refuge Visitor Services	(\$000)	75,571	79,973	-873	-3,044	76,056	-3,917
	FTE	606	609	0	-15	594	-15
Refuge Law Enforcement	(\$000)	36,089	38,684	-473	0	38,211	-473
	FTE	236	247	0	0	247	0
Conservation Planning	(\$000)	11,789	13,021	-150	-1,000	11,871	-1,150
	FTE	87	94	0	-1	93	-1
<b>Subtotal, Refuge Operations</b>	<b>(\$000)</b>	<b>323,308</b>	<b>362,456</b>	<b>-3,873</b>	<b>-210</b>	<b>358,373</b>	<b>-4,083</b>
	<b>FTE</b>	<b>2,237</b>	<b>2,393</b>	<b>0</b>	<b>+1</b>	<b>2,394</b>	<b>1</b>
Refuge Maintenance	(\$000)	139,551	140,349	-1,176	+2,000	141,173	+824
	FTE	677	677	0	0	677	0
<b>Total, National Wildlife Refuge System</b>	<b>(\$000)</b>	<b>462,859</b>	<b>502,805</b>	<b>-5,049</b>	<b>+1,790</b>	<b>+499,546</b>	<b>-3,259</b>
	<b>FTE</b>	<b>2,914</b>	<b>3,070</b>	<b>0</b>	<b>+1</b>	<b>3,071</b>	<b>+1</b>
<i>Other Major Resources: Recreation Fee Program</i>	(\$000)	4,750	4,800	0	0	4,800	0
	FTE	29	28	0	0	28	0

**Program Overview**

The Service’s National Wildlife Refuge System (Refuge System) embodies our Nation’s commitment to conserving wildlife populations and biological diversity for the benefit of present and future generations of Americans. The Refuge system comprises more than 150 million acres of land and waters, including nearly 53 million acres of submerged land in 4 marine national monuments. These lands and waters provide habitat for many species of fish, wildlife, and plants, sanctuary for hundreds of threatened and endangered species, and secure spawning areas for native fish. The 551 refuges range from the relatively tiny, half-acre, Mille Lacs National Wildlife Refuge, encompassing two rocky islands in Minnesota’s Lake District, to the vast Arctic National Wildlife Refuge spanning 19.6 million acres of boreal forest, tundra, and estuary in Alaska. The Refuge System also encompasses 4.1 million acres managed under easement, agreement, or lease, including 37 wetland management districts and 49 wildlife coordination areas. Thus, the Refuge System uses a variety of tools and legal arrangements to protect our nation’s fish, wildlife, plants, and the habitats on which they depend.

Passage of the National Wildlife Refuge System Improvement Act of 1997 provided the Refuge System with a clear comprehensive mission, which is:

*“...to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”*

The Refuge System fulfills its mission through the implementation of programmatic activities in five broad areas; Wildlife and Habitat Management, Visitor Services, Refuge Law Enforcement, Conservation Planning, and Refuge Maintenance. Through these programs, the Refuge System monitors, restores, and

protects wildlife, fish, plants and habitat, maintains facilities, supports wildlife-dependent recreation, and conducts other activities to achieve strategic goals.

The programs of the Refuge System support Service goals for resource conservation, protection, recreation, and service to communities. Through the Refuge System, the Service works with other Federal agencies and many other partners to conduct vital conservation projects to achieve these goals. For example, the Service is working with the U.S. Geological Survey to develop best methods to conduct ongoing biological monitoring of wildlife populations and habitat to improve management of refuge resources.

#### Use of Cost and Performance

The Refuge Maintenance program helps achieve the Refuge System mission by supporting a complex infrastructure including habitat, visitor, administrative, and maintenance facilities as well as a fleet of vehicles and heavy equipment necessary to conduct wildlife and habitat management activities and to provide our 42.5 million visitors with wildlife dependent recreation opportunities. Together, this facility infrastructure and mobile equipment fleet is valued at more than \$23 billion (as of December 2009). Using principles embodied in Executive Order 13327, Federal Real Property Asset Management and the Department's Asset Management Plan, the Refuge System is managing its portfolio of facility and mobile equipment assets in a manner that focuses on accomplishment of our legislative mission while improving efficiency and effectiveness. Completing condition assessments for all assets has improved management of the portfolio and assists in targeting of funds to meet highest priority maintenance and capital improvement needs.

The Refuge System considers costs and benefits when allocating maintenance funding for these assets. Through the Service Asset and Maintenance Management System (SAMMS), which operates on the DOI standard MAXIMO software, the Refuge System identifies assets that can most effectively be maintained by simultaneously applying an Asset Priority Index (API) and a Facility Condition Index (FCI). The API scores an asset according to how critical it is to achieving the Service mission, while the FCI scores an asset according to repair versus replacement costs. These two scoring mechanisms along with factors such as critical health and safety components are applied whenever an asset is entered into SAMMS, enabling managers to see where they should apply funding to most efficiently manage the entire asset portfolio. This insight into asset management enables managers to make better cost/benefit decisions about related matters like lease space and new construction projects.

In FY 2006, the Refuge System completed its first round of condition assessments for all of its assets. The second full round of condition assessments began in 2007. Condition assessment data is updated continuously with the goal of comprehensive reassessment of 20 percent of our assets each year. The assessments are based on DOI guidance and apply specific valuation tools. Through these assessments, the Refuge System developed a full inventory of the assets, improving the quality of information regarding annual operations and maintenance costs. The assessments established baseline FCIs that validate costs for known deferred maintenance (DM) needs and documented new needs. The assessments also validate the current replacement value (CRV), which is necessary to determine the FCI. Both DM and CRV estimates are determined using standardized DOI policy guidance to ensure accuracy and uniformity. Regular assessments of the condition of assets and their contribution to the Refuge System mission assure that information used to allocate funding will contribute to effective asset management. By completing assessments for all facilities, the Refuge System improved its ability to provide maintenance, repair, and, where required, replacement costs with greater accuracy. The second round of condition assessments is also focusing on determining component renewal costs to provide information necessary to avoid deferring maintenance, and to improve our asset measurements necessary to accurately use unit costing for DM and CRV estimates.

Reliable functioning physical assets are direct enablers of the Service mission as described in strategic plan goals. Asset management decisions are based on input from field station managers, with assistance of Regional asset management experts and national program managers who are familiar with the resource management impacts that result from asset investment decisions. Annual O&M cost data for each asset has been collected since 2005 in the Federal Real Property Profile. Collecting this data has helped us identify opportunities for energy efficiency, downsizing, replacement, and other cost saving measures. Asset managers are also identifying opportunities to employ energy conservation and renewable energy strategies within the Refuge System. Energy conservation and renewable energy opportunities are a regular part of planning and completing deferred maintenance projects.

Understanding how each individual asset contributes to the Refuge System mission, along with an understanding of its history, current condition, and its full life cycle costs combine to help prioritize and optimize allocations. Within the context of portfolio management activities, this approach allows for development of strong and well informed budget requests and identifies efficiencies to be gained during the budget execution phase. The Refuge System allocates Refuge Maintenance funding to its regional offices, and ultimately to its field stations, based on a formula that considers each region's total asset CRV, size, and five-year averages of each region's maintenance needs. Allocating funds in this manner allows regional and field managers to effectively plan maintenance activities.

In addition to achieving performance targets, proper support of the Refuge System's infrastructure is critical to mission accomplishments including wetland restoration, wildlife monitoring, and providing wildlife dependent recreation opportunities, as well as meeting goals for sustainability and energy independence. The use of the condition assessments, as well as the API and FCI, has directed funding to the highest priority needs of the Refuge System.

In addition, in response to Executive Order 13423 and the Service goal of becoming a Carbon neutral agency, the Service is assessing its energy use and opportunities for investments to boost energy efficiency and implement renewable energy sources in many of its locations. Energy audits will help us identify needed actions and performance measurements such as return on investment, reduced O&M costs, and reduced energy intensity as measured in BTU's/Gross Square foot. The identified needed actions will help us prioritize the actions we will take.

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
<b>Watersheds and Landscapes</b>										
CSF 1.1 Number of FWS riparian (stream/ shoreline) (including marine and coastal) miles restored to the condition specified in management plans-annual (GPRA)	97	58	53	163	72	52	52	52	0	52
CSF Total Actual/ Projected Expenditures (\$000)	\$2,997	\$3,747	\$3,105	n/a	\$3,553	\$2,615	\$2,615	\$2,679	\$64	\$2,740
CSF Program Total Actual/ Projected Expenditures (\$000)	\$2,026	\$2,328	\$1,872	n/a	\$2,515	\$2,573	\$2,573	\$2,632	\$59	\$2,693
Actual/ Projected Cost Per Mile (whole dollars)	\$31,045	\$64,599	\$58,549	n/a	\$49,221	\$50,353	\$50,353	\$51,511	\$1,158	\$52,696
CSF 1.2 Number of FWS riparian (stream/ shoreline) (including marine and coastal) miles managed or protected to maintain desired condition as specified in management plans-annual (GPRA)	5,144	59,125	65,115	309,974	310,032	309,976	309,976	310,010	34	310,010
CSF Total Actual/ Projected Expenditures (\$000)	\$4,265	\$3,864	\$4,883	n/a	\$4,137	\$4,231	\$4,231	\$4,329	\$98	\$4,429
CSF Program Total Actual/ Projected Expenditures (\$000)	\$3,234	\$2,533	\$3,758	n/a	\$3,095	\$3,166	\$3,166	\$3,239	\$73	\$3,314
Actual/ Projected Cost Per Mile (whole dollars)	\$829	\$65	\$75	n/a	\$13	\$14	\$14	\$14	\$0	\$14
CSF 2.1 Number of FWS wetland acres restored to the condition specified in management plans-annual (GPRA)	49,765	24,889	24,869	20,222	61,693	28,017	28,017	29,026	1,009	29,026
CSF Total Actual/ Projected Expenditures (\$000)	\$10,287	\$10,361	\$11,672	n/a	\$18,274	\$8,490	\$8,490	\$8,998	\$508	\$9,205
CSF Program Total Actual/ Projected Expenditures (\$000)	\$8,875	\$7,996	\$9,780	n/a	\$16,507	\$16,886	\$16,886	\$17,275	\$388	\$17,672
Actual/ Projected Cost Per Acre (whole dollars)	\$207	\$416	\$469	n/a	\$296	\$303	\$303	\$310	\$7	\$317

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
CSF 2.2 Number of FWS upland acres restored to the condition specified in management plans-annual (GPRA)	198,663	56,177	93,470	113,188	575,957	253,307	253,307	262,426	9,119	262,426
CSF Total Actual/ Projected Expenditures (\$000)	\$12,331	\$12,447	\$14,947	n/a	\$19,021	\$8,558	\$8,558	\$9,070	\$512	\$9,278
CSF Program Total Actual/ Projected Expenditures (\$000)	\$10,316	\$9,293	\$12,293	n/a	\$16,705	\$17,089	\$17,089	\$17,482	\$393	\$17,884
Actual/ Projected Cost Per Acre (whole dollars)	\$62	\$222	\$160	n/a	\$33	\$34	\$34	\$35	\$1	\$35
CSF 2.3 Number of FWS coastal and marine acres restored to the condition specified in management plans-annual (GPRA)	5,903	7,159	8,863	12,773	103,800	7,447	7,447	7,715	269	7,715
CSF Total Actual/ Projected Expenditures (\$000)	\$1,910	\$1,748	\$2,608	n/a	\$2,506	\$184	\$184	\$195	\$11	\$199
CSF Program Total Actual/ Projected Expenditures (\$000)	\$1,629	\$1,334	\$2,253	n/a	\$2,224	\$2,275	\$2,275	\$2,328	\$52	\$2,381
Actual/ Projected Cost Per Acre (whole dollars)	\$324	\$244	\$294	n/a	\$24	\$25	\$25	\$25	\$1	\$26
CSF 2.4 Number of FWS wetland acres managed or protected to maintain desired condition as specified in management plans-annual (GPRA)	21,357,697	21,624,566	32,194,867	32,079,420	32,087,460	32,069,571	32,069,571	33,224,076	1,154,504 (3.6%)	33,224,076
CSF Total Actual/ Projected Expenditures (\$000)	\$79,404	\$88,702	\$96,670	n/a	\$101,940	\$104,227	\$104,227	\$110,462	\$6,236	\$113,003
CSF Program Total Actual/ Projected Expenditures (\$000)	\$67,224	\$67,253	\$77,732	n/a	\$86,259	\$88,243	\$88,243	\$90,272	\$2,030	\$92,348
Actual/ Projected Cost Per Acre (whole dollars)	\$4	\$4	\$3	n/a	\$3	\$3	\$3	\$3	\$0	\$3

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
CSF 2.5 Number of FWS upland acres managed or protected to maintain desired condition as specified in management plans-annual (GPRA)	52,791,511	52,689,376	52,553,845	52,264,381	52,352,498	52,448,499	52,448,499	54,336,645	1,888,146 (3.6%)	54,336,645
CSF Total Actual/ Projected Expenditures (\$000)	\$58,652	\$62,709	\$63,241	n/a	\$62,413	\$63,965	\$63,965	\$67,792	\$3,827	\$69,351
CSF Program Total Actual/ Projected Expenditures (\$000)	\$49,382	\$47,444	\$50,938	n/a	\$52,172	\$53,372	\$53,372	\$54,600	\$1,228	\$55,856
CSF 2.6 Number of FWS coastal and marine acres managed and protected to maintain desired condition as specified in management plans-annual (GPRA)	2,359,228	2,366,041	2,423,086	2,913,747	2,913,747	53,672,185	53,672,185	55,604,384	1,932,199 (3.6%)	55,604,384
CSF Total Actual/ Projected Expenditures (\$000)	\$22,586	\$26,257	\$29,173	n/a	\$32,285	\$608,378	\$608,378	\$644,776	\$36,398	\$659,606
CSF Program Total Actual/ Projected Expenditures (\$000)	\$19,669	\$20,849	\$24,661	n/a	\$25,718	\$26,310	\$26,310	\$26,915	\$605	\$27,534
Actual/ Projected Cost Per Acre (whole dollars)	\$10	\$11	\$12	n/a	\$11	\$11	\$11	\$12	\$0	\$12
2.9.2 % of known contaminated sites on NWRs lands remediated during the FY (GPRA)	20% (24 of 120)	43% (15 of 35)	34% (10 of 29)	42% (10 of 24)	62% (15 of 24)	41% (9 of 22)	41% (9 of 22)	41% (9 of 22)	0	41% (9 of 22)
CSF 2.10 Sum of the number of NWRs/WMDs completing a Comprehensive Conservation Plan during the year and the number of NWRs/WMDs with a plan under development	225	221	211	264	170	196	196	180	(16) (-8.2%)	180
CSF Total Actual/ Projected Expenditures (\$000)	\$14,701	\$17,756	\$27,593	n/a	\$25,716	\$30,330	\$30,330	\$28,495	(\$1,835)	\$29,151
CSF Program Total Actual/ Projected Expenditures (\$000)	\$11,430	\$14,344	\$21,668	n/a	\$20,991	\$21,474	\$21,474	\$21,968	\$494	\$22,473

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
Actual/ Projected Cost Per NWRs/WMDs (whole dollars)	\$65,339	\$80,343	\$130,770	n/a	\$151,268	\$154,747	\$154,747	\$158,307	\$3,559	\$161,948
2.10.1 # of NWRs/WMDs with a Comprehensive Conservation Plan completed - cumulative	204	263	318	332	430	433	433	496	63 (14.5%)	496
Comments:	The number of Comprehensive Conservation Plans completed increase as the Plans are a multi-year process									
2.10.2 # of NWRs/WMDs with Comprehensive Conservation Planning underway at the end of the FY	128	166	152	175	136	126	126	116	(10) (-7.9%)	116
2.10.3 # of NWRs/WMDs with a Comprehensive Conservation Plan completed (during the year)	97	55	59	89	34	70	70	64	(6) (-8.6%)	64
2.11.1 The condition of NWRS conservation and biological research facilities, as measured by the DOI FCI, is x. (GPRA)	0.051 (245.3M of 4,836.5M)	0.067 (422.7M of 6,337.4M)	0.070 (355.6M of 5,057.8M)	0.071 (377.4M of 5,294.9M)	0.076 (404.3M of 5,294.9M)	0.069 (414.6M of 5,973.1M)	0.069 (414.6M of 5,973.1M)	0.069 (414.6M of 5,973.1M)	0	0.069 (414.6M of 5,973.1M)
CSF 11.1 Percent of baseline acres infested with invasive plant species that are controlled (GPRA)	12% (284,363 of 2,356,740)	14% (280,961 of 2,015,841)	15% (341,467 of 2,329,450)	5% (107,657 of 2,312,632)	6% (146,938 of 2,312,632)	6% (160,893 of 2,508,387)	6% (160,893 of 2,508,387)	7% (166,685 of 2,508,387)	0 (3.6%)	7% (166,685 of 2,508,387)
CSF Total Actual/ Projected Expenditures (\$000)	\$24,802	\$29,097	\$30,285	n/a	\$32,847	\$36,794	\$36,794	\$38,995	\$2,201	\$39,892
CSF Program Total Actual/ Projected Expenditures (\$000)	\$18,710	\$19,867	\$23,804	n/a	\$28,311	\$28,962	\$28,962	\$29,628	\$666	\$30,310
Actual/ Projected Cost Per Acre (whole dollars)	\$87	\$104	\$89	n/a	\$224	\$229	\$229	\$234	\$5	\$239
CSF 12.1 Percent of invasive animal species populations that are controlled (GPRA)	6% (288 of 4,978)	7% (302 of 4,493)	6% (283 of 4,387)	7% (285 of 3,900)	8% (298 of 3,900)	8% (300 of 3,844)	8% (300 of 3,844)	8% (311 of 3,844)	0 (3.6%)	8% (311 of 3,844)
CSF Total Actual/ Projected Expenditures (\$000)	\$3,386	\$3,167	\$3,490	n/a	\$3,032	\$3,123	\$3,123	\$3,310	\$187	\$3,386
CSF Program Total Actual/ Projected Expenditures (\$000)	\$1,842	\$1,609	\$1,868	n/a	\$1,796	\$1,838	\$1,838	\$1,880	\$42	\$1,923

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
Actual/ Projected Cost Per Populations (whole dollars)	\$11,757	\$10,486	\$12,332	n/a	\$10,175	\$10,410	\$10,410	\$10,649	\$239	\$10,894
12.1.1 % of invasive animal species populations that are controlled (GPRA)	6% (288 of 4,978)	7% (302 of 4,493)	6% (283 of 4,387)	7% (285 of 3,900)	8% (298 of 3,900)	8% (300 of 3,844)	8% (300 of 3,844)	8% (311 of 3,844)	0.0 (3.6%)	8% (311 of 3,844)
CSF 13.1 Percent of archaeological sites and historic structures on FWS inventory in good condition	19% (2,795 of 14,347)	12% (2,858 of 24,098)	14% (2,892 of 20,743)	13% (2,912 of 21,608)	13% (2,916 of 21,608)	18% (2,950 of 16,812)	18% (2,950 of 16,812)	18% (2,950 of 16,812)	0	18% (2,950 of 16,812)
CSF Total Actual/ Projected Expenditures (\$000)	\$3,131	\$3,977	\$4,134	n/a	\$3,898	\$4,034	\$4,034	\$4,127	\$93	\$4,222
CSF Program Total Actual/ Projected Expenditures (\$000)	\$2,123	\$2,263	\$2,928	n/a	\$2,740	\$2,803	\$2,803	\$2,867	\$64	\$2,933
Actual/ Projected Cost Per Unit (whole dollars)	\$1,120	\$1,392	\$1,430	n/a	\$1,337	\$1,368	\$1,368	\$1,399	\$31	\$1,431
13.1.4 % of NWRS historic structures in FWS inventory that are in good condition (GPRA)	19% (2,795 of 14,347)	1% (86 of 11,583)	4% (98 of 2,181)	4% (98 of 2,723)	3% (92 of 2,723)	4% (90 of 2,213)	4% (90 of 2,213)	4% (90 of 2,213)	0	4% (90 of 2,213)
<b>Improve Recreation Opportunities for America</b>										
CSF 15.2 Percent of NWRs/WMDs open to six priority NWRS recreation activities	83% (5 of 6)	83% (5 of 6)	85% (5 of 6)	85% (5 of 6)	85% (5 of 6)	84% (5 of 6)	84% (5 of 6)	84% (5 of 6)	0	84% (5 of 6)
CSF Total Actual/ Projected Expenditures (\$000)	\$55,779	\$64,510	\$67,614	n/a	\$65,860	\$66,603	\$66,603	\$68,135	\$1,532	\$69,702
CSF Program Total Actual/ Projected Expenditures (\$000)	\$43,484	\$43,316	\$46,765	n/a	\$48,483	\$49,598	\$49,598	\$50,739	\$1,141	\$51,906
Actual/ Projected Cost Per NWRs/WMDs (whole dollars)	\$11,170,377	\$12,940,514	\$13,253,464	n/a	\$12,841,629	\$13,136,987	\$13,136,987	\$13,439,137	\$302,151	\$13,748,237

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
15.2.1 % of NWRs/WMDs open to six priority NWRS recreation activities (applies within constraints of compatibility standard): % open to hunting, % open to fishing, % open to wildlife observation & photography, % open to environmental education, % open to interpretation, and % open to other recreational uses	83% (5 of 6)	83% (5 of 6)	85% (5 of 6)	85% (5 of 6)	85% (5 of 6)	84% (5 of 6)	84% (5 of 6)	84% (5 of 6)	0	84% (5 of 6)
15.2.20 % of visitors are satisfied with the quality of experience (GPRA)	85% (85 of 100)	85% (85 of 100)	85% (85 of 100)	85% (85 of 100)	0	85% (85 of 100)				
CSF 17.1 Percent of NWRs/WMDs having law enforcement staffing comparable to the need identified in the NWRS Law Enforcement Deployment Model	8% (18 of 227)	8% (18 of 227)	8% (18 of 227)	9% (17 of 189)	9% (17 of 189)	7% (17 of 233)	7% (17 of 233)	7% (17 of 233)	0	7% (17 of 233)
CSF Total Actual/ Projected Expenditures (\$000)	\$48,585	\$55,387	\$61,160	n/a	\$57,655	\$58,981	\$58,981	\$60,337	\$1,357	\$61,725
CSF Program Total Actual/ Projected Expenditures (\$000)	\$39,344	\$43,947	\$50,803	n/a	\$49,512	\$50,651	\$50,651	\$51,816	\$1,165	\$53,008
Actual/ Projected Cost Per NWRs/WMDs (whole dollars)	\$2,699,172	\$3,077,075	\$3,397,778	n/a	\$3,391,442	\$3,469,445	\$3,469,445	\$3,549,242	\$79,797	\$3,630,875
<b>Improve Protection of Lives, Resources and Property</b>										
17.1.10 % change in Part I offenses that occur on FWS lands or under FWS jurisdiction (GPRA)	n/a	(0 of 653)	(0 of 653)	(0 of 511)	-13% (-65 of 511)	5% (25 of 536)	5% (25 of 536)	5% (25 of 536)	0	5% (25 of 536)
17.1.11 % change in Part II offenses (excluding natural, cultural and heritage resource crimes) that occur on FWS lands or under FWS jurisdiction (GPRA)	n/a	(0 of 43,525)	(0 of 43,525)	(0 of 37,027)	0% (0 of 37,027)	5% (1,851 of 38,878)	5% (1,851 of 38,878)	5% (1,851 of 38,878)	0	5% (1,851 of 38,878)
17.1.12 % change in natural, cultural and heritage resource crimes that occur on FWS lands or under FWS jurisdiction (GPRA)	n/a	(0 of 22,312)	(0 of 22,312)	(0 of 40,421)	32% (12,815 of 40,421)	5% (2,660 of 55,900)	5% (2,660 of 55,900)	5% (2,660 of 55,900)	0	5% (2,660 of 55,900)

**Program Performance Overview - Refuges**

Performance Goal	2006 Actual	2007 Actual	2008 Actual	2009 Plan	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Long-term Target 2012
<b>Advance Modernization/Integration</b>										
52.1.1 # of volunteer hours are annually contributed to NWRS (GPRA)	1,277,523	1,307,291	1,389,886	1,283,140	1,382,990	1,293,790	1,293,790	1,382,990	89,200 (6.9%)	1,382,990
52.1.8 % of NWRS/WMDs have a Friends Groups	79% (384 of 485)	61% (287 of 469)	52% (310 of 594)	70% (327 of 464)	69% (321 of 464)	72% (334 of 462)	72% (334 of 462)	71% (334 of 471)	(1%) (0 over 9) (-1.9%)	71% (334 of 471)
52.1.8.1 # of NWRS with Friends Groups	384	287	310	327	321	334	334	334	0	334
52.1.8.2 # of NWRS with wildlife dependent recreation	485	469	594	464	464	462	462	471	9 (1.9%)	471
CSF 54.1 Service-wide Comprehensive Facilities Improvement: Overall condition of buildings and structures (as measured by the FCI) that are mission critical and mission dependent (as measured by the API) with emphasis on improving the condition of assets with critical health and safety needs (GPRA)	0.085 (1,537.2 M of 18,001.6 M)	0.127 (2,680.2 M of 21,049.1 M)	0.125 (2,648.6 M of 21,211.2 M)	0.119 (2,845.7 M of 23,813.9 M)	0.112 (2,676.8 M of 23,813.9 M)	0.117 (2,768.7 M of 23,608.7 M)	0.117 (2,768.7 M of 23,608.7 M)	0.118 (2,753.2 M of 23,368.6 M)	0 (0.5%)	0.118 (2,753.2 M of 23,368.6 M)
54.1.9 Percent of assets targeted for disposal that were disposed (GPRA)	n/a	n/a	1,247% (212 of 17)	117% (62 of 53)	117% (62 of 53)	100% (124 of 124)	100% (124 of 124)	100% (124 of 124)	0	100% (124 of 124)

Note: 2011 Base Budget is equal to 2010 Plan (enacted level) plus fixed cost (absorbed).

**Activity: National Wildlife Refuge System**  
**Subactivity: Wildlife and Habitat Management**

		2009 Actual	2010 Enacted	2011 Request			Change from 2010 (+/-)
				DOI-wide Changes & Transfers (+/-)	Program Changes (+/-)	Budget Request	
Wildlife and Habitat Management	(\$000)	192,186	223,105	-2,377	+3,834	224,562	+1,457
Healthy Habitats & Populations	(\$000)	4,833	4,833	0	0	4,833	0
Alaska Subsistence	(\$000)	2,840	2,840	0	0	2,840	0
<b>Total, Wildlife and Habitat Management</b>	<b>(\$000)</b>	<b>199,859</b>	<b>230,778</b>	<b>-2,377</b>	<b>+3,834</b>	<b>232,235</b>	<b>+1,457</b>
	<b>FTE</b>	<b>1,308</b>	<b>1,443</b>	<b>0</b>	<b>+17</b>	<b>1,460</b>	<b>+17</b>

**Summary of 2011 Program Changes for Wildlife and Habitat Management**

Request Component	(\$000)	FTE
Wildlife and Habitat Management		
• Climate Change Adaptation Initiative	+8,000	+25
• Treasured Landscapes Initiative - Chesapeake Bay	+1,460	+1
• Treasured Landscapes Initiative - Bay Delta Ecosystem	+180	+1
• Treasured Landscapes Initiative - Gulf Coast Ecosystem	+750	+1
• Palmyra Atoll Rat Eradication	-1,200	0
• Wildlife and Habitat Management - Operations	-1,260	-9
• Challenge Cost Share	-4,096	-2
<b>Total, Program Changes</b>	<b>+3,834</b>	<b>+17</b>

**Justification of 2011 Program Changes for Wildlife and Habitat Management**

The 2011 budget request for the Wildlife and Habitat Management (WHM) program is \$232,235,000 and 1,460 FTE, a program change of +\$3,834,000 and +17 FTE from the 2010 Enacted.

**Climate Change Adaptation - Inventory and Monitoring Program (+\$8,000,000/+25 FTE)**

The requested increase of \$8,000,000 would be used to continue building the landscape-scale, long-term inventory and monitoring network that the Service began in 2010. A primary emphasis would be working with the Service’s Division of Information Resources Technology Management to build a data architecture that can store and serve the necessary large datasets, and to work on monitoring protocols and guidance. In support of this effort, 25 additional FTE would be added, including data managers, ecologists, biometricians, and field biologists.

In 2011 the Service will use \$1,000,000 of its Refuge Climate Inventory and Monitoring funding for collaboration on land management science priorities at the Department’s Climate Science Centers (CSCs). Service participation in and support of the CSCs will help prioritize research topics to address the most pressing management needs and provide an interface to step down broad-scale research results to the applied research and monitoring activities of the LCCs, individual Interior bureaus, programs and land managers.

The Service anticipates over 100 new inventories of fish, wildlife, plants, and their habitats will be completed. These inventories will cover biodiversity, vegetative communities, and the underlying abiotic features that support fish and wildlife populations. Detecting climate-driven changes in these resources is important to help focus our strategic response to climate change at multiple landscape scales and adaptation efforts on those species most in need. The inventories would include cross-program work with Migratory Birds, Endangered Species, Fisheries, and Habitat Conservation. These inventory, monitoring, and data collection efforts would be coordinated with the USGS and data would be shared with the Bureau of Land Management and the National Park Service through Landscape Conservation Cooperatives.

**Treasured Landscapes - Chesapeake Bay (+\$1,460,000/+1 FTE)**

The requested funding would be used to improve habitat for Service priority fish and wildlife trust species through habitat restoration and management on 14 National Wildlife Refuges within the Chesapeake Bay Watershed. Much of the work would be done by expanding partnerships that have already proven effective.

The Service would develop population and habitat models on and off national wildlife refuges to determine the ability of Chesapeake Bay lands and waters to conserve priority populations of aquatic species, endangered and threatened species, migratory birds, and other Federal trust resources. The Service anticipates approximately 19 new inventories would be completed with this funding.

Funding would also be used to better control invasive species, such as stiltgrass, phragmites, kudzu, and trumpet vine. Increased monitoring, evaluation, and law enforcement efforts are needed to prevent both intentional and unintentional introductions of terrestrial and aquatic invasive species. Once detected, rapid response teams would act to eradicate or control infestations of invasive species before they can become established.

**Treasured Landscapes – Bay Delta Ecosystem (+\$180,000/+1 FTE)**

Funding is needed to coordinate National Wildlife Refuge water supply and delivery, threatened and endangered species recovery, and migratory bird habitat needs with Bay Delta conservation planning. The Refuge System's tidal marsh and wetland restoration expertise would be utilized by a new FTE to provide technical assistance and planning for habitat restoration efforts in the Bay Delta. In addition, this funding will enable the Refuge System experts to communicate, educate, and guide private landowners in the conservation of vital Bay Delta habitats.

**Treasured Landscapes – Gulf Coast Ecosystem (+\$750,000/+1 FTE)**

This request would support the restoration of key fish and wildlife habitat along the Gulf Coast of Louisiana and Mississippi. There are 10 National Wildlife Refuges along this coast, protecting more than 300,000 acres. These refuges are some of the last havens for species that depend upon habitats in the Mississippi coastal plain. The Service is an active partner with the many Federal and State agencies working on coastal protection and restoration projects, including the Army Corps of Engineers, the National Oceanic and Atmospheric Administration, EPA, NPS, and USGS. As a member of the LA/MS Coastal Ecosystem Restoration Working Group, the Service plays a significant role in coastal Louisiana and Mississippi restoration akin to the collaborative role the Service plays in the Everglades restoration. A detailed scientific assessment on these coastal refuges would enable the Service to sustain resources into the future, taking into consideration sea-level rise and other potential impacts of climate change.

The Refuge system manages a considerable portion of this area as coastal marsh that needs restoration and protection from sea level rise and impacts of storms and climate change. Key plant and wildlife species must be inventoried and monitored to document impacts on their status as habitats change due to outside impacts and restoration efforts. Significant oil and gas reserves with active production and

seismic exploration occur on these refuges. Oversight is needed to avoid negative impacts to these sensitive marsh and coastal habitats.

The 2011 President's budget request would focus and expand restoration efforts by hiring one new staff member to:

- assist with the inventory and monitoring of key species on refuges and other priority areas within the ecosystem;
- identify, prioritize, and develop future restoration projects;
- accomplish restoration projects on refuge lands and assist partners with projects off refuge lands;
- collaborate with partners on the many ongoing and future projects that involve refuge system lands on the lower river and coastal wetlands;
- help develop pilot test areas and research efforts for better use of dredge material in marsh building and protection; and
- work with our energy partners for successful production of energy reserves while protecting critical marsh and coastal habitats.

#### **Palmyra Atoll NWR Rat Eradication (-\$1,200,000/0 FTE)**

In 2010 Congress provided \$1,200,000 to eradicate rats on Palmyra Atoll. This one time eradication project will be completed in 2010, no additional funding is required in 2011.

#### **General Operations (-\$1,260,000/-9 FTE)**

The Service proposes a reduction of \$1,260,000, part of a large Congressional increase of unrequested funding in 2010 for general operations. Funds will be targeted to increases for high priority activities elsewhere in the budget request. The 2011 request maintains an increase of \$14.1 million over the 2009 enacted level for Wildlife and Habitat Management general operations.

#### **Challenge Cost Share (-\$4,096,000/-2 FTE)**

The Challenge Cost Share program funds a variety of small-scale projects with partners, from eradication of invasive species to construction of visitor facilities. A 2009 report by the Department of the Interior's Office of Inspector General concluded that the program did not demonstrate effective program management of non-federal contributions. Challenge Cost Share procedures are under review; no funding is requested for this program in 2011.

#### **Program Overview**

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The Wildlife and Habitat Management (WHM) program element addresses the ecological condition of Refuge System lands, employing actions such as inventory and monitoring of plant and animal populations and habitats; restoration of wetland, forest, grassland and marine habitats; active management of habitats through manipulation of water levels, prescribed burning, haying and grazing; identification and control of the spread of invasive species; air quality monitoring; investigation and cleanup of contaminants; control of wildlife disease outbreaks; and assessment of water quality and quantity. These activities are integral for the Refuge System to conserve, manage and restore fish, wildlife, and plant resources and their habitats at local, landscape, and national scales. These activities are vital to supporting fish and wildlife adaptation to climate change by providing healthy and productive habitats, reducing non-climate environmental stressors, and providing scientific information needed to inform management decisions.

Much of the conservation work done on refuges is accomplished in partnership with adjacent landowners, local communities, non-government organizations, states, and other Federal agencies. Working with partners at landscape scales adds to the effective conservation achievements of the Refuge System and allows individual refuges to more effectively respond to climate change and other environmental

stressors. More than 250 organized groups of volunteers, known as Friends groups, help refuges meet public use and resource management goals. Volunteers annually contribute approximately 20 percent of the work hours performed on refuges.

Through efforts to conserve migratory birds, protect endangered species, restore and manage habitats and combat invasive species, the Refuge System supports the conservation, management, and restoration of fish, wildlife, and plant resources and their habitats. The Refuge System also provides major societal benefits for ecosystem services such as improving air and water quality, improving groundwater retention, reducing coastal impacts from hurricanes, sequestering carbon, moderating flood impacts, etc. These benefits are increasingly valuable in light of current worldwide challenges associated with climate change.

WHM funding is also used to manage lands and waters with special designations for their unique values, including 74 Wilderness areas, 13 Wild and Scenic rivers, millions of acres of marine managed areas, and 6 National Monuments, including 3 marine monuments in the Pacific that were established in 2009: the Pacific Remote Islands, Rose Atoll, and Marianas Trench Marine National Monuments.

The diversity of habitats conserved and managed in the Refuge System includes not only coastal and marine habitats, but also freshwater wetlands, forests, grasslands, deserts, tundra, and other habitat types. By necessity, habitat restoration and management activities are diverse and include restoring hydrology, establishing native plants, managing forests and grasslands, manipulating water levels, and controlling invasive plant and animal species. The Service routinely restores Refuge System habitat at an average cost of approximately \$430 per acre. Those restored acres are critical to provide for the resting, breeding, and nutritional needs of a wide diversity of wildlife. Habitat restoration and protection on refuges also plays an important role in sequestering carbon. The Service cooperates with Federal, state and local entities to complete projects such as:

Countering Sea-Level Rise at Alligator River Refuge – This coastal refuge is the principle foothold of the endangered red wolf, and protects the last remaining wild population. Thirteen other threatened and endangered species occur there, including the Red Cockaded Woodpecker. However, the vast majority of its land is less than 5 feet above sea level, and the effects of climate change induced sea-level rise are already visible. Increased tide levels and higher storm surges are eroding the shoreline, and salt water intrusion is degrading the peat soils. Natural communities are in retreat away from the shoreline. Just since the Refuge's establishment 25 years ago, tens of thousands of forested wetland acres have become marsh, historic drainage ditches from inland are widening, invasive species are spreading, and salinity is increasing in open, adjacent waters. The refuge is collaborating with the Army Corps of Engineers, the North Carolina Division of Coastal Management, and other partners in pursuit of innovative approaches to counter these effects and buy time as they pursue longer-term strategies. The most recent and aggressive effort is a project with The Nature Conservancy and Duke Energy to address two specific effects, shoreline erosion and salt water intrusion. Specifically, they are creating artificial oyster reefs that parallel the shoreline to buffer higher seas and wave action and reduce erosion. Also, they are installing water control structures at the outlet of old, agricultural ditches that drain the interior. One-way flap closures on the control structures permit fresh water to pass outwards, but prevent salt water intrusion up into the ditches from the sea. Finally, they are experimenting with salt-tolerant native vegetation such as bald cypress, black gum and green ash as replacements for coastal forest species that have been retreating from increasing salinities. Other refuges are now looking to Alligator River as a model for addressing complex climate change challenges with traditional land management techniques.

Long-Term Ecological Monitoring at Kenai Refuge – In 2004, the Service launched a long-term ecological monitoring program at Kenai Refuge in Alaska, and that highly successful program is helping shape the upcoming System-wide Inventory and Monitoring Program. Working cooperatively with the U.S. Forest Service's Forest Inventory & Analysis program, Kenai Refuge staff sample breeding land birds, vascular and nonvascular plants, arthropods, and noise on 255 plots placed at 5 kilometer intervals across 2 million acres. This program documents ecological conditions and characterizes biological diversity over the entire refuge, and results in predictive spatial models of species distributions now and into the future given climate change. Several insect and plant species new to Alaska, or new to the Refuge, have been identified, with over 1,000 species recorded to date. Lessons learned from this model program are helping shape protocols and data systems being developed System-wide to detect the effects of climate change and other landscape-level stressors.

Award Winning Carbon Sequestration at Marias des Cygnes Refuge – In partnership with The Conservation Fund and Environmental Synergy Inc., the Service restored 775 acres of native oak and hickory trees at the Marias des Cygnes Refuge in Kansas. As the forest matures it will trap 260,500 metric tons of carbon dioxide from the atmosphere, the equivalent of removing approximately 47,000 cars from the roads. Under the standards of the Climate, Community and Biodiversity Alliance (CCB), the project received the highest validation level which is Gold. Projects like this allow the Service to restore important habitats while simultaneously addressing climate impacts. The restored forest will be managed by the Service for migratory birds and the lands will be open to the public for wildlife dependent recreation.

Marsh Restoration at Blackwater Refuge – In the last 9 years, more than 40 acres of cordgrass marsh have been restored on Barren Island at Blackwater Refuge in Maryland. Through a joint project with the National Aquarium in Baltimore, the Maryland Conservation Corps, Friends of the Blackwater, and the U.S. Army Corps of Engineers, more than 80 students, from fourth through twelfth grade, are planting cordgrass to control erosion and restore wildlife habitat. Moreover, the students plant cordgrass they have raised in their own schoolyards.

The plantings are part of a long-term project to save Barren Island, which is now divided into two pieces because of erosion. The island serves as a rookery for herons and egrets, and it also has a bald eagle nest. In addition, Barren Island provides important storm and erosion protection to people living on nearby Hooper Island.

Burmese Pythons – Emerging Threat at Florida Refuges – The Burmese Python population is expanding in south Florida and threatening national wildlife refuges from the Florida Keys to the Everglades. Originally from Asia, the invasive snake can grow to more than 20 feet and nearly 200 pounds. Current estimates put the python population at between 20,000 and 30,000. The snake is a predator of virtually all Florida wildlife from white-tailed deer to endangered wood storks, and even adult alligators. A breeding population is well established in the 400 square miles of Everglades National Park, and the range is spreading towards Crocodile Lake and Loxahatchee Refuges.

Eradicating this invasive snake is no longer feasible, but the Service is working with partners to keep them from spreading. Immediate actions include placing python traps near sensitive places like Crocodile Lake Refuge, hosting Python Patrol classes to teach staff how to safely identify and capture pythons, and tracking pythons via radio transmitters to better understand their habits. The Service is also pursuing new legislative authority to prevent and control invasive species, as well as working to develop a biological control for the pythons.

Reintroducing an Endangered Butterfly at William L. Finley Refuge – This year over 130 volunteers planted 3,000 native plants on a hillside at the William L. Finley Refuge in Oregon as they prepare to reintroduce the endangered Fender's Blue Butterfly. The volunteers were recruited from local high schools, scout troops, wildlife organizations, and the Friends of the Willamette Valley Refuge Complex. Working along with refuge staff, the volunteers planted everything from camas lily bulbs and milkweed plugs to wild onions, oak, and bigleaf maple trees, wild iris, dense sedge, and shooting star. Once the plants are established, the refuge will take the next step of reintroducing the endangered butterfly in hopes of establishing a new population.

### **Refuge Wildlife and Habitat Management**

The WHM program element includes management of a broad array of fish, wildlife, plants, and habitat management and restoration on millions of acres of refuge lands every year. Through the Refuge System the Service conserves key habitats across broad landscapes spanning all four North American migratory bird flyways, providing protected areas across the entire range of many endangered species, and conserving expansive marine and Arctic ecosystems. Effective management of the Refuge System will be critical to support adaptation by fish, wildlife, and plants to changing environmental conditions driven by a changing climate system and other environmental stressors.

Management activities include restoring wetlands, riparian areas, and uplands; maintaining and restoring estuarine and marine ecosystems, including coral reef ecosystems at 180 refuges; managing extensive wetland impoundments and other bodies of water; managing vegetative habitats through farming, prescribed burning, mowing, haying, grazing, forest harvest or selective forest thinning; and control and management of invasive plants and animals. Such activities are carried out with operational funding, particularly for managing extensive wetland impoundments requiring water management facilities, such as dikes, levees, pumps, spillways, and water level control structures. Water resources are vitally important to wildlife and their habitats, making water rights protection and adjudication an ever increasing endeavor as demand for water grows. Management actions for wildlife populations include reintroducing imperiled species, erecting nest structures, controlling predators, banding and radio-tracking wildlife, and inventorying and monitoring species and habitats.

Invasive species control activities are also critical and include preventing the introduction and spread of invasive species, and controlling or eradicating invasives where they are established. Integrated pest management techniques are used wherever feasible but mechanical removal and/or herbicides are sometimes needed for extensive infestations. Rapid response and eradication of emerging invasive species populations is attempted wherever possible to limit establishment, to limit range expansion, and to prevent the need for more costly ongoing treatments, which are inevitably required once invasives become established. Climate change is projected to exacerbate infestations, as rapidly changing ecological conditions are expected to favor many invasive species, making early detection and rapid response even more critical.

The Service also uses WHM funding to review and manage lands and waters with special designations, such as wilderness areas, wild and scenic rivers, areas proposed as marine protected areas, western hemisphere shorebird reserves, and world heritage sites. The Service manages wilderness areas to preserve their natural and undeveloped character, and manage wild and scenic rivers to protect their outstanding values. This element also funds employees who review projects funded or permitted by the Service per the National Historic Preservation Act (NHPA). The NHPA reviews typically include field surveys, archaeological investigations, and site evaluations. The Refuge System employs a majority of the Service's cultural resource specialists and provides compliance reviews for projects funded by other programs, such as grants issued by the Ecological Services program.

**Healthy Habitats & Populations**

The Healthy Habitats & Populations program element directs funds to environmental contaminant investigations and cleanup on refuges; managing mineral resources during all phases of exploration, drilling, production, clean-up and restoration; as well as for addressing wildlife diseases found on refuges, such as chronic wasting disease. Reducing these non-climate stressors is a key component of supporting fish and wildlife adaptation across the Refuge System.

Managing the extraction of oil, natural gas, and other mineral resources continues to be a challenge for refuges, with more than one-fourth (155 refuges) of all refuges having mineral extraction activities within their boundaries. Past and current activities include exploration, drilling and production, pipelines and hard-rock mining, all of which have a direct impact on wildlife and their habitat. This element funds the management and oversight of mineral activities to ensure refuge resources are protected and that Best Management Practices are employed during resource extraction.

**Alaska Subsistence**

The Alaska Subsistence program manages subsistence uses by rural Alaskans on 237 million acres of Federal lands by coordinating the regulation and management of subsistence harvests among five Federal bureaus (the U.S. Fish and Wildlife Service, the National Park Service, the Bureau of Land Management, the Bureau of Indian Affairs, and the U.S. Forest Service), coordinating with the Alaska Department of Fish and Game, and providing technical and administrative support for 10 rural Regional Advisory Councils.

**2011 Program Performance**

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The 2011 budget request would be used to build upon the landscape-scale, long-term, inventory and monitoring program that began in 2010. This program would contribute to the success of the Landscape Conservation Cooperatives and provide critical information for planning and management decisions in the context of climate change adaptation and mitigation. With this funding the Refuge System would be able to complete additional inventory and monitoring actions; a critical first step for the Refuge System to more effectively help species and habitats adapt to environmental changes.

In addition, the Refuge System intends to restore tens of thousands of wetland, open water, and upland acres. These activities not only benefit wildlife and habitat, but also support high-quality, wildlife-dependent recreation opportunities for more than 42.5 million annual visitors.

In addition to less intensive wildlife and habitat management practices, the Refuge System would continue traditional management activities, such as water level manipulation, prescriptive grazing, and selective timber harvesting. In FY 2011, the Refuge System would treat nearly 300,000 acres infested with invasive plants. Invasive species management includes the continuing operation of five Invasive Species Strike Teams operating across the country and focusing on early detection and rapid response to recently established infestations.

Due to an Inspector General's report that concluded the Challenge Cost Share program did not demonstrate effective program management of nonfederal contributions, the program's are under review and no funding is requested for this program in 2011.

**Performance Change Table - Refuges Wildlife and Habitat Management**

Performance Goal	2007 Actual	2008 Actual	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Program Change Accruing in Out-years
<b>Watersheds and Landscapes</b>								
2.4.1 # of NWRS wetland acres achieving desired condition (GPRA)	21,624,566	32,194,867	32,087,460	32,069,571	32,069,571	33,224,076	1,154,504	
Comments:	In 2011, this measure has an increase for several Treasured Landscape initiatives. The funding increase will result in over 1.1 million wetland acres achieving desired management condition.							
2.5.1 # of NWRS upland acres achieving desired condition (GPRA)	52,689,376	52,553,845	52,352,498	52,448,499	52,448,499	54,336,645	1,888,146	
Comments:	In 2011, this measure has an increase for several Treasured Landscape initiatives. The funding increase will result in over 1.8 million upland acres achieving desired management condition.							
2.8.1 % of all NWRs/WMDs free of documented water quality problems with significant negative impacts to natural resources	75% (437 of 584)	73% (429 of 584)	62% (365 of 586)	62% (368 of 589)	62% (368 of 589)	62% (368 of 589)	0	
Comments:	In 2011, this measure has an increase for several Treasured Landscape initiatives. However, the impact of the funding on resolving documented water quality problems will not manifest during 2011.							
2.8.6 # of surface and ground water systems directly managed or influenced by FWS that are protected and/or restored to meet ecological needs (GPRA)	1,489	1,489	809	809	809	809	0	
Comments:	In 2011, this measure has an increase for several Treasured Landscape initiatives. However, the impact of the funding on resolving documented water quality problems will not manifest during 2011.							
CSF 11.1 Percent of baseline acres infested with invasive plant species that are controlled (GPRA)	14% (280,961 of 2,015,841)	15% (341,467 of 2,329,450)	6% (146,938 of 2,312,632)	6% (160,893 of 2,508,387)	6% (160,893 of 2,508,387)	7% (166,685 of 2,508,387)	1% (5,792 of 2,508,387)	
CSF Total Actual/Projected Expenditures (\$000)	\$29,097	\$30,285	\$32,847	\$36,794	\$36,794	\$38,995	\$2,201	

**Performance Change Table - Refuges Wildlife and Habitat Management**

Performance Goal	2007 Actual	2008 Actual	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Program Change Accruing in Out-years
CSF Program Total Actual/ Projected Expenditures (\$000)	\$19,867	\$23,804	\$28,311	\$28,962	\$28,962	\$29,628	\$666	
Actual/ Projected Cost Per Acre (whole dollars)	\$104	\$89	\$224	\$229	\$229	\$234	\$5	
Comments:	In 2011, this measure has an increase for several Treasured Landscape initiatives. As a result of this funding, the percent of baseline acres that are controlled will increase by 3.6 percent.							

Note: 2011 Base Budget is equal to 2010 Plan (enacted level) plus fixed cost (absorbed).

**Activity: National Wildlife Refuge System**  
**Subactivity: Visitor Services**

		2009 Actual	2010 Enacted	2011			Change from 2010 (+/-)
				DOI-wide Changes & Transfers (+/-)	Program Changes (+/-)	Budget Request	
Refuge Visitor Services	(\$000)	71,459	74,861	-873	+360	74,348	-513
Volunteer Partnerships	(\$000)	1,708	2,708	0	-1,000	1,708	-1,000
Challenge Cost Sharing Partnerships	(\$000)	2,404	2,404	0	-2,404	0	-2,404
<b>Total, Refuge Visitor Services</b>	<b>(\$000)</b>	<b>75,571</b>	<b>79,973</b>	<b>-873</b>	<b>-3,044</b>	<b>76,056</b>	<b>-3,917</b>
	<b>FTE</b>	<b>606</b>	<b>609</b>	<b>0</b>	<b>-15</b>	<b>594</b>	<b>-15</b>
<i>Other Major Resources:</i>	<i>(\$000)</i>	<i>4,750</i>	<i>4,800</i>	<i>0</i>	<i>0</i>	<i>4,800</i>	<i>0</i>
<i>Recreation Fee Program</i>	<i>FTE</i>	<i>28</i>	<i>28</i>	<i>0</i>	<i>0</i>	<i>28</i>	<i>0</i>

**Summary of 2011 Program Changes for Visitor Services**

Request Component	(\$000)	FTE
Visitor Services		
• Chesapeake Bay - Treasured Landscapes	+360	0
• Volunteers	-1,000	-11
• Challenge Cost Share	-2,404	-4
<b>Total, Program Changes</b>	<b>-3,044</b>	<b>-15</b>

**Justification of 2011 Program Changes**

The 2011 budget request for the Visitor Services program is \$76,056,000 and 594 FTE, a program change of -\$3,044,000 and -15 FTE from the 2010 Enacted.

**Treasured Landscapes Initiative - Chesapeake Bay (+\$360,000/+0 FTE)**

Wildlife recreation generates significant income for state economies and connects the American public with our natural world. In Maryland alone, 2006 expenditures on wildlife related recreation totaled \$1.6 billion. Through implementation of visitor facility enhancements and increased interpretive and educational operations, the Service would work with the NPS, NOAA, and other partners to expand opportunities for public access to the Chesapeake Bay and improve wildlife dependent activities on refuge lands and waters. Improvements would include new observation trails, water trails in conjunction with the Chesapeake Bay Gateways and Watertrails Network, Captain John Smith National Historical Trail, Harriet Tubman Historical Park, and other improvements recommended in reports drafted under Section 202 of Executive Order 13508, Chesapeake Bay Protection and Restoration. These improvements would expand environmental education to reconnect America's youth to our lands, waters, and species.

**Volunteers (-\$1,000,000/-11 FTE)**

The Service proposes to eliminate this earmark funding for Visitor Services in 2011.

**Challenge Cost Share (-\$2,404,000/-4 FTE)**

The Challenge Cost Share program, which started in 1985, has been successful in eradicating invasive species and constructing visitor facilities. A 2009 report by the Department of the Interior's Office of Inspector General concluded that the program did not demonstrate effective program management of nonfederal contributions. As a result, the Challenge Cost Share procedures are under review, and no funding is requested for this program in 2011. Program savings would be redirected into higher priority operational needs.

## Program Overview

The Refuge System Improvement Act of 1997 (Improvement Act) clarified that providing wildlife-dependent recreation is a prominent and important goal for the Refuge System. The Improvement Act recognizes the importance of a close connection between wildlife resources, the American character, and the need to conserve wildlife for future generations of Americans. The Refuge System embraces the Act and weaves its mandates into our daily work to provide greater access to Refuge System lands, when appropriate and compatible with the purpose for which a refuge was established.

The Refuge System's priority public uses, the so-called "Big 6", are hunting, fishing, wildlife photography, wildlife observation, environmental education, and interpretation. The Refuge System Visitor Services program also includes recreation fees, cultural resource protection and interpretation, an accessibility program, volunteers and Friends programs, special use permits, concessions management, and a host of other activities designed to welcome and orient visitors to the Refuge System.

The Visitor Services program creates quality experiences for the American public through access to knowledgeable staff, as well as through interpretive signs and brochures, while supplying safe and accessible facilities. The program also manages recreation fees in a manner that provides the government with a fair return on investments and visitors with exceptional value for fees paid. Local communities that have the ability to enjoy quality wildlife-dependent recreational experiences on refuges often carry those experiences to the next level, by making a personal commitment to and involvement in meeting the Refuge System's mission. Of the more than 42.5 million annual Refuge System visitors in FY 2009, more than 2 million came to hunt, 7 million to fish, and 26 million to observe wildlife from trails, observation towers, decks, and platforms. In addition, five million visitors came to photograph wildlife, while almost one million participated in on-site and off-site environmental education activities. Moreover, more than 28 million visitors participated in interpretive programs, which include 15 million visitors who benefited from our visitor centers and exhibits.

The focus of Refuge System Visitor Services is to welcome and orient Refuge System visitors, support friends groups and volunteer initiatives, and to conserve cultural, historic, and archaeological resources. Under this budget element, the Refuge System ensures that wildlife dependent recreational opportunities are provided, where compatible with refuge purposes.

Visitor Services program elements include:

- **Refuge Visitor Services** - This element includes the salary and base funding that supports recreational activities, with priority given to wildlife dependent recreation as required by the Improvement Act. The Refuge System provides the Big 6 types of wildlife dependent recreation to the extent that they are found to be compatible with the purposes for which a particular refuge was established. Non-wildlife dependent recreation (e.g. swimming, horseback riding, etc.) is considered to be a lower priority and must be determined to be both appropriate and compatible with the Refuge System mission and individual refuge purposes before being allowed on a refuge. Interpretive activities include interpretive programs, tours, staffed and un-staffed exhibits and workshops to learn about bird watching and natural resource management programs. Environmental education involves structured classroom or outdoor activities that help provide awareness and direct connections with wildlife and natural resource issues. Teacher workshops, which are particularly effective at reaching local school districts, provide a service that teachers can use in developing course materials and instruction for their students. The Visitor Services Program also funds staff that review projects funded or permitted by the Service for compliance with the National Historic Preservation Act (NHPA). The NHPA regulatory reviews may include field surveys, archaeological investigations, site evaluations and mitigation. The Refuge System employs a majority of the Service's cultural

resource specialists and provides compliance reviews for projects funded by other programs, such as permits and grants issued by the Ecological Services program.

- **Visitor Facility Enhancements** - This element includes the development and rehabilitation of small outdoor facilities that support quality visitor services programs on refuges. Parking areas at trailheads, wildlife observation platforms, kiosks, fishing piers, interpretive signs, trails, and boardwalks are all examples of such enhancements.
- **Friends and Volunteers** - This element encompasses activities directed by the Volunteer and Community Partnership Enhancement Act of 1998. Annually, volunteers contribute nearly 20 percent of the work hours performed on refuges. More than 200 non-profit groups, or Friends groups, assist refuges in meeting visitor services and natural resource management goals. Managing a refuge's partnership with the Friends and Volunteers Program requires developing projects and activities suitable for volunteers; maintaining communication and an organizational framework to ensure that partner's skill sets are matched to appropriate jobs; and training and outfitting volunteers with the proper equipment to perform quality work in a safe manner.

### **Welcome and Orient Visitors**

Under this element, the Refuge System clearly identifies all wildlife refuges that are open to the public, and ensures that visitors understand who we are, what we do, and how to enjoy their visits to refuges. Welcoming and orienting visitors provides a unique brand identity that helps the public distinguish between the Service, including the Refuge System, and other land management entities. This identity recognition can be heightened through clear and accurate signage, brochures, interpretive materials, uniforms, adequate and accessible recreational facilities, and knowledgeable staff or volunteers available to answer questions and describe the role of an individual refuge within the context of the Refuge System's mission.

### **Provide Quality Wildlife-Dependent Recreation and Education Opportunities**

Opportunities for compatible wildlife-dependent recreation (wildlife observation, hunting, fishing, nature photography, environmental education and interpretation) are provided and evaluated by visitor satisfaction surveys to ensure that we offer quality experiences for the public to enjoy America's wild lands, fish, wildlife, and plants. When those recreational activities are managed according to the principles of sound fish and wildlife management and administration on national wildlife refuges, they stimulate stewardship and a conservation ethic within the public.

Quality interpretation and environmental education programs engage the public in, and increase community support for, the conservation mission of the Refuge System; making fish, wildlife, plants, and wildlife habitat relevant, meaningful and accessible to the American public; and helping teachers, students and visitors understand the causes and consequences of climate change affecting fish and wildlife resources.

The Refuge System recently launched a new birding initiative in response to the growing interest among Americans to watch birds in their communities and on refuges. Nearly 50 million Americans enjoy bird-watching each year and it is possibly the fastest growing wildlife-dependent recreational activity in the United States. An example of one program underway is the partnership with the Cornell Laboratory of Ornithology to use the interactive birding program, e-Bird, for visitors and volunteers to record bird observations on refuges. The Refuge System and the Lab are also examining other education and interpretive programs, such as Celebrate Urban Birds, to reach new and diverse audiences and make refuges more birder friendly. In early 2009, new partnerships resulted in the distribution of optics and birding field guides to 80 national wildlife refuges for use by visitors and school groups. Birding programs and festivals generate significant revenue and create jobs for local economies, as documented in

the Refuge System's 2006 Banking on Nature study. A recent report shows that 1 of every 5 Americans watches birds, and in doing so, birdwatchers contributed \$36 billion to the U.S. economy in 2006, the most recent year for which economic data are available. The report, Birding in the United States: A Demographic and Economic Analysis, shows that total participation in bird watching is strong at 48 million, and remaining at a steady 20 percent of the U.S. population since 1996.

More than 750,000 students and teachers annually visit national wildlife refuges, which provide substantial environmental education programs to introduce young people to the precepts of natural resource conservation and the idea of natural resources as a career path. Moreover, youth are hired on scores of national wildlife refuges through term and seasonal jobs, often through the collaboration of the Service with nongovernmental organizations whose mission is to reach diverse audiences. The Service also works in partnership with a range of citizen science programs that engage young people in natural resource programs that not only heighten scientific knowledge nationwide, but also raise the awareness of young people from diverse backgrounds about the importance of natural resource protection.

The visitor facility enhancement program supports the development, rehabilitation, and construction of facilities such as parking areas at trailheads, wildlife observation platforms, kiosks, and other projects that are necessary for interpretation and environmental education on refuges.

The Refuge System continues to support volunteers and Friends groups through on-site training, mentoring, workshops, and awards. New efforts are underway to build a suite of Refuge System citizen science programs for participation by Friends organizations, volunteers, and visitors. Partners include the National Phenology Network, Project Budburst, and the Cornell Laboratory of Ornithology. These programs offer volunteers and visitors new, meaningful opportunities to contribute data that would help the Service understand the causes and consequences of climate change on refuges and adjacent landscapes.

### **Cultural and Historic Resources Are Protected and Interpreted**

As a part of the Visitor Services Program, the Service ensures that significant cultural and historic resources are protected, experienced by visitors, and interpreted in accordance with authorizing legislation and policies. The Refuge System protects many significant cultural and archaeological sites. The Refuge System has identified more than 20,000 archaeological and historical sites within its borders to date, with more yet to be discovered. The Refuge System museum collections consist of approximately 6.2 million objects maintained in Service facilities or on loan to more than 200 non-Federal repositories, such as qualified museums and academic institutions, for scientific study, public viewing, and long-term care.

### **Youth in Natural Resources**

Under this initiative, the Refuge System would build upon existing proven programs with new and creative approaches to offer public service opportunities, support science-based education and outdoor learning laboratories, and engage young Americans in wildlife-dependent recreation such as hunting, fishing, wildlife observation and photography. Hundreds of national wildlife refuges offer employment, education and recreation opportunities that connect youth with the outdoors. These connections foster understanding and appreciation of the need to conserve America's natural resources. These youth programs also provide opportunities to educate youth about career opportunities and promote public service as part of a life-long commitment to natural resource conservation. These programs are managed through mentoring and partnerships with Friends organizations, volunteers, educational institutions, and local conservation organizations.

Refuges offer multiple entry points to connect children and youth and develop interest in a career in natural resource management. Specific programs benefiting from this funding include:

**Environmental Education** which involves nearly 800,000 students and teachers, providing outdoor laboratories that adhere to curriculum standards.

**Wildlife-Dependent Recreation** programs, such as fishing, wildlife observation, photography, and hunting, offer outstanding opportunities for youth to enjoy the natural world and build stronger relationships with their families, peers, and communities.

**Youth Conservation Corps** which provides opportunities for young adults from varied backgrounds to work together on conservation projects, such as maintenance and construction, habitat management, and visitor services. Enrollees learn about potential career opportunities and are offered guidance and training.

**Volunteer and Community Service Programs**, which involve tens of thousands of Americans each year on refuges. Our volunteers work with school and youth groups and support organizations, such as the Scouts. Volunteers often serve as important role models and mentors for our Nation's youth.

**Student Temporary Employment Program (STEP)**, which is designed to introduce talented students to the advantages and challenges of working for the Federal Government, combining academic study with on-the-job work experience on a refuge.

**The Student Career Experience Program (SCEP)** was established to recruit high quality employees into Federal Service, to support equal employment opportunity objectives, to provide exposure to public service, and to promote education.

**Student Conservation Association (SCA)**, which works with refuges to offer conservation internships and summer trail crew opportunities. The SCA focuses on developing conservation and community leaders while accomplishing important work supporting our mission.

### **2011 Program Performance**

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The 2011 budget request would allow the Refuge System to welcome more than 42.5 million visitors to enjoy educational and interpretive programs, hunting, fishing, wildlife observation, and photography. Funding would be used to develop visitor programs, materials, and services that improve upon visitor satisfaction rates, which are currently at 85 percent. Satisfaction rates would soon be reassessed with a comprehensive new survey.

The funding provided for Youth Conservation Corps would allow the Refuge System to reach children and young adults in ways that can spark an interest in wildlife and a lifelong conservation ethic. As an example, the Refuge System's visitor services specialists and volunteers actively promote programs that connect children with nature and promote bird watching, one of the fastest growing outdoor activities.

The performance of the Volunteer program in 2011 is expected to return to 2009 levels, a year with similar funding. Refuge System staff aim to train and supervise approximately 30,000 volunteers that contribute more than 1.3 million hours to conservation and recreation programs. The Refuge System would continue to support training programs for volunteer coordinators and provide support for refuges working with Friends organizations. In addition, the Refuge System would provide support for the many Friends groups across the country that help each refuge meet its mission.

**Performance Change Table - Visitor Services**

Performance Goal	2007 Actual	2008 Actual	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Program Change Accruing in Out-years
<b>Advance Modernization of America</b>								
CSF 52.1 Number of volunteer hours per year supporting FWS mission activities (GPRA)	2,328,109	2,229,555	2,214,648	2,040,259	2,040,259	1,515,010	-525,249	

Note: 2011 Base Budget is equal to 2010 Plan (enacted level) plus fixed cost (absorbed).

**Activity: National Wildlife Refuge System**  
**Subactivity: Refuge Law Enforcement**

		2009 Actual	2010 Enacted	2011			Change from 2010 (+/-)
				DOI-wide Changes & Transfers (+/-)	Program Changes (+/-)	Budget Request	
Refuge Law Enforcement	(\$000)	34,514	37,109	-473	0	36,636	-473
Safe Borderlands	(\$000)	1,000	1,000	0	0	1,000	0
IMARS	(\$000)	575	575	0	0	575	0
<b>Total, Refuge Law Enforcement</b>	<b>(\$000) FTE</b>	<b>36,089 236</b>	<b>38,684 247</b>	<b>-473 0</b>	<b>0 0</b>	<b>38,211 247</b>	<b>-473 0</b>

**Justification of 2011 Program Changes**

The 2011 budget request for the Refuge Law Enforcement program is \$38,211,000 and 247 FTE, a program change of +\$0 and +0 FTE from the 2010 Enacted.

**Program Overview**

The Refuge System employs a professional cadre of law enforcement officers dedicated to natural resource protection and public safety. Refuge law enforcement officers also contribute to community policing, environmental education and outreach, as well as other activities supporting the Service's conservation mission. Refuge law enforcement officers are routinely involved with the greater law enforcement community in cooperative efforts to combat the Nation's drug problems, addressing border security issues, and other pressing challenges.

While the Refuge System continues to improve its law enforcement operations through the hiring and training of full-time officers, dual-function officers continue to play a critical role in meeting law enforcement needs. Dual-function officers dedicate 25 to 50 percent of their time to law enforcement activities and spend the balance of their time on traditional conservation and wildlife dependent recreation programs. The Refuge System began to reduce dependency on dual function officers in 2002 to improve effectiveness and efficiency of Refuge law enforcement operations. As the Refuge System loses dual function officers, full time officers are being added which will allow current dual function officers to focus on their primary duties. Refuges rely on partnerships with local, county, and state law enforcement officers and other Federal agencies to provide back up support to Refuge law enforcement.

The Refuge System has also instituted a Zone System to provide critical law enforcement planning, deployment, and support to multiple wildlife refuges with maximum efficiency through experienced officers. A Zone Officer provides refuges within his or her designated zone with technical assistance on law enforcement, institutes reliable record-keeping and defensible reviews, enhances training, and promotes communication and coordination with other law enforcement agencies.

The National Wildlife Refuge System remains concerned about the situation on the southwest border, and directed a significant portion of the 2010 increase to regions with refuges located along the border. Regions 2 and 8 received operational increases totaling more than \$229,000. These management increases will enhance the law enforcement programs within the regions, including all of our officers along the southwest border.

**Refuge Law Enforcement**

This program element includes funding for the Refuge Law Enforcement Program. Included under the funding are zone officers, regional refuge law enforcement chiefs, field officers, training, equipment, and supplies. Officers play an integral part of the Department-wide strategy of drug interdiction and marijuana eradication on public lands. The Service uses its effort to combat illegal marijuana cultivation on Service lands includes operational activities, such as aircraft hours, training, equipment, and any associated environmental clean-up activities.

**Incident Management Analysis Reporting System (IMARS)**

The Refuge Law Enforcement program is working with the DOI to develop and implement the Department-wide Incident Management Analysis Reporting system (IMARS). The program will document all law enforcement-related incidents occurring on refuges, and will be accessible at all levels of the organization. It will track not only different types of crimes, but also locations, which will allow us to be proactive in crime prevention. This information is necessary to prioritize law enforcement officer needs and to deploy officers where they are needed in emergencies.

**2011 Program Performance**

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The Division of Refuge Law Enforcement would continue to pursue its goal of protecting human lives, wildlife, and properties. The 2011 budget request would support 247 FTE within the Law Enforcement program. These officers would provide for the security and safety of refuge visitors, government property, and the wildlife and habitats the Refuge System strives to protect. Refuge officers anticipate documenting more than 55,000 natural, cultural, and heritage resource crimes, in addition to more than 39,000 other crimes such as drug abuse, burglary, assaults, and even murders.

The budget request includes \$575,000 for the completion and implementation of a critically needed database and reporting system known as the Incident Management, Analysis, and Reporting System (IMARS). Several years in the making, IMARS would allow for more effective law enforcement through more accurate data reporting, tracking of trends, and information sharing.

Refuge Law Enforcement would continue to help monitor approximately 33,200 conservation easement contracts with non-federal landowners, with a goal of ensuring that the terms are met on at least 95 percent of the contracts.

**Activity: National Wildlife Refuge System**  
**Subactivity: Conservation Planning**

		2009 Actual	2010 Enacted	2011			Change from 2010 (+/-)
				DOI-wide Changes & Transfers (+/-)	Program Changes (+/-)	Budget Request	
Refuge Planning	(\$000)	7,365	8,597	-150	-1,000	7,447	-1,150
Land Protection Planning	(\$000)	3,440	3,440	0	0	3,440	0
Comprehensive Conservation Plans	(\$000)	984	984	0	0	984	0
<b>Total, Conservation Planning</b>	<b>(\$000)</b>	<b>11,789</b>	<b>13,021</b>	<b>-150</b>	<b>-1,000</b>	<b>11,871</b>	<b>-1,150</b>
	<b>FTE</b>	<b>87</b>	<b>94</b>	<b>0</b>	<b>-1</b>	<b>93</b>	<b>-1</b>

**Summary of 2011 Program Changes for Conservation Planning**

Request Component	(\$000)	FTE
Conservation Planning		
• Refuge Planning	-1,000	-1
<b>Total, Program Changes</b>	<b>-1,000</b>	<b>-1</b>

**Justification of 2011 Program Changes**

The 2011 budget request for the Visitor Services program is \$11,871,000 and 93 FTE, a program change of -\$1,000,000 and -1 FTE from the 2010 Enacted.

**Refuge Planning (-\$1,000,000/-1 FTE)**

The Service proposes to eliminate this unrequested funding for Conservation Planning in 2011, and use the savings to fund higher priorities in the Department’s budget.

**Program Overview**

**Refuge Planning** - Comprehensive Conservation Plans (CCPs) and step-down management plans, such as Habitat Management and Visitor Services plans, are developed for individual refuges by conservation planners with input from the public, states and other partners. This subactivity supports funding for these plans, as well as for geographic information system capability and other related support tools.

**Land Protection Planning** - This planning function evaluates potential land acquisitions to support the strategic growth of the Refuge System. Refuge field stations work in cooperation with partners to identify and protect habitats for migratory birds and other important species. In some cases, Land Protection Plans will be prepared to expand existing refuges or to establish new refuges in order to address the needs of fish, wildlife, and plant communities. Specific activities include gathering background data, coordinating with state and local entities, involving the public, analyzing ecological, legal, and financial issues, as well as printing and distributing draft and final plan documents.

The Service has developed three draft planning policies to guide the strategic management of the Refuge System. When finalized, these policies will be incorporated into the Service Manual as sections on Strategic Growth, Land Protection Planning, and Land Acquisition Planning. The Strategic Growth policy provides guidance to identify areas of ecological importance for conservation and potential land acquisitions or exchange. The Land Protection Planning policy describes the specific procedures and documents used in the conservation planning processes. The Land Acquisition Planning policy provides criteria for prioritizing approved proposals for funding.

**Comprehensive Conservation Plans** - The Improvement Act (Act) mandated that a Comprehensive Conservation Plan (CCP) must be completed for every refuge, in existence at the time that the Act was passed, within 15 years of the Act’s passage. There were 551 units of the refuge system, including wetland management districts, at the time of the passage of the Act. Since then, Congress has mandated that the Service also complete CCPs for three newly established field stations before the 2012 deadline. Thus, 554 field stations require completed CCPs by 2012. Through the end of 2009, the Refuge System has completed 350 CCPs and has started work on another 136. The CCPs ensure that each refuge unit is comprehensively managed to fulfill the purpose(s) for which it was established. Developing a CCP facilitates decision making regarding issues such as allowable wildlife dependent recreation, the construction of facilities, and the development of biological programs. The process of completing a CCP also helps refuge managers address any conflicting uses that may exist or be proposed. Once a refuge finishes its CCP, it may develop subsequent step-down management plans to meet the CCP’s goals and objectives. Issues addressed by these step-down management plans include habitat management, visitor services, fire management, wildlife inventorying and monitoring, and wilderness management plans. Completed CCPs allow refuge managers to implement resource management actions that support State Wildlife Action Plans, improving the condition of habitats at a landscape scale and benefiting wildlife. Refuge personnel also have the ability to improve and increase wildlife-dependent recreation opportunities which are critical to connecting people, particularly children, with nature.

The Refuge System uses CCP development as the primary method to conduct citizen centered government. Developing these long-term plans relies on public participation and input. Local communities, state conservation agencies, and other partners help guide refuge management through the development of each CCP. Diverse private organizations, such as the National Rifle Association, Defenders of Wildlife, and many others, also participate in the CCP planning process.

**2011 Program Performance**

Producing high-quality, useful CCPs is a high priority for the Refuge System. The value of these 15-year, publicly vetted guidance documents is widely recognized by the staff, local communities, and stakeholders. By the end of 2011, the Refuge System intends to complete CCPs for approximately 500 refuge units.

**Performance Change Table - Refuges Conservation Planning**

Performance Goal	2007 Actual	2008 Actual	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Program Change Accruing in Out-years
CSF 2.10 Sum of the number of NWRs/WMDs completing a Comprehensive Conservation Plan during the year and the number of NWRs/WMDs with a plan under development	221	211	170	196	196	180	(16) (-8.2%)	
CSF Total Actual/ Projected Expenditures (\$000)	\$17,756	\$27,593	\$25,716	\$30,330	\$30,330	\$28,495	(\$1,835)	
CSF Program Total Actual/ Projected Expenditures (\$000)	\$14,344	\$21,668	\$20,991	\$21,474	\$21,474	\$21,968	\$494	

**Performance Change Table - Refuges Conservation Planning**

Performance Goal	2007 Actual	2008 Actual	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Program Change Accruing in Out-years
Actual/ Projected Cost Per NWRs/WMDs (whole dollars)	\$80,343	\$130,770	\$151,268	\$154,747	\$154,747	\$158,307	\$3,559	
2.10.1 # of NWRs/WMDs with a Comprehensive Conservation Plan completed - cumulative	263	318	430	433	433	496	63 (14.5%)	
Comments:	The number of Comprehensive Conservation Plans completed increase as the Plans are a multi-year process.							

Note: 2011 Base Budget is equal to 2010 Plan (enacted level) plus fixed cost (absorbed).

**Activity: National Wildlife Refuge System**  
**Subactivity: Refuge Maintenance**

		2009 Actual	2010 Enacted	2011			Change from 2010  (+/-)
				DOI-wide Changes & Transfers (+/-)	Program Changes (+/-)	Budget Request	
Maintenance Support	(\$000)	53,851	55,123	-1,176	+2,000	55,947	+824
Annual Maintenance	(\$000)	25,581	27,581	0	-2,000	25,581	-2,000
Small Equipment and Fleet Management	(\$000)	5,981	5,981	0	0	5,981	0
Heavy Equipment Management	(\$000)	5,783	5,783	0	0	5,783	0
Deferred Maintenance	(\$000)	42,239	39,765	0	+2,000	41,765	+2,000
Deferred Maintenance WO/RO Support	(\$000)	6,116	6,116	0	0	6,116	0
<b>Total, Refuge Maintenance</b>	<b>(\$000)</b>	<b>139,551</b>	<b>140,349</b>	<b>-1,176</b>	<b>+2,000</b>	<b>141,173</b>	<b>+824</b>
	<b>FTE</b>	<b>677</b>	<b>677</b>	<b>0</b>	<b>0</b>	<b>677</b>	<b>0</b>

**Summary of 2011 Program Changes for Refuge Maintenance**

Request Component	(\$000)	FTE
Refuge Maintenance		
• Annual Maintenance	-2,000	-2
• Deferred Maintenance	+2,000	0
• Youth in Natural Resources	+2,000	+2
<b>Total, Program Changes</b>	<b>+2,000</b>	<b>0</b>

**Justification of 2011 Program Changes**

The 2011 budget request for the Refuge Maintenance program is \$141,173,000 and 677 FTE, a program change of +\$2,000,000 and +0 FTE from the 2010 Enacted.

**Annual Maintenance (-\$2,000,000/-2 FTE)**

The Service proposes to decrease the annual maintenance budget by \$2,000,000 million and shift these funds from preventative type maintenance to addressing larger deferred maintenance projects.

**Deferred Maintenance (+\$2,000,000/+0 FTE)**

A \$2,000,000 increase to deferred maintenance and a corresponding decrease in the annual maintenance budget would shift funds from preventative type maintenance to addressing larger deferred maintenance projects.

**Youth in Natural Resources (+\$2,000,000/+2 FTE)**

An increase of \$2,000,000 in annual maintenance would be devoted to Youth Conservation Corps programs which would allow for increased routine maintenance or improvement of facilities. Under this initiative, the Refuge System would build upon existing proven programs with new and creative approaches to offer public service opportunities, support science-based education and outdoor learning laboratories, and engage young Americans in wildlife-dependent recreation such as hunting, fishing, wildlife observation and photography. Hundreds of national wildlife refuges offer employment, education and recreation opportunities that connect youth with the outdoors. These connections foster understanding

and appreciation of the need to conserve America's natural resources. These youth programs also provide opportunities to educate youth about career opportunities and promote public service as part of a life-long commitment to natural resource conservation. These programs are managed through mentoring and partnerships with Friends organizations, volunteers, educational institutions, and local conservation organizations.

Refuges offer multiple entry points to connect children and youth and develop interest in a career in natural resource management. Specific programs benefiting from this funding include:

**Environmental Education** which involves nearly 800,000 students and teachers, providing outdoor laboratories that adhere to curriculum standards.

**Wildlife-Dependent Recreation** programs, such as fishing, wildlife observation, photography, and hunting, offer outstanding opportunities for youth to enjoy the natural world and build stronger relationships with their families, peers, and communities.

**Youth Conservation Corps** which provides opportunities for young adults from varied backgrounds to work together on conservation projects such as maintenance and construction, habitat management, and visitor services. Enrollees learn about potential career opportunities and are offered guidance and training.

**Volunteer and Community Service Programs**, which involve tens of thousands of Americans each year on refuges. Our volunteers work with school and youth groups and support organizations, such as the Scouts. Volunteers often serve as important role models and mentors for our Nation's youth.

**Student Temporary Employment Program (STEP)**, which is designed to introduce talented students to the advantages and challenges of working for the Federal Government, combining academic study with on-the-job work experience on a refuge.

**The Student Career Experience Program (SCEP)** was established to recruit high quality employees into Federal Service, to support equal employment opportunity objectives, to provide exposure to public service, and to promote education.

**Student Conservation Association (SCA)**, which works within refuges to offer conservation internships and summer trail crew opportunities. The SCA focuses on developing conservation and community leaders while accomplishing important work supporting our mission.



High School Students in the Youth Conservation Corps have the opportunity to participate in wildlife habitat management activities such as this sea turtle conservation project at Cape Romain National Wildlife Refuge in South Carolina. Many Youth Conservation Corps students develop a life-long passion for wildlife and later pursue a career in wildlife management with the U.S. Fish and Wildlife Service or a state wildlife agency. Sam Hamilton, the current Director of the U.S. Fish and Wildlife Service, started his career as a Youth Conservation Corps student at Noxubee National Wildlife Refuge in Mississippi.

**Program Overview**

The Refuge Maintenance Program supports a complex infrastructure including habitat management; visitor, administrative, and maintenance facilities; and a fleet of vehicles and heavy equipment necessary to conduct wildlife and habitat management activities. This support provides access to Refuge System lands for more than 42.5 million visitors. The facility infrastructure is valued at more than \$22 billion.

Asset Type	Quantity
Boardwalks	193
Boat Launches	495
Bridges	more than 750
Buildings	6,197
Docks	292
Historic Heritage Facilities	296
Information Kiosks	492
Dams/Levees / Water Management Structures	12,496
Observation Decks, Platforms, and Towers	465
Parking Lots	5,100
Roads	more than 4,800 miles
Signs	1,024
Trails	Approx. 2,500 miles
<b>Total Number of Assets</b>	<b>42,800</b>
<b>Total Current Replacement Value</b>	<b>\$22.1 billion</b>

In order to meet critical habitat and visitor services goals, refuge lands, facilities, and equipment must be serviceable and properly maintained. There is a direct link between maintained Refuge System facilities, trails, and structures and healthy wildlife habitats and populations. Without sufficiently maintained facilities, trails, and structures, much needed wildlife management actions through facilities such as water control structures for wetlands could be impaired; core refuge operations would be less efficient; and access for either management purposes or for visitation by the public would be hindered.

Adequately maintained facility and mobile equipment assets enable the Service to achieve its conservation mission. The Service uses a strategic, portfolio-based approach to manage these assets in a manner that informs decision making and maximizes efficient and effective mission delivery with an emphasis on health and safety needs and long-term protection of our investments. To further this goal the Service strives to accurately:

- account for what we own;
- determine the costs to operate and maintain each individual asset;
- track the condition of assets;
- plan and prioritize budgets to include disposal of any unneeded assets, and
- understand and plan life cycle costs for both existing and proposed new assets.

Using principles embodied in Executive Order 13327, Federal Real Property Asset Management, the Department's Capital Asset and Investment Control policy, and the Department's guidance for deferred maintenance and capital improvement plans, the Refuge System is managing its portfolio of facility and mobile equipment assets in a manner that focuses on accomplishing our legislative mission using the most cost effective means possible. Developing a full inventory of what the Service owns, understanding annual Operations and Maintenance costs, and regularly assessing the condition of assets and their contribution to our mission, all contribute to effective management of our assets. In managing our assets, we also strive for environmentally friendly and sustainable business practices and seek mechanisms for reducing energy use and applying renewable energy strategies.

In addition to achieving performance targets for assets using the Facility Condition Index (FCI), proper support of Refuge System infrastructure is critical to achieving other performance targets for the entire range of mission accomplishments, including wetland restoration, wildlife monitoring, and providing recreational opportunities for the public. The Service uses the FCI, which is a measure of the ratio of the repair to the replacement costs for each asset, in combination with the Asset Priority Index (API), which indicates the relative importance of an asset to accomplishing our mission, to prioritize the use of maintenance funding. The Service continues to prioritize maintenance needs through improved data, which underlies development of five year budget plans, including the FCI and the API, which are key measures for the program and the DOI Asset Management Plan. The FCI for conservation facilities, for example, is currently 0.06, which industry standards rate as acceptable condition. The Refuge System is using its Service Asset and Maintenance Management System (SAMMS) to document assessments, facility maintenance histories, and maintenance schedules to improve its overall FCI and to reduce out year project costs.

Energy conservation, reduction of energy costs and application of renewable energy sources is a current priority associated with management of Refuge System facility assets. About \$8,000,000 is being devoted to renewable energy measures in the American Recovery and Reinvestment Act of 2009 (ARRA). As ARRA and deferred maintenance projects are completed, sustainable energy measures are incorporated to reduce annual Operations and Maintenance costs and to help reduce our dependence upon petroleum based energy. These efforts also reduce the carbon footprint of the Refuge System in furtherance of goals established in the Service's draft Climate Change Strategic Plan.



Using a tiered approach to on-site renewable energy generation, including grid-tied solar photo voltaic panels and a wind turbine, the San Andres National Wildlife Refuge supplies 100% of its own power for several months of the year and has decreased energy intensity by 80% from its 2003 baseline. Additional solar photovoltaic capacity will be added in FY2010 to help the facility approach carbon neutral status.

The Service is using financial and performance data to improve its management of facility infrastructure and its mobile equipment fleet. The Service has developed an asset management plan to aid in management of our assets, based on workload drivers including General Services Administration useful life standards, geographic location, utilization patterns, interagency equipment sharing agreements, and generally accepted asset management principles.

In addition to managing an extensive facility infrastructure with 42,800 assets valued at more than \$22 billion, as of December 2009, the Service owns and maintains a variety of traditional and specialized mobile equipment items necessary to achieve our strategic goals.

Most of the 5,000 vehicles used on refuges are four wheel drive trucks and utility vehicles used for fire fighting, wildlife and habitat surveys, transporting equipment and tools to remote sites, and law enforcement. Much of the vehicle use is on gravel roads and extensive off-road use is also required. Thousands of refuge volunteers also rely on Refuge System vehicles for transportation. Agricultural, earthmoving, and construction equipment are used to maintain wetland impoundments and roads; enhance areas for wildlife habitat; control invasive plants; and maintain and construct modest visitor facilities such as boardwalks, observation platforms, tour routes, and nature trails. Smaller, specialized equipment like all-terrain vehicles, aircraft, boats, small tractors and snowmobiles are needed to access remote or rugged areas. Vehicles are also crucial on most refuges for law enforcement, public safety and wildlife surveys. The Refuge Maintenance budget includes six program elements as described below.

### **Refuge Maintenance Support**

Refuge Maintenance Support includes salaries and associated funding for maintenance staff at refuge field stations. Maintenance staff support all refuge programs both indirectly, by maintaining functional facilities and reliable equipment needed to achieve our mission, and directly, by performing tasks such as mowing fields to enhance habitat, removing unwanted woody vegetation from wetland impoundments, and controlling invasive plants. Ongoing maintenance of visitor facilities including roads, trails, and a variety of small facilities needed to provide visitors with appropriate access to refuge lands is vital to enabling a positive experience for more than 42.5 million annual visitors.

### **Annual Maintenance**

Annual maintenance encompasses all activities needed to keep our facility portfolio functioning for its intended purpose. Annual maintenance includes such items as utilities, custodial care, and snow removal for our offices, administrative, and visitor center buildings. Annual maintenance involves repairing system failures in the year they occur, and includes preventive and cyclic maintenance, purchasing maintenance supplies, and obtaining contracts. Preventive maintenance; including scheduled servicing, repairs, and parts replacement; results in fewer breakdowns and is required to achieve the expected life of facilities and equipment. Cyclic maintenance is preventive maintenance scheduled in periods greater than one year. Annual maintenance allows scheduled replacement of small equipment, defined as equipment of less than \$5,000 in value, and addresses problems cost-effectively, before they grow in expense. The Youth Conservation Corps, a temporary employment program for high school youth, is also included under this category since much of their work supports annual maintenance.

### **Small Equipment and Fleet Management**

This program element, formally named Equipment Replacement, facilitates the acquisition, repair, and disposal of equipment valued from \$5,000 to in excess of \$25,000 including passenger vehicles and pickup trucks. The Small Equipment and Fleet Management program element also includes a rental and leasing program that provides a cost-effective alternative to purchasing equipment, particularly for short-term needs. In many cases, renting or leasing allows refuge staff to complete vital projects while limiting the maintenance cost of the equipment fleet.

Funds in this program element are used to optimize the management of equipment in order to meet mission needs, environmental mandates, and serve as an example to the public for efficient use of assets. Because it is difficult to access remote and rough terrain, the Service needs a wide variety of vehicles and equipment to achieve our mission. This includes about 4,500 small equipment items including all terrain vehicles, boats and motors, pumps, generators, trailers, etc. Most of the 5,000 refuge vehicles are used for fire fighting, wildlife and habitat surveys, transporting equipment to remote work sites, and transporting volunteers. About 1,500 units of agricultural equipment are used to complete small projects to manage habitats, maintain roads and levees and preclude growth of undesirable vegetation.

The program element name was changed to more accurately reflect the objectives of the program. In the past, the Service required a refuge to trade in an old vehicle or equipment to get a new vehicle or equipment. That policy has been abandoned because it creates inefficiencies in fleet management. Some refuges retain old equipment because refuge managers believe they can only acquire a new tractor if they have an old one that needs to be replaced. This practice is not only an inefficient use of the Service's equipment and vehicle fleet, but it also poses potential environmental hazards and safety risks for Service employees.

The Service believes using the term "Management" rather than "Replacement" will reinforce the policy change and encourage refuge managers to use the Service's fleet as effectively and efficiently as possible rather than holding old equipment for no other reason than to retain the option of someday replacing it with new equipment. There is no FTE increase resulting from this name change.

Small Equipment / Vehicles	Total Units	Original Cost (\$000s)	Current Replacement Value (\$000s)	# Units Exceeding GSA Useful Life	% Units Exceeding GSA Useful Life
Agricultural Implements	1,487	\$19,563,073	\$22,815,614	615	41%
Heavy Equip. Attachments	103	\$1,388,642	\$1,597,303	13	13%
Trailers	1,498	\$20,257,538	\$23,817,829	500	33%
Off Road Utility Vehicles	1,386	\$10,921,735	\$12,284,914	237	17%
Boats/Motors	915	\$21,726,047	\$26,717,008	322	35%
Pumps/Power Units	424	\$5,666,498	\$6,900,872	224	53%
Motor Vehicles - Sedans	111	\$2,784,379	\$3,055,744	50	45%
Motor Vehicles - Trucks	4,217	\$100,656,687	\$114,577,095	2,031	48%
MV - Heavy Duty Trucks	721	\$48,379,759	\$60,226,849	413	57%
<b>Total</b>	<b>10,862</b>	<b>\$231,344,358</b>	<b>\$271,993,228</b>	<b>4,405</b>	<b>38%</b>

### Heavy Equipment Management

This program element, formerly named Heavy Equipment Replacement, facilitates the acquisition, repair, and disposal of Heavy equipment which is any equipment item exceeding \$25,000 in replacement cost, excluding passenger vehicles and light trucks. This program element also includes a rental and leasing program to provide a cost-effective alternative to purchasing equipment, allowing refuge staff to complete vital projects while limiting the size and cost of the heavy equipment fleet.

Funds are used to optimize the management of equipment in order to meet mission needs, environmental mandates, and serve as an example to the public for efficient use of assets. The Refuge System owns more than 2,700 heavy equipment assets with a combined replacement value of about \$205 million. The Refuge System depends on reliable heavy equipment since 3.5 million acres are managed through water control, tillage, mowing, invasive species control, or farming for habitat management, wildfire prevention, and other goals. Providing access to refuge lands and facilities by managing a variety of access roads is vital to all aspects of conservation land management. Visitor programs rely on heavy equipment for maintenance of roads, trails, boat ramps, and facilities, as well as enhancing habitat for wildlife in particular areas.

The program element name was changed to more accurately reflect the objectives of the program. In the past, the Service required a refuge to trade in old equipment to get new equipment. That policy has been abandoned because it creates inefficiencies in fleet management. Some refuges retain old equipment because refuge managers believe they can only acquire new equipment if they have old equipment that needs to be replaced. This practice is not only an inefficient use of the Service's equipment and vehicle fleet, but it also poses potential environmental hazards and safety risks for Service employees.

The Service believes using the term "Management" rather than "Replacement" will reinforce the policy change and encourage refuge managers to use the Service's heavy equipment fleet as effectively and efficiently as possible rather than holding old equipment for no other reason than to retain the option of someday replacing it with new equipment. There is no FTE increase resulting from this name change.

Heavy Equipment	Total Units	Original Acquisition Cost (\$000s)	Current Replacement Value (\$000s)	# Units Exceeding GSA Useful Life	% Units Exceeding GSA Useful Life
Crawler Dozer	395	\$34,869,241	\$44,459,228	212	54%
Four Wheel Drive Loaders	183	\$12,694,980	\$16,168,509	100	55%
Backhoe/Loaders	280	\$14,706,577	\$17,674,110	101	36%
Excavators	128	\$17,712,659	\$21,250,474	37	29%
Motor Grader	214	\$18,582,095	\$23,398,374	116	54%
Skid Steer/ Compact Track	177	\$6,158,205	\$6,856,266	19	11%
Specialty Tracked Equipment	103	\$10,488,894	\$12,664,596	29	28%
Agricultural Tractors	996	\$42,598,955	\$51,806,088	571	59%
Cranes	24	\$1,961,890	\$2,776,668	20	83%
Forklifts	154	\$3,918,579	\$4,978,843	74	48%
Other (Rollers, Skidders)	57	\$2,085,120	\$2,881,638	30	52%
<b>Total</b>	<b>2,711</b>	<b>\$165,777,195</b>	<b>\$204,914,794</b>	<b>1,309</b>	<b>46%</b>

### Deferred Maintenance Projects

Deferred Maintenance projects include repair, rehabilitation, disposal, and replacement of facilities. Only those projects that have already been delayed beyond their scheduled maintenance or replacement date are included in Deferred Maintenance. Projects that have not reached their scheduled date are not included in Deferred Maintenance. Major building components such as roofs have a scheduled replacement date. If funds are not available for the component to be replaced as scheduled, the project falls into the Deferred Maintenance category. The Service maintains an inventory of Deferred Maintenance and capital improvement needs for all field stations consistent with Federal Accounting Standards. Available funds are directed to the highest priority projects based upon Facility Condition Index (FCI), a ratio of repair to replacement cost, and Asset Priority Index (API), an indicator of individual assets' contribution to the refuge system mission, in accordance with the DOI guidance on Deferred Maintenance and capital improvement plans. Ranking scores are currently derived from ten DOI-wide priority ranking factors. This Deferred Maintenance category funds both Service engineers and temporary contract staff working on Deferred Maintenance projects.

In addition to the Deferred Maintenance budget, the Refuge Roads program provides \$29,000,000 per year from the Federal Highway Administration to assist in maintaining refuge public use roads (defined as public roads, bridges, and parking areas) This program is reauthorized every 5 years and is currently pending reauthorization

### Regional and Central Support

The regional and central office support element includes management and coordination of the facility and equipment maintenance and improvement effort at the regional and National level. Primary support activities include:

- Management and technical support for implementing the Service Asset and Maintenance Management System (SAMMS) through maintaining and refining software, managing databases and servers, providing support via a help desk, and training personnel to use the software.
- Completing condition assessments of 20 percent of facilities at field stations each year to ensure that real property data is accurate and complete every five years. This program supports decision making for

facility management, and provides technical support and short term assistance for deferred maintenance projects.

- Developing and implementing 5-year maintenance plans, including coordinating and reporting on project completions.
- Planning and implementing major maintenance and capital improvement efforts including development of budget plans, monitoring annual O&M costs, executing completion of deferred maintenance and related costs, coordinating energy conservation initiatives, prioritizing needs across multiple field locations, responding to major health and safety issues, and identifying and disposing of assets that are not mission dependent.
- Managing a heavy equipment program including operator safety training, budget planning, consolidated purchasing of replacement equipment, and coordination of equipment rental.

**Impact of ARRA Funding on Requested Deferred Maintenance Projects**

The American Recovery and Reinvestment Act (ARRA) provided the Service a unique opportunity to accelerate work on the Deferred Maintenance Five Year Plan. ARRA funding of \$113,000,000 is being used to complete the majority of Deferred Maintenance projects initially scheduled for 2010 and 2011 allowing the Service to accelerate projects planned for later years. Some ARRA funds were directed towards completing larger Deferred Maintenance projects that exceed the funding threshold within the Resource Management Deferred Maintenance programs. Also, some projects will improve energy efficiency by updating window, door, insulation, and mechanical systems and by retrofitting other buildings with renewable energy systems. To further support the renewed focus on reducing energy and water consumption, ARRA funds will also complete energy and water audits at some of the Service’s largest, most energy consumptive facilities. A valuable output of the ARRA funding will be the identification of future lifecycle cost effective energy and water reduction retrofit projects that are proposed for funding in the Service’s 2011 Construction budget under a line item for Green Energy projects.

ARRA funds will contribute to the Refuge System’s goal of improving the condition of its facility assets; however, the scope of Deferred Maintenance is so large that significant needs remain.



Using Recovery Act funds, Tualatin River NWR in Oregon hired a local firm to repair Dennis Pond. This project will directly support the mission of the refuge by conserving floodplain wetlands used by thousands of migrating and wintering waterfowl.

**2010 Program Performance**

The 2011 budget request would support maintenance staffing for field stations, as well as provide annual preventive maintenance, including funds for supplies, materials, and contracts. These funds would allow the Refuge System to repair facilities and equipment, and perform most regular annual maintenance on schedule.

The budget would also support replacement of mobile equipment assets and allow initiation of approximately 200 deferred maintenance projects which would improve the condition of Service assets as measured by the FCI. These funds would allow the Refuge System to fund projects to repair facilities and equipment within the year in which deficiencies occur and perform cyclical maintenance on schedule, ensuring that cyclic projects do not become deferred maintenance.

The Refuge System would use its ongoing condition assessment program to focus maintenance activities on highest priority needs. By completing an assessment of all facilities every 5 years, the Refuge System would improve its ability to provide maintenance, repair, and where required, replacement costs with greater accuracy. Under this subactivity, the Refuge System would also continue use of the SAMMS database to reduce these costs through improved management.

The Refuge System would continue to use maintenance funding to support refuge operations. The facilities and equipment utilized on refuges contribute to wildlife and habitat management goals, and help maintain the vast majority of Refuge System acreage in desirable condition. Maintenance funding would also support Visitor Services by ensuring the safety of observation decks, trails, hunting blinds, fishing piers, and more. These facilities would help provide more than 42.5 million visitors with high quality, wildlife-dependent recreation opportunities.

**Performance Change Table - Refuge Maintenance**

Performance Goal	2007 Actual	2008 Actual	2009 Actual	2010 Plan	2011 Base Budget	2011 President's Budget Request	Program Change Accruing in 2011	Program Change Accruing in Out-years
CSF 54.1 Service-wide Comprehensive Facilities Improvement: Overall condition of buildings and structures (as measured by the FCI) that are mission critical and mission dependent (as measured by the API) with emphasis on improving the condition of assets with critical health and safety needs (GPRA)	0.127 (2,680.2M of 21,049.1M)	0.125 (2,648.6M of 21,211.2M)	0.112 (2,676.8M of 23,813.9M)	0.117 (2,768.7M of 23,608.7M)	0.117 (2,768.7M of 23,608.7M)	0.118 (2,753.2M of 23,368.6M)	0 (0.5%)	0.118 (2,753.2M of 23,368.6M)

Note: 2011 Base Budget is equal to 2010 Plan (enacted level) plus fixed cost (absorbed).