Activity: Fisheries and Aquatic Resource Conservation

					2013		
		2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	Change From 2012 Enacted (+/-)
National Fish Hatchery							
Operations	(\$000)	48,856	46,075	+343	-3,229	43,189	-2,886
	*FTE	374	335	0	-21	314	-21
Maintenance and							
Equipment	(\$000)	18,180	18,031	-34	0	17,997	-34
	FTE	73	72	0	0	72	0
Aquatic Habitat and Species							
Conservation	(\$000)	71,903	71,211	+694	-1,484	70,421	-790
	FTE	342	331	0	-45	286	-45
Total, Fisheries							
and Aquatic	(\$000)	138,939	135,317	+1,003	-4,713	131,607	-3,710
Resource		789	738	0	-66	672	-66
Conservation	FTE	, 55	, 50		30	312	00

[•] The 2012 FTE number assumes 39 FTE are covered under the COE reimbursable agreement. In 2013 an additional 5 FTE will be supported under the BOR reimbursable agreement for a total of 44 FTE.

Fisheries and Aquatic Resource Conservation Program Overview

America's fish and aquatic resources are among the world's richest in abundance and diversity, and provide substantial economic, social, and ecological benefits to its citizens. Yet many aquatic resources are declining at alarming rates - outpacing the conservation efforts of the Service and its partners. Almost

400 aquatic animal and plant species require and receive special protection in some part of their natural or historic range. The causes of these declines are largely due to habitat loss and the impact of non-native invasive species. Stream fragmentation is one component of habitat loss that plays a major role in the nationwide decline of fish and mussel populations. The spread of invasive species through ballast water, commercial trade and other pathways has significantly impacted the Nation's ecosystems: the cost to the



Our mission is: "Work with partners to restore and maintain fish and other aquatic resources

at self-sustaining levels, and to support federal mitigation programs for the benefit of the American public."

Nation in economic and environmental harm is in the tens of billions of dollars, and is second only to habitat destruction as a cause of declining biodiversity.

Since 1871, the Service has provided national leadership in strategically managing populations of aquatic species, conserving habitat and sustaining the biological health of America's aquatic resources. Using the Strategic Habitat Conservation (SHC) framework, efforts and resources are focused on geographic areas and species with the greatest conservation needs. Aquatic resource conservation would be severely hampered without the Service's scientific and technical expertise in conservation genetics, propagation technology, aquatic species inventory, assessment and monitoring, and aquatic habitat improvement. Likewise, the ability to design and implement critical research programs, maintain decision-support systems and databases, and deliver on-the-ground and in-the-water conservation is integral to successful conservation. The Fisheries Program directly supports the Landscape Conservation Cooperatives (LCC) model and works with the LCCs across geographic and political borders to foster partnerships with states,

Tribes, other governments, private organizations, and interested citizens to conserve America's aquatic resources. Through its existing cooperative partnerships (such as the National Fish Habitat Action Plan), wide-ranging programs, and over 150 field stations nationwide, Fisheries Program expertise can address LCC priorities and provide information needed to construct landscape and climate models. Working collaboratively within the LCC framework, Service scientists and their partners, academia, and other agencies, address landscape-scale stressors including habitat fragmentation, genetic isolation, spread of invasive species, and water scarcity—all of which are magnified by accelerating environmental change.

Approximately 800 employees are located nationwide in over 150 facilities or offices, including 71 National Fish Hatcheries, 65 Fish and Wildlife Conservation Offices (including the Alaska Conservation Genetics Laboratory), 1 Historic National Fish Hatchery, 9 Fish Health Centers, and 7 Fish Technology Centers. Additionally, the Service's Aquatic Invasive Species, Aquatic Animal Drug Approval



Partnership, and Marine Mammals programs are coordinated and delivered by staff strategically located in national, regional and field offices throughout the nation. These varied offices conduct assessments of species, habitats, vectors of invasive species and pathogens, and ecological functions. These Service employees provide a network unique in its geographic range, array of technical and managerial capabilities, and ability to work across political and program boundaries. Whether removing dams or water diversions to reconnect fragmented

habitat; restoring degraded riparian and wetland habitat; controlling aquatic nuisance species; or propagating imperiled aquatic species in captivity, the Service, in concert with numerous state, federal, tribal and private partners, provides services crucial to the survival of aquatic species and their habitats.

Partners and stakeholders are integral to the achieving success in eight focus areas, each with associated goals, strategies, and performance targets that are consistent with the *Fisheries Program Vision for the Future*:

- Partnerships and Accountability
- Aquatic Habitat Conservation and Management
- Aquatic Species Conservation and Management
- Cooperation with Native American Tribes
- Recreational Fishing and Public Use
- Leadership in Science and Technology
- Asset Management
- Workforce Management

In the face of impacts such as habitat fragmentation or the introduction of aquatic invasive species, which are altering the abundance and distribution of fish, wildlife, and plant populations, the Fisheries Program is more relevant now than in any other time in the program's history. Through accurate biological inventories, assessments, modeling and conservation strategies, the Service in collaboration with its partners is working to better understand the relationship between fish and wildlife populations, habitats and people. Adhering to the SHC framework, the Service seeks to ameliorate these issues by strategically restoring the connectivity of the Nation's waterways, preventing new infestations of aquatic invasive

species, and improving the adaptability and resilience of species and their habitats held in trust by the Service.

In these uncertain economic times, and with ever-tightening budgets, the Service continues to fuel American economic growth in local communities in America as evidenced in *Net Worth*, *The Economic Value of Fisheries Conservation Fall 2011* report by:

- Generating \$3.6 billion in annual contributions to the U.S. economy
- Annually returning 28 times our initial federal investment (taxpayer dollars)
- Generating 13.5 million angler days
- Creating 68,000 jobs
- Returning real benefits back to local economies as a result of National Fish Hatchery System activities, such as;
 - o \$551 million in retail sales.
 - o \$903 million in industrial output,
 - o \$256 million in wages/salaries, and,
 - o \$35 million in local tax revenues from recreational angling



The Service is a key player in the recovery of threatened and endangered aquatic species. In coordination with the Endangered Species Program, the Fisheries Program meets specific tasks prescribed in Recovery Plans by providing population and habitat assessment and monitoring, captive propagation/stocking, applied research, and refugia for 94 threatened and endangered species. For example, Fish and Wildlife Coordination Offices (FWCOs) work on the recovery of endangered and threatened species such as the pallid sturgeon. The offices conduct on the ground habitat restoration activities for the species, collect broodstock to be held in captivity within the National Fish Hatchery System (NFHS), and monitor the population status throughout the Mississippi River basin. Similar long-term coordinated efforts have resulted in many successes; however, it is reasonable to assume that additional species and populations will become imperiled in the face of environmental change and other challenges and will require intervention. The Service continues to pursue collaborative opportunities and improve our tools to protect our aquatic resources.

The Service actively implements the President's America's Great Outdoors (AGO) initiative. For generations, the Service has engaged families and local communities to instill a love of the outdoors and a strong conservation ethic in tomorrow's leaders. Working with volunteers, partners, and Fishery Friends Groups, the Service delivers a wide array of formal and informal conservation education programs. Fisheries Friends Groups help coordinate volunteers and businesses in communities in support of facility operations, special events, and outdoor classrooms for youth. The Service benefits from many adults who become volunteers, Fishery Friends, or youth mentors, and who contribute more than 150,000 hours of their time annually. With thousands of outreach and educational events, the Service reaches over one million youth annually. An example of this outreach is "Fishing for Rainbows", a community event for children and families who were victims of the Joplin, Missouri tornado. This event was held in June 2011, and hosted by the Neosho National Fish Hatchery (MO), the Friends of the Neosho NFH, and the Sugar Creek Gobblers (local chapter of the National Wild Turkey Federation (NWTF). The NWTF's national youth program named the event the Best Special Event of 2011. Local businesses donated sleeping bags, backpacks, flashlights, and other essential equipment for over 200 youth to take home.

The Service is addressing the AGO initiative by conserving and restoring large landscapes through efforts such as the Penobscot River Restoration Project. Over the past six years, the National Fish Passage Program has worked with partners to re-open more than 1,000 miles of the Penobscot River for the

benefit of recreationalists and aquatic species such as the endangered Atlantic salmon and shortnose sturgeon. The Penobscot River Restoration Project involves the removal of two dams and the construction of a fish bypass around a third dam. Once completed, this project is certain to have numerous positive impacts on local economies and improve tribal resources for the Penobscot Nation.

Messages on conservation and environmental issues are delivered through innovative, science-based, hands on learning, incorporating programs such as Biologist-in-Training, Kids in the Creek, Baby Brookies, and the Salmon Festival. The Service also fully

supports the Secretary's Youth in the Great Outdoors initiative to create a 21st Century Youth Conservation Corps (YCC) that builds the next generation of conservation and community leaders by supporting youth employment, exposing youth to conservation careers, and specifically targeting under-represented groups such as those in urban environments, minorities, and women. The Service's SCEP/STEP program, rural and tribal YCC programs, and the Biologist-in-Training Program complement these early learning experiences to steer youth into careers in conservation and natural resources management.

With over 230 formal agreements with indigenous Tribal Nations, the Service has unique relationships in Indian Country that have generated Tribal YCC projects to employ, educate and train American Indian youth for careers in natural resources management. By providing jobs and career pathways for tribal youth through the YCC, young people are connected with their natural environment and cultural heritage. For many years the Service has supported youth employment at the Mescalero Apache tribal hatchery in New Mexico, and has partnered with YCC and AmeriCorps for the last four years. Many of the YCC or AmeriCorps graduates continue to work with the Tribe at their hatchery and with the Service. In 2011, the Service employed 115 tribal youth from the Mescalero Apache, White Mountain Apache, Nez Perce, Santa Clara Pueblo, Santa Ana Pueblo, Isleta Pueblo, Navajo, Confederated Salish and Kootenai, and Klamath Basin tribes at field stations across the country. These programs provide the opportunity for youth to not only honor their elders, local traditions and culture, but also to participate in valuable career-enhancing work experiences. They gain experience on team work, their local natural environment, and conservation practices. Several former YCC participants are now employed in the Service.

How Rainbow Trout Helps a Local Economy:

Norfork National Fish Hatchery, Mountain Home, AR

In 2008, Outdoor Life magazine revealed America's top 200 towns for hunters and anglers to call home. Number one on the list was Mountain Home, Arkansas. A major draw is the world-class fishing on the White River, Bull Run Shoals, and Norfork Lake. The Norfork National Fish Hatchery stocks nearly 1.8 million rainbow trout in local waters, accounting for 19% of the total National Fish Hatchery System rainbow trout stockings. These fish account for 1,039,439 angler days and retail expenditures of \$42.8 million annually. This economic activity supports 916 jobs with \$19.5 million in iob income. In addition, this activity generates \$922 thousand in state income tax. \$2 million in Federal income tax, and an economic output of \$77.6 million – significant for a local population of 12,215 people.

Activity: Fisheries and Aquatic Resource Conservation

Subactivity: National Fish Hatchery System Operations

		2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	Change From 2012 Enacted (+/-)
National Fish							
Hatchery							
Operations	(\$000)	48,856	46,075	+343	-3,229	43,189	-2,886
	FTE	374	335	0	-21	314	-21

Summary of 2013 Progr	ram Changes for Nationa	I Fish Hatchery S	system Operations

Request Component	(\$000)	FTE
General Program Activities	-3,229	-21
Program Changes	-3,229	-21

Justification of Program Changes for the National Fish Hatchery System

The 2013 budget request for the National Fish Hatchery System is \$43,189,000 and 314 FTE, a net program change of -\$3,229,000 and -21 FTE from the 2012 Enacted.

General Program Activities (-\$3,229,000/-21 FTE)

This funding reduction is associated with the production of fish for the purpose of mitigating the effects of federal water development projects and for critical supplies. For many years the Service has worked to recover costs from responsible agencies in order to focus Service base funding on native fish recovery and restoration. A user-pays system has been in place for many years for a number of hatcheries, including two in California and several in the Pacific Northwest, where the Bureau of Reclamation and Army Corps of Engineers (Corps), respectively, pay for the costs associated with mitigation fish hatcheries. There are 23 national fish hatcheries and offices that have been involved in non-reimbursed activities to mitigate the adverse effects of federal water development projects constructed by other federal agencies. The Service is seeking full reimbursement for this non-reimbursed fish mitigation production so that Service base funds can be focused on recovery and restoration of native species and their habitats.

The Corps began reimbursing the Service for mitigation hatchery production in the eastern U.S. in FY 2010, which has allowed the service to reduce the funding it provides to raise hatchery fish for mitigation. In the FY 2012 President's Budget, the Corps requested \$3.8 million to fund mitigation fish production, and the Service expects a similar level of support in 2013. In the FY 2013 President's Budget the Bureau of Reclamation requests an increase of \$600,000 to fund its mitigation responsibilities.

The Service will continue to work with the Corps, the Tennessee Valley Authority, and the Bureau of Reclamation, to establish equitable reimbursable agreements for the production of hatchery fish for mitigation. Without these agreements, mitigation fish production will be reduced and will be commensurate with the level of funding received. For example, the Service needs to recover \$834,000 for mitigation production from the Tennessee Valley Authority and an additional \$900,000 for full reimbursement from the Corps. Without that reimbursement, potentially 1,000,000 fish for mitigation will not be produced and potentially 6,000,000 eyed eggs will not be shipped. Outreach and youth activities at the affected hatcheries will be reduced as well. The Service's report the *Economic Effects of*

Rainbow Trout Production by NFHS outlines the economic impact of Service programs. In 2009, Service mitigation facilities produced 12,786,600 fish and 15,924,000 eyed eggs, which supported 3,500 jobs and \$325 million in economic benefit to local and state economies.

Program Overview

The National Fish Hatchery System (NFHS) consists of 71 National Fish Hatcheries (NFHs), 9 Fish Health Centers (FHCs), 7 Fish Technology Centers (FTCs), one Historic National Fish Hatchery, and the Aquatic Animal Drug Approval Partnership (AADAP) Program, and operates under the authority of numerous treaties and consent decrees, recovery and restoration plans, and statutes such as the Fish and Wildlife Conservation Act. These facilities and programs encompass a unique network of highly-skilled scientists, able to work with hundreds of state, tribal, non-governmental organizations, and private citizen partners to deliver conservation off federal lands. These skills include: propagation of healthy and genetically-appropriate aquatic animals and plants to help re-establish wild populations; leadership in applied research, aquatic animal health diagnostics and assessment; and development of new animal drugs. Working closely with partners, the Service also provides recreational opportunities, conservation, and economic benefits to local communities. Additionally, a small percentage of hatchery facilities produce fish to mitigate the adverse effects of federal water development projects while focusing on native fish recovery and restoration.

The Service is a key contributor to the recovery of Federally-listed aquatic species and the restoration of aquatic species whose populations are declining. The enormity of the challenge, and the significance of the Service's participation in aquatic species conservation, is indicated by the 130 species propagated in 2011, a 60% increase over the 81 species reared ten years earlier. Non-fish species propagation increased from 7 species in 1998 to 49 in 2011, a seven-fold increase. The Service anticipates a changing environment will result in an increase in the numbers of species that will require captive propagation to head-off extinction.

The Service's Fish Health and Fish Technology Centers provide the scientific foundation for many recovery programs. In addition, the AADAP works with the public and private sectors to dramatically reduce the cost of FDA approval of drugs and chemo-therapeutants necessary to manage and safeguard critical aquatic stocks and support private aquaculture. These recovery and restoration activities are fully coordinated with state, federal, tribal, and private-sector partners.

Through applied research, captive propagation and refugia, and development of innovative assessment techniques all prescribed in species Recovery Plans, the Service contributes to the recovery of threatened and endangered aquatic species and populations. Genetic tools are used to identify populations, determine recovery goals, guide captive propagation programs, and assess population recovery. Captive propagation techniques are developed, refined, and implemented, while studies in applied physiology and ecology help address problems related to survival in the wild or help establish basic life history parameters. The development of non-lethal marking and tagging techniques assists in the evaluation of propagation programs and enhances adaptive management, while modeling techniques help link restoration actions to population goals. Hatcheries provide refugia for populations impacted by wildfire, drought, or other environmental conditions and remain critical as environmental changes continue to affect a number of native aquatic species.

The Service also conserves non-listed species and enhances recreational opportunities through production and stocking of healthy, genetically-appropriate animals to maintain or re-establish wild populations; provides technical support in areas such as biometrics, nutrition, physiology, and conservation genetics; and studies fish health, disease diagnostics, treatment, and management.

The Service's contribution to habitat conservation is multi-faceted, and these activities provide some of the scientific basis for recovery and restoration programs inherent in the National Fish Habitat Action Plan and the Landscape Conservation Cooperatives. For example, monitoring is crucial to understanding vulnerable locations and populations, the distribution of emerging aquatic pathogens, and environmental change. Monitoring under the aegis of the National Wild Fish Health Survey (NWFHS), a successful partnership between the Service, states, tribes, and NGOs, improves the Service's ability to track potentially dangerous aquatic pathogens and provide managers the information required to make sound species recovery and restoration decisions. Other projects provide "explorer" or representative species to study habitat preferences, population dynamics and interactions, or other requirements of imperiled species.

The NFHS supports many other Service program priorities. Water sources and the associated riparian habitats found on NFHs attract many different bird species and provide critical stopovers on annual migrations. Stations in proximity to the US/Mexico border are especially important, as they are positioned in a major migratory bird flyway and are often enhanced, with the assistance of local communities, to attract waterfowl and other species. Additionally, the NFHS works with the National Wildlife Refuge System to survey aquatic animal populations.

Science and Technology - The Service's Fish Technology Centers, Fish Health Centers and the Aquatic Animal Drug Approval Program provide national scientific and technical leadership to solve on-the-ground fishery management problems that are critical to many restoration and recovery programs. In collaboration with LCCs and under the SHC framework, these science centers conduct research on high-priority conservation issues. Areas addressed involve genetic analyses, nutrition, ecological physiology, reproductive biology, population dynamics and modeling, cryopreservation, biometrics, culture technologies, disease diagnostics, aquatic health management, invasive species studies, and availability of new aquatic animal drugs.

Authorized by the Fish and Wildlife Act of 1956, Fish Technology Centers address an array of research topics related to altered habitat conditions and population fragmentation, stemming from various factors. For example, scientists at Bozeman FTC (MT) are studying the physiological impacts of temperature-induced stress on reproduction and survival of the endangered pallid sturgeon. Scientists at San Marcos FTC (TX) provide management guidance on the effects of reduced stream flow on endangered species and study invasive species pathways and impacts on native fish populations. Abernathy FTC (WA) is refining methods in remote monitoring technology to track changes in seasonal movement of fish, to identify micro-habitat use, and to monitor population abundance. In addition, FTC geneticists characterize genetic diversity, or the lack of diversity, as a basis for conservation and management decisions.

As these FTCs continue to develop and refine technology associated with cryopreservation, or freezing, of reproductive cells (gametes) to assist in restoration and recovery efforts, the Service benefits from efficiencies associated with cryopreservation which include reduced space and costs related to housing live broodstock and assurance of genetically representative specimens at spawning time. Cryopreservation provides a safeguard for preserving genetic diversity and with a Memorandum of Understanding (MOU) with the Department of Agriculture; the NFHS can transfer cryopreserved gametes for secure archiving within USDA's National Germplasm Repository in Ft. Collins, CO until they are needed for restoration and recovery.

Aquatic Animal Health – Since their establishment, the Fish Health Centers (FHC) have been increasingly called upon to provide national and international leadership to the aquatic animal health community. These centers are critical components of the Service's aquatic animal health program, and guide the National Aquatic Animal Health Plan, in partnership with the National Oceanic and

Atmospheric Administration and the Department of Agriculture's Animal and Plant Health Inspection Service. FHCs provide expertise to the State Department in the trade of live fish products, and to the American Fisheries Society's Fish Health Section in detecting pathogens and infectious diseases. FHCs are the nexus of applied and basic aquatic animal health science for addressing threats to the Nation's wild and cultured fish species, such as the potentially catastrophic VHS virus. The FHCs are also important participants in the new National Aquatic Animal Pathogen Testing Network, the preeminent source of information on the status of aquatic animal pathogens in the wild. As environmental changes impact the landscape and our Nation's aquatic species, the potential for introduction or spread of dangerous aquatic pathogens will increase. The Service's aquatic animal health biologists are on the front lines monitoring and detecting these pathogens and providing timely information to help fisheries managers make informed decisions.

The AADAP Program in Bozeman, MT is a partner-based national program established by the Service in 2004 that provides multi-agency coordination to obtain FDA approval for new aquatic animal drugs and therapeutants. The AADAP leads a coordinated effort to generate critical research data and manage all other aspects of requisite data submissions to the FDA in support of these new drug approvals to ensure the efficient management and production of healthy animals, as well as administer the Service's highly successful National Investigational New Animal Drug (INAD) Program. Through this effort other federal, state, tribal, and private aquaculture programs throughout the U.S. are allowed to use certain needed drugs under limited experimental conditions. In the public sector, these drugs are critical to the restoration, recovery, and management of aquatic species (including many threatened or endangered species), mitigation of federal water projects via fish-plantings, and recreational fisheries enhancement through stocking. In the private aquaculture sector, a lack of FDA-approved drugs has reduced production efficiencies, and perhaps even more importantly. America's ability to compete with foreign producers that have access to a much broader spectrum of drugs. This partnership allows the otherwise prohibitive cost of the applied research and development needed for FDA-approval to be shared by the states, tribes, private aquaculture community, pharmaceutical sponsors, and other partners, thereby enabling the submission of consolidated data packages to the FDA. The AADAP was established to be proactive and to address emerging issues, such as threats from global environmental change which potentially threaten the health and well-being of all aquatic species. The prevalence and severity of animal diseases is strongly correlated with environmental conditions (i.e., potential stressors), and is ever-changing. In aquatic species with body temperatures that vary with the temperature of its surroundings (poikliothermic), water temperature is a critical factor in pathogen abundance and virulence, as well as host susceptibility. Recent new FDA-approvals for the use of Aquaflor[®] (florfenicol), Terramycin[®] 200 for Fish (oxytetracycline), and 35% PEROX-AID® (hydrogen peroxide) provide both public and private sector U.S. aquaculture programs with critical new management tools and highlight the success of AADAP's partnership efforts.

Recreation – The Service's responsibilities and authorities for recreational fishing are established in a variety of laws and support the activities of more than 58 million recreational anglers. Working with state, tribal, nongovernmental organizations and other partners, and operating under approved fishery management plans, the Service restores depleted populations of native game fish and enhances fishing opportunities.

According to the peer-reviewed report, the *Economic Effects of Rainbow Trout Production by the NFHS*, the \$5.4 million expended by NFHS field stations to grow and stock rainbow trout provide a total economic output of \$325 million. This 60:1 return on taxpayer investment directly supports over 3,500

¹ A.C. von Eschenbach, Report to Congress, Food and Drug Administration Amendments Act of 2007. *Enhanced Aquaculture and Seafood Inspection*. 2008. 20 pp.

jobs and \$173 million in angling-related sales. Overall, each dollar budgeted for Service rainbow trout production generates approximately \$32 in retail sales and \$37 in net economic value.

Education – National Fish Hatcheries are integral parts of the communities in which they are located. Through the National Fish Hatchery System Volunteer Act of 2006, the Service offers outdoor classroom

opportunities that combine educational curricula with personal experiences relating to fish, aquatic species and their habitats, and the cultural and historical resources of these hatchery facilities. Through these outdoor classrooms the Service seeks to improve scientific literacy while promoting conservation of aquatic species and cultural resources through hands-on experiences and opportunities for discovery.

Mitigation – Consistent with the Fisheries Program Strategic Plan and Vision for the Future, and authorized by the Fish and Wildlife Coordination Act, the Service mitigates the adverse effects of federal water development projects while focusing on native fish recovery and restoration. To address Administration, Congressional, and partner mandates, the Service is working to recover costs from responsible water development agencies. In the current fiscal climate, the Service believes that mitigation hatcheries should be run on a fee-for-service basis. Through negotiations with the Army Corps of Engineers, the Service secured \$4.5 million in FY 2010, \$3.8 million in FY 2011, anticipates securing \$3.8 million in FY 2012; negotiations are on-going for full cost reimbursement of \$4.7 million. The Service is working with the Tennessee Valley Authority to negotiate reimbursement for mitigation activities in the Southeast, and plans to initiate discussions with Bureau of Reclamation to ensure adequate cost recovery.

2013 Program Performance - National Fish Hatchery Operations

This reduction will curtail the implementation of mitigation tasks implemented prescribed in approved management plans. Because many of the hatcheries support tribal management plans, hold refugia and propagate threatened and endangered species, and have strong outreach and education programs, the Service will also see a reduction in the implementation of planned tasks for tribal fish and wildlife conservation as prescribed by tribal plans and agreements, tasks prescribed in Recovery Plans, and the number of outreach and education activities and events.

Hationari		, -,	Combined					
Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
CSF 5.3 Percent of tasks implemented, as prescribed in management plans	76% (2,379/ 3,130)	74% (2,866/ 3,894)	63% (2,453/ 3,906)	58% (2,525/ 4,384)	55% (2,525/ 4,600)	0%	-55%	61% (2,388/ 3,906
5.3.1.4 # of tasks implemented, as prescribed in management plans - NFHS	1,251	1,339	1,418	1,551	1,280	1,165	-115	1,041

National Fis	sn Hatchery	/ System -	Combined	<u>Performan</u>	<u>ce Change</u>	and Overv	riew Tabi	е
Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
Comments	115 less FM FY2013-PB.	1P tasks can	be accomplis	hed due to N	IFHS Ops fur	nding decreas	se propose	ed for
5.3.7 # of applied aquatic science and technologic tools developed through publications	394	311	286	266	214	195	-19	286
Comments	19 less tool	s developed	due to NFHS	Ops funding	decrease pr	oposed for F	Y2013-PB	
5.5.1 The condition of NFHS mission critical water management assets, as measured by the DOI FCI, is x. (GPRA)	0.114 (120,198,951 of 1,057,209,131)	0.106 (115,472,369 of 1,087,233,873)	0.098 (128,244,148 of 1,305,484,969)	0.090 (121,403,568 of 1,344,649,517)	0.098 (128,466,853 of 1,309,977,842)	0.098 (128,466,853 of 1,309,977,842)	0.000	0.098 (128,244,148 of 1,305,484,969)
5.5.1.1 Total NFHS deferred maintenance needs (\$) for MCWM assets (GPRA)	120,198,951	115,472,369	128,244,148	121,403,568	128,466,853	128,466,853	0	128,244,148
5.5.1.2 Total NFHS replacement value (\$) for MCWM assets (GPRA)	1,057,209,131	1,087,233,873	1,305,484,969	1,344,649,517	1,309,977,842	1,309,977,842	0	1,305,484,969
CSF 7.21 Percent of populations of aquatic threatened and endangered species (T&E) that are self- sustaining in the wild	12% (70/585)	11% (70/639)	10% (70/701)	10% (71/689)	10% (72/711)	10% (72/711)	0%	9% (66/ 701)
7.21.5.4 Number of Recovery Plan tasks implemented by the Fisheries Program - NFHS (GPRA)	416	445	460	436	371	361	-10	322
Comments	10 less Rec for FY2013-	overy Plan ta -PB.	isks can be a	ccomplished	due to NFHS	Ops funding	g decrease	proposed

	in Haterier y	y Cystem	Combined				Change from	
Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	2012 Plan to 2013 PB	Long Term Target 2016
CSF 15.4 % of fisheries mitigation tasks implemented as prescribed in approved management plans	64% (49/77)	76% (56/74)	96% (73/76)	70% (74/105)	77% (74/96)	0%	-77%	49% (37/76)
15.4.1.4 # of mitigation tasks implemented as prescribed in approved management plans - NFHS	42	45	70	74	70	35	-35	11
Comments		ation tasks a roposed for F		would be sev	verely reduce	ed due to NF	HS Ops fu	nding
15.4.8 # of aquatic outreach and education activities and/or events	2,020	4,207	5,339	4,817	3,112	2,832	-280	838
Comments	Less activiti	ies and event	ts can be pla	nned or cond	lucted due to	less NFHS (Ops fundin	g proposed
15.4.12 Total # of visitors to NFHS facilities	2,471,045	1,340,136	2,107,562	1,735,926	1,625,629	1,475,629	-150,000	624,468
Comments		ies and event -PB. Addition ortages.						
CSF 15.8 Percent of adult Americans participating in wildlife- associated recreation	38% (385/1,000)	38% (87,465M/ 229,245M)	38% (87,465M/ 229,245M)	38% (87,465M/ 229,245M)	38% (87,465M/ 229,245M)	38% (87,465M/ 229,245M)	0%	38% (87,465M/ 229,245M)
15.8.10 # of waters where recreational fishing opportunities are provided - NFHS	230	230	230	230	230	115	-115	230
Comments		tion water bo crease propos			fish for recre	eational fishi	ng due to	NFHS Ops
CSF 52.1 Number of volunteer hours per year supporting	2,229,555	2,214,648	2,366,121	1,634,598	1,462,247	1,452,947	-9,300	1,501,633

National Fis	ii Halchery	y System -	Combined	r C HOHHan	ce Change	and Overv	IEW I ADI	<u> </u>
Performance Goal FWS mission	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
activities								
Comments								
52.1.2 # of volunteer participation hours are supporting Fisheries objectives for Hatcheries	116,071	119,954	115,190	110,913	96,086	87,486	-8,600	106,158
Comments	Less activiti	ies and event	ts can be cor	nducted or pl	anned for NF	HS due to re	educed fun	iding.
CSF 18.1 Percent of planned tasks implemented for Tribal fish and wildlife conservation as prescribed by Tribal plans or agreements	87% (123/142)	65% (351/538)	55% (335/608)	63% (349/555)	64% (345/538)	0%)	-64%	46% (281/608)
18.1.2.1 # of planned tasks implemented for Tribal fish and wildlife conservation as prescribed by Tribal plans or agreements - NFHS	123	165	169	188	165	150	-15	119
Comments	Less Tribal FY2013-PB	work can be	accomplishe	d due to red	uction in NFH	IS Ops fundi	ng propose	ed for

Activity: Fisheries and Aquatic Resource Conservation

Subactivity: Maintenance and Equipment

					2013		
		2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	Change From 2012 Enacted (+/-)
National Fish Hatchery Maintenance and							
Equipment	(\$000)	17,655	17,513	-34	0	17,479	-34
	FTE	73	72	0	0	72	0
FWCO Maintenance and Equipment	(\$000)	525	518	0	0	518	0
	FTE	0	0	0	0	0	0
Total, Maintenance and Equipment	(\$000) FTE	18,180 73	18,031 72	-34 0	0	17,997 72	-34 0

Justification of Program Changes for Maintenance and Equipment

The 2013 budget request for Maintenance and Equipment is \$17,997,000 and 72 FTE, no net program change from the 2012 Enacted.

Program Overview

Under the auspices of the Occupational Safety and Health Act (OSHA) and DOI standards, the Service has developed an Asset Management Plan that guides program management of its \$1.75 billion in essential real and personal property inventories, including the systematic and objective tracking, evaluation, reporting of asset condition, and prioritization of asset management. Using the Service Asset and Maintenance Management System (SAMMS), an integrated web-based information system, the Service standardizes asset management, corroborates deferred maintenance needs with objective condition assessment data, identifies short- and long-term maintenance needs, and initiates analyses of annual operating and maintenance expenditures. Comprehensive, proactive asset management is essential to ensure water flows, and sustains captive aquatic populations to meet recovery, restoration, and mitigation objectives and tribal trust responsibilities identified in Recovery Plans and Fishery Management Plans.

National Fish Hatchery System Maintenance and Equipment

The ability of the Service to accomplish its mission is largely determined by the condition of key assets associated with water delivery, aquatic species culture, and effluent management. These assets include those that deliver the water, treat the water, and discharge it from the station, and those that regulate the rearing or holding environment of fish and other aquatic species. Three-fourths of the NFHS's \$1.75 billion of real property assets are mission-critical. The Service has developed asset performance measures and a strategy for ensuring its crucial assets remain fully functional. The Departmental standard is that mission critical assets be maintained in "good" (less than 5 percent) facility condition index. With a current FCI for its critical assets of 9.46 percent ("fair" by DOI standards), the Service works diligently to minimize fish losses associated with water supply failures, especially those involving threatened or endangered species.

The Service's Asset Management Plan and Regional Asset Business Plans are used to manage assets, address repair needs, and dispose of assets that are low in priority or excess to the government's needs. A rigorous Condition Assessment process ensures that repair needs are determined objectively and associated costs are appropriately estimated using industry standards. To ensure critical assets remain in fully operational condition, attention to both annual maintenance (regular servicing of water supply components), and deferred maintenance (outstanding repair needs of these vital assets) is necessary.

Environmental concerns and energy costs have increased over the past several years, prompting the Service to track energy use by station and to some extent by asset, and providing the impetus for thorough consideration of what these data indicate.

- The NFHS's real property assets constitute 7.6 percent of all Service assets by replacement value, yet account for 37 percent of all Service energy use.
- The average NFHS field station uses 2.3 billion BTUs annually, over 3 times the 0.7 billion BTU average used by non-NFHS field stations.
- Seventeen of the NFHS's 85 field stations account for 62% of all NFHS energy use.

Hatcheries can play an important role in reducing the Service's and the Department's carbon footprint. Service staff are developing energy performance measures reflective of both energy use by station and energy reduction opportunities. Energy consumption can be reduced through building renovations, new technologies, and proper placement of renewable energy systems. Annual analysis of the greatest energy-consuming stations, along with metering, will help significantly.

The Maintenance Budget includes three components: 1) Annual Maintenance, 2) Deferred Maintenance, and 3) Equipment Repair and Replacement.

Annual Maintenance - Properly managed, annual preventive maintenance is the most logical and cost-effective way to address maintenance issues before they occur. Annual maintenance funds pay salaries of maintenance employees, ensure timely upkeep of hatchery real property and equipment, purchase maintenance-related supplies (e.g., lumber, pipe, paint, tools, filters), and replace small equipment (generally less than \$5,000). Current annual maintenance funding allows priority preventive maintenance needs to be addressed. Similarly, critical water assets such as wells and pumps require regular care to ensure dependable operation. Existing funding will be used to service such components at appropriate intervals, reducing the likelihood of preventable pump failure. Through SAMMS and condition assessments, the Service can plan recurring maintenance to enable more proactive asset management, reduce maintenance needs from becoming more costly deferred maintenance deficiencies, and foster successful operations and mission delivery.

Deferred Maintenance – Three-fourths of the NFHS's \$1.75 billion in assets are mission-critical water management assets that are currently in fair condition (based on the 9.46% FCI identified previously.) Ensuring these properties are fully functional is key to the Service's ability to conserve fish and other aquatic species. Deferred maintenance projects, directed at the repair, rehabilitation, or replacement of constructed assets, target assets used for restoration, recovery, outdoor education and mitigation. The current focus is on high-priority mission-critical water management projects and human health and safety projects, in order to maintain current efficiencies (including reduced losses) in fish production and address safety issues. The NFHS has identified \$162 million in deferred maintenance needs.

The 5-Year Deferred Maintenance/Construction Plan, prioritizes the projects of greatest need, focusing first on human health and safety and then on critical resource protection. The Service has undertaken an intense effort in the field to develop and refine this list. Modifications to the list occur through its annual review and update, with the addition of a new fifth year, and when it is submitted to the Congress.

Equipment: Routine Maintenance, Repair, and Replacement – Equipment is essential for proper hatchery operations. Over \$35 million of machinery (fish pumps, tractors, loaders, backhoes, riding mowers), fish transports (trucks, tanks, oxygen containment), standard vehicles (pickups, sedans, vans), and tools (table saws, welders, and hand-held power tools) is necessary. With proper operation by trained and qualified operators, and with scheduled maintenance completed and documented in a timely manner, equipment will remain in safe, operating condition for the foreseeable future. Proper maintenance of equipment includes both short- and long-term storage.

The NFHS equipment funds pay for maintenance, repair, and replacement of equipment. Replacement generally targets items with a value between \$5,000 and \$30,000, and includes passenger vehicles. More expensive equipment purchases are identified in the Five-Year Deferred Maintenance Plan. To minimize the need to purchase expensive specialized equipment and to maximize efficiency, the NFHS works closely with the National Wildlife Refuge System to accomplish certain projects. If scheduling conflicts arise, specialized equipment is leased from the private sector and Refuge-based equipment operators are loaned to hatcheries for the duration of the project, saving the Service considerable funds.

Fish and Wildlife Conservation Office Maintenance and Equipment – Fish and Wildlife Conservation Office maintenance and equipment funds are used to purchase and maintain over \$21 million in assets such as boats, vehicles, and sampling equipment. This equipment is essential for inventory and monitoring of aquatic species, and critical to the Service's mission to restore native aquatic populations to self-sustaining levels.

2013 Program Performance

The NFHS will continue to work on its repair needs involving mission-critical water management assets by implementing the following highly-ranked projects from the 2013-2017 NFHS Deferred Maintenance Plan:

- In 2013 alone, NFHS will rehabilitate, renovate or replace at least 16 wells, including: 4 wells at Allegheny NFH (PA), one well and pumping station at Dexter NFH and FTC (NM), 2 high capacity wells at Pendills Creek NFH (MI), 3 wells and one water supply line at Richard Cronin National Salmon Station (MA), 3 wells at Nashua NFH (NH), one well at Mora NFH (NM) and one well at Lahontan NFH (NV). These wells are critical to fulfilling the mission of these hatcheries and must be rehabilitated, renovated or replaced periodically to prevent catastrophic failure and fish losses.
- Rehabilitate the nearly 50 year old water tower at Gavins Point NFH (SD) and rehabilitate well pumps to ensure consistent water to endangered pallid sturgeon and other fish species. The deficiencies were identified in the 2008 Comprehensive Condition Assessment.
- Rehabilitate the water treatment system at Dwight D. Eisenhower NFH (VT) to disinfect incoming surface water and provides clean rearing water to Atlantic salmon.
- Rehabilitate the well and generator at Dexter NFH and Tech Center (NM) to ensure reliable and continuous supply of water necessary to maintain healthy captive fish populations and the survival of 17 threatened and endangered fish species reared for recovery activities; propagation, reintroduction, research, and refugium populations in New Mexico, Arizona, Colorado, Utah, and Texas.

Several states continue to permit fish culture operations at Service facilities only because pollution abatement projects are proposed in the maintenance or capital improvement plans. Deviations from those proposed schedules could lead to a reduction of production for Atlantic salmon and other imperiled species. All the critical maintenance issues that directly deal with human health and safety, water

delivery, water treatment (both influent and effluent), fish culture, and efficient discharge are high priorities for the Service. Maintenance and water supply failures have caused fish losses or seriously impacted production programs, such as the recent back-up generator switch failure at Jackson Hole NFH (WY), which resulted in the loss of 150,000 Snake River cutthroat trout and affected the programs of partner agencies, including the Idaho Fish and Game Department, Wyoming Game and Fish Department, the Wind River Reservation and the Bureau of Reclamation. A dedicated Service workforce continues to maximize production of a large variety of aquatic species for restoration, recovery, and mitigation. Rehabilitating or replacing critical assets is necessary to meet program goals and the expectations of the Service's many partners and stakeholders in aquatic resource conservation.

Addressing critical maintenance needs will help meet Facility Condition Index performance targets. Furthermore, continuing to conduct condition assessments has directly contributed to increasing the credibility of NFHS repair needs identified for essential assets.

In 2013, the NFHS is committed to:

- Continuing the second 5-year cycle of assessments by completing Condition Assessments at approximately 20 hatcheries. Efforts will continue to improve the assessment program by implementing knowledge gained in the first 5-year cycle, using SAMMS to improve the efficiency of the data storage and retrieval system, and increasing the reliability of data used to effectively and efficiently meet DOI and NFHS maintenance goals and objectives.
- Implementing an Asset Management Plan and Asset Business Plan that outlines proactive strategies to maintain assets for their efficient, safe use. Critical water management assets in poor or marginal condition will continue to be the primary focus of NFHS asset management efforts, while energy use reduction will target the NFHS's greatest users and those improvements with the shortest payback periods. Additionally, Asset Business Plans developed at the Regional level will continue to be implemented, ensuring essential Service uniformity in managing its crucial assets.

Activity: Fisheries and Aquatic Resource Conservation Subactivity: Aquatic Habitat and Species Conservation

					2013		
		2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	Change From 2012 Enacted (+/-)
Habitat Assessment and Restoration	(\$000) FTE	27,061 117	24,553 110	+109 0	+2,031 -8	26,693 102	+2,140 -8
Population Assessment and Cooperative							
Management	(\$000) FTE	32,638 173	31,991 169	+421 0	-4,033 -37	28,379 132	-3,612 -37
Aquatic Invasive Species	(\$000) FTE	6,244 27	8,836 27	+70 0	+518 0	9,424 27	+588 0
Marine Mammals							
	(\$000) FTE	5,960 25	5,831 25	+94 0	0	5,925 25	+94 0
Total, Aquatic Habitat and Species	(\$000)	71,903	71,211	+694	-1,484	70,421	-790
Conservation	FTE	342	331	0	-45	286	-45

Summary of 2013 Program Changes for Aquatic Habitat and Species Conservation

Request Component	(\$000)	FTE
Asian Carp	+2,903	0
Fish Passage	+1,518	+7
Klamath Basin	+1,610	0
Cooperative Recovery	+800	+8
 Ecosystem Restoration-Chesapeake Bay 	+145	+0
State Plans/NISA Implementation	+123	0
 Prevention 	-149	0
Control and Management	-507	0
 Habitat Assessment, General Program Activities 	-1,097	-15
Quagga-Zebra Mussels	-1,997	0
Alaska Subsistence	-2,254	-11
Population Assessment, General Program Activities	-2,579	-34
Program Changes	-1,484	-45

Justification of 2013 Program Changes

The 2013 budget request for Aquatic Habitat and Species Conservation is \$70,421,000 and 286 FTE, a net program change of -\$1,484,000 and -45 FTE from the 2012 Enacted.

Asian Carp (+\$2,903,000/+0 FTE)

Part of this funding (+\$903,000) will support all of the critical monitoring, prevention, and control actions identified in the Asian Carp Control Strategy Framework for the Service. The Service will fully

implement an integrated and comprehensive strategy for Asian carp prevention and real-time monitoring and rapid response in the high risk areas in the Great Lakes and selected tributaries. Specifically, the Service will increase traditional gear sampling as part of a comprehensive surveillance and monitoring program for Asian carp species in the Great Lakes. This includes conducting Incident Command System training (mock training exercises), material acquisition (including rotenone) and requisite environmental compliance activities. Additional surveys and risk assessments needed to minimize range expansion and population growth of Asian carp and other aquatic nuisance species will also occur.

The remainder of this funding (\$2,000,000) will support the development of a comprehensive early detection and surveillance program for Asian carp through the establishment of eDNA lab(s) at FWS' Regional Fish Technology Centers. Early detection and surveillance of Asian Carp are key to preventing their spread, and eDNA is more sensitive than traditional methods of confirming the presence of Asian Carp in low numbers. This sampling will be conducted in high-risk ecosystems and habitats such as the California Bay-Delta, Mississippi River Basin, and Columbia River Basin. Samples from high-risk areas susceptible to Asian carp invasions will be obtained from State partners and Fish and Wildlife Conservation Offices (FWCOs). Sampling locations will be selected using a risk-based sampling design developed by the Service and its partners. Funds may also be used to augment development and use of new technologies like DIDSON, fish telemetry, and novel gear types (e.g. Paupier net, purse seine, etc.) to rapidly assess abundance and distribution of Asian Carp species where detected.

Habitat Assessment and Restoration – Fish Passage Improvements (+\$1,518,000/+7 FTE)

The requested additional \$1,518,000 for the National Fish Passage Program (NFPP) will implement as many as 28 critical barrier removals or bypass projects that will reconnect important waterways and reopen 300 miles and over 2,000 acres of habitats for fish and other aquatic species. This will result in more than \$200 million in economic benefits to local communities, as well as create or maintain over 1,300 jobs. The Service will work with its 700+ partners to assist local communities with the planning and implementation of these projects.

The Service will focus on rivers where it can open large portions of the watershed and where it can achieve the largest return on investment. Areas of work can include:

- Removing 30 culverts and remnant dams in the Narraguagus River (ME), restoring connectivity
 to 150 miles of stream habitat for brook trout, American eels, and alewife. Habitat and fishery
 assessments have been completed and existing shovel-ready projects can be initiated
 immediately.
- Removing 8 culverts on the Chehalis River (WA), will open 30 river miles of habitat for Coho, Chinook, and coastal cutthroat salmon. The Chehalis River basin has a completed barrier assessment and projects are prioritized. Numerous partners, including the NFPP, are already working on barriers in the river; therefore the foundation is in place to make an immediate, significant impact on the system and local communities.
- The removal of the 30-foot high and 842-foot long Veazie Dam (ME) will reconnect 1,000 miles of historic spawning habitats, important to the recovery of endangered Atlantic salmon. Removal can begin in 2013 with full partner and community support.

All projects are collaborative efforts with local communities, which not only provide benefits for aquatic species, but benefit the local and surrounding communities as well. The NFPP helps communities build sustainable road crossing infrastructure which increases public safety, lowers long term replacement costs, and opens habitat for fish and other aquatic species.

The President's "America's Great Outdoors" initiative is focused on reconnecting the American people to the outdoors through community-level conservation. This increase in NFPP funding allows the program to boost its established local efforts to connect communities to the outdoors by reconnecting America's rivers and restoring recreational opportunities.

Klamath Basin (+\$1,610,000/+0 FTE)

Funds will be directed to the Arcata, Yreka, and Klamath Falls Fish and Wildlife Conservation Offices to support critically needed fisheries and fish habitat monitoring, planning, and habitat restoration programs for listed and native fish. Projects will include fish-related monitoring and modeling (such as fish population, water temperature, hydrology, water quality, fish disease, and stock assessments, fish and watershed habitat planning and assessments), fish and watershed habitat planning and restoration projects, and projects to improve instream flows for fish. These FWCOs will continue to produce data, analytical tools, plans, and models that are crucial to improving the health of the Klamath River and its tributaries and provide critical support to agency, tribal, and other parties whom have come together to settle long disputed claims in the Klamath Basin.

Demands on Service staff, supported in part by these funds, are anticipated to increase significantly in 2013 and 2014, due to increasing demands on limited water supplies, and any requirement which may be necessary to implement all or parts of the Klamath Basin Restoration Agreement, should it be implemented. These funds will also enhance the Service's ability to restore high-priority stream habitats and recover listed and native fish species in the Klamath system while working with stakeholders to resolve natural resource issues. This funding supports the removal of one barrier reopening 4 miles of historic habitat, the implementation of 9 fishery management plan and 6 recovery plan tasks, 7 new or modified tribal fish and wildlife cooperative agreements and 6 tribal fish and wildlife conservation consultations, and updates status and trend information for aquatic species in the Klamath River Basin.

Cooperative Recovery (+\$800,000/+8 FTE)

The \$800,000 request will support the Fisheries Program's participation in a Service-wide collaborative initiative to restore and recover Federally listed species on National Wildlife Refuges and in surrounding ecosystems. Working under the Strategic Habitat Conservation (SHC) framework and in consultation with Landscape Conservation Cooperatives (LCCs), and with Endangered Species, Migratory Birds, National Wildlife Refuge System, Partners for Fish and Wildlife, the Science Program, and the Fisheries Program will contribute to the development and implementation of a national, proposal-driven process for identifying highest priority projects that achieve greatest gains towards identifying threats to listed species. This collaborative effort will identify priority projects for recovering endangered species landscapes on or around refuges. Service biologists will cooperatively design and implement aquatic species and habitat recovery actions using the SHC approach. The Service will use cutting edge GIS tools and leverage the resources of partners through the use of cooperative conservation mechanisms, and such as the National Fish Habitat Action Plan and the National Fish Passage Program.

Ecosystem Restoration-Chesapeake Bay (+\$145,000/+0 FTE)

The Service proposes to increase monitoring and assessment to prevent both intentional and unintentional introductions of aquatic invasive species in the Chesapeake Bay Ecosystem. Rapid response teams will eradicate new infestations of invasive species before they can become established. These teams offer a unique opportunity to enlist community members in work to protect their most precious resources from the threat of invasive species. For species whose eradication is not feasible, methods to control and prevent their spread will be explored. Increased education and outreach efforts will help the public understand the ecological and economic damage caused by the spread of aquatic invasive species.

State Plans/NISA Implementation/Coordination (+\$123,000/+0 FTE)

The Aquatic Nuisance Species Task Force (ANSTF), composed of 13 Federal and 12 ex-officio organizations, serves as the only intergovernmental organization dedicated to preventing and controlling aquatic nuisance species (ANS.) The ANSTF provides a national infrastructure and forum for collaborative discussion and decision making with a wide variety of organizations on critical ANS issues that can impact prevention, control, and management of ANS at the federal, state, and local levels. This increase will help support regional coordination efforts for invasive species control, management, and prevention between Federal agencies and other partners.

The State/Interstate Aquatic Nuisance Species Management Plan grant program, through which the Service provides funding to States and Tribal entities for implementation of ANSTF-approved plans, will be eliminated. The State AIS programs coordinate with their partners to prevent the introduction and spread of AIS and have accomplished significant regional and landscape-level outcomes such as educating public citizens, inspecting hundreds of thousands of recreational boats, rapidly responding to new infestations, and supporting needed research. In FY 2012, under Congressional direction, the Service will allocate \$1 million of the quaaga/zebra mussel funding towards projects by States with approved State/Interstate plans. To comply with this direction, funding will not be available to support the 41 existing ANSTF-approved plans or the State staffs who implement those plans on the ground. Without direct funding support, actions in the State/Interstate ANS Management Plans will not be implemented at current levels. The reduction in this effort and other similar activities means that 80 fewer partnerships will be established and maintained for invasive species tasks.

Prevention (-\$149,000/+0 FTE)

This reduction will specifically impact the 100th Meridian Initiative, a Service program originally created to prevent the spread of zebra mussels into western waters primarily through recreational boating; curtail Service efforts on the Alaskan Ballast Water Initiative; Service funding for injurious wildlife evaluations; Hazard Analysis and Critical Control Point Planning (HACCP), an internationally recognized planning process that identifies potential risks for invasion so that they can be properly managed and significantly reduced; and early detection and monitoring capabilities.. As a result, 12 fewer risk assessments will be conducted to evaluate potentially invasive species, 37 fewer surveys will be conducted to gather baseline/trend data, and 21 fewer surveys will be conducted for early detection and rapid response actions.

Control and Management (-\$507,000/+0 FTE)

Control and management will focus primarily on preventing Asian carp in the Mississippi River from entering the Great Lakes. The Service will be unable to fund the many ANSTF-approved national plans that focus on management and control of specific AIS. Rather, the Service will focus remaining control and management efforts on New Zealand mudsnail, Asian carp, giant salvinia, and sea lamprey, with some limited resources devoted to brown tree snakes. With the resources to address 11 other important AIS populations that are currently managed not available, there is an increased risk of their spread and the resultant impact on wildlife resources. Control and management activities will not be funded across the United States for zebra and quagga mussels, Eurasianruffe, snakehead, Chinese mitten crabs, apple snails, *Caulerpa* (a seaweed), water chestnut, *Undaria pinnatifada* (a kelp), and lionfish.

Historically, the Service's coordination and leadership for management and control actions has been crucial to minimizing the spread of these species. Without Service involvement, states, tribes, stakeholders, and other partners will have primary responsibility for combating their spread. Additionally, funding will not be available to rapidly contain small and localized AIS populations, which could increase the chance of their spreading to other locations. As a result of this decrease, 82 activities such as coordinating and implementing interjurisdictional management and control strategies will not be conducted. Reduced funding will be available for the public outreach campaigns Habitattitude and Stop Aquatic Hitchhikers! which will likely lead to the enlistment of fewer partners, decreased updates of the

website and ultimately reaching fewer people. This will, in turn, result in less behavioral change, and, ultimately less empowerment of the public to help stop the spread of ANS on their own.

Habitat Assessment and Restoration, General Program Activities (-\$1,097,000/-15 FTE)

This reduction will eliminate up to 15 FTEs and reduce the Service's core capacity to deliver essential onthe-ground fisheries habitat restoration and conservation.

As a result of recommendations from the Sport Fish and Boating Partnership Council, Congress and the Administration, the Service has shifted efforts toward more habitat restoration.

Numerous performance metrics will be impacted by this reduction, including:

- 150 fewer habitat assessments completed;
- 630 fewer miles of aquatic habitat assessed;
- 30 fewer miles of stream and shoreline restored;
- 260 fewer tasks implemented as prescribed in management plans;
- 70 fewer recovery plan tasks implemented by the Fisheries Program;
- 140 fewer aquatic education and outreach activities;
- 30 fewer tasks implemented for Tribal fish and wildlife conservation; and,
- 700 fewer volunteer hours in support of Fisheries Program objectives.

Quagga-Zebra Mussels (-\$1,997,000/+0 FTE)

In order to continue providing funds to address other priorities, the Service will eliminate funding for quagga and zebra mussel control and management activities. This includes funds for operational inspection and decontamination stations and funds that were previously allocated under the State/Intersate Aquatic Nuisance Species management plans.

- Operational Inspection and Decontamination Funds currently being used to help prevent the spread of quagga and zebra mussels from moving into western waters will be eliminated. Funding is not available to support inspection and decontamination activities, or other actions under the Quagga-Zebra Mussel Action Plan (QZAP). This loss of funds increases the possible risk of invasion of these species into Lake Tahoe and other water bodies, as boaters can unintentionally carry mussels on boats and other equipment that has not been properly cleaned and inspected.
- State/Interstate Aquatic Nuisance Species Management Plans The Service recognizes the efforts of States that have developed State/Interstate Aquatic Nuisance Species Management Plans by providing funding each year to those States. Such efforts by the States indicate a strong commitment to address urgent invasive species needs on a regional and local level. Funds for containment, prevention, and education of quagga and zebra mussels provided in FY 2012 will be eliminated, impacting Service partners' ability to reduce and minimize the spread of these mussels since they are the recipients of this funding.

Alaska Subsistence (-\$2,254,000/ -11 FTE)

This reduction in combination with a proposed \$636,000 reduction in the National Wildlife Refuges budget represents a 22% reduction to the Alaska subsistence program. The \$2.3M decrease will reduce staffing by 11 FTEs. The Service serves as the lead agency in administering the Federal Subsistence Management Program for the Departments of the Interior and Agriculture. This program coordinates the regulation and management among federal land managers of subsistence harvests by rural Alaskans on 237 million acres of land. It provides information and analysis for the regulatory function of the Federal Subsistence Board and support for the advisory functions of the 10 Regional Advisory Councils.

The reduction will require that the Alaska Federal Subsistence Board work with the Service to prioritize workload within the program and achieve efficiencies through changes in staffing. The workload reduction will result in twenty-five percent fewer fish population and harvest assessments being conducted and eliminate the gathering of status and trends information for more than 16 native fish

populations. The proposed funding decrease also will reduce the funding support the Service provides to the State of Alaska to help reimburse its activities associated with the subsistence program and the work of the Federal Subsistence Board. In addition, one program which utilizes local youth in fish and wildlife research and study efforts would be eliminated. Even with the reduction, the total funding provided in the budget is adequate to ensure that subsistence harvest of fish and wildlife by rural Alaskans continues and will allow for the implementation of some of the higher priority recommendations of the Secretary's Alaska Subsistence Review.

Population Assessment and Cooperative Management, General Program Activities (-\$2,579,000/-34FTE)

As the principal funding source for most of the Service's Fish and Wildlife Conservation Offices, this reduction will impact the Service's infrastructure. However, this decrease will be attenuated by increases in the fish passage program to fund fish passage activities and in the new initiative, cooperative recovery. As a result, the Service will be able to minimize the need for reductions in workforce.

Decreased funding will impact the Service's capacity to deliver essential on-the-ground fisheries conservation, which affects partnership projects, conservation efforts to native species, and benefits to local economies estimated at \$64,000,000. Funding for the new cooperative recovery initiative will allow the Service to counter these impacts by increasing its fish population recovery and management activities on National Wildlife Refuge System properties. Working cooperatively across programs, the Service will focus on delisting threatened and endangered species and enhancing habitat for depleted fish populations. This will create aquatic refuges for fish and other aquatic organisms that otherwise would be in peril of decline and, ultimately, extinction. The Service will stem the loss of keystone fish species on several National Wildlife Refuges that also support fisheries and bolster economies of local communities through recreational fishing. For example, Service biologists may work with the Whittlesey Creek National Wildlife Refuge, a large wetland complex on Lake Superior, near Ashland, Wisconsin. These coastal wetlands and streams provide critical habitat for coaster brook trout, an anadromous fish that has been repeatedly proposed for listing. The Service can restore habitat both on and near the Whittlesey Creek NWR by plugging drainage ditches, restoring riparian vegetation and managing non-native fish species. By increasing the cooperative management focus on this species in the Lake Superior drainage basin, the Service can both prevent the listing of this unique strain of brook trout while significantly enhancing local economies.

Utilizing the new funding for fish passage and by shifting existing human resources, the Service will enhance its aquatic habitat science and conservation delivery capability. As increased funding for large fish passage projects becomes available, more expertise is needed in the highly specialized areas of fluvial geomorphology, fish passage engineering, fish behavior, and conservation business management. Building upon the existing Fish and Wildlife Conservation Office infrastructure, the Service will continue its transition towards a leaner, habitat-focused conservation delivery program, crucial for delivering the aquatic conservation component of the Service's mission.

The 2010 economic assessment of the Fisheries Program showed that these functions generate \$677 million in economic impact (direct, indirect, and induced expenditures) and directly support 15,054 American jobs. In addition, the Service plays a leadership role in conserving America's fisheries. Anglers benefiting from conservation activities support slightly over one million jobs with \$45 billion in retail sales injecting over \$125 billion into the Nation's economy, with \$7.4 billion generated for state and local taxes, which this reduction may impact.

Numerous performance metrics will be impacted by this reduction which includes:

- 350 fewer population assessments;
- 70 fewer native aquatic populations managed by the Service with current status and trend data;

- 120 fewer native aquatic populations with approved management plans;
- 260 fewer Fishery Management Plan tasks implemented;
- 20 fewer threatened and endangered aquatic populations with current status and trend data;
- 60 fewer threatened and endangered aquatic populations with current Recovery Plans;
- 20 fewer activities conducted to support the control and management of aquatic invasive species;
- 20 fewer surveys conducted for early detection and rapid response for aquatic invasive species;
- 7 fewer risk assessments conducted to evaluate potentially invasive aquatic species;
- 160 fewer aquatic education and outreach activities;
- 10 fewer training sessions to support tribal fish and wildlife conservation;
- 2 fewer cooperative agreements with tribes completed;
- 15 fewer consultations conducted to support tribal fish and wildlife conservation; and
- 25 fewer tasks implemented for tribal fish and wildlife conservation.

Program Overview

The Service monitors and assesses aquatic populations and their habitats to inform our resource management decisions. A 2008 report by a U.S. Geological Survey-led team examined the status of North America's freshwater fishes and documented a substantial decline among 700 fishes. Sea-level rise, temperature elevations, and precipitation changes are devastating the nation's fisheries. The Service's ability to respond to these impacts is hampered by a severe lack of basic population-level data. Monitoring and assessment of fish populations and their habitats, important components of the Service's Strategic Plan for Climate Change, are carried out by the 65 Fish and Wildlife Conservation Offices (FWCOs) and are critical to the Service's success to protect trust resources. Monitoring and assessment of aquatic populations are necessary in order to: 1) understand current conditions and stressors; 2) establish trends and address environmental impacts on fisheries; 3) identify sensitive aquatic ecosystems, key processes, and critical information gaps; and 4) implement management plans and projects, including projects funded by the National Fish Habitat Action Plan (NFHAP), the National Fish Passage Program (NFPP) and Landscape Conservation Cooperatives (LCC). These data will provide the Service and its partners with the information necessary to respond to environmental impacts strategically, scientifically, and successfully.

Habitat Assessment and Restoration Program Overview

The Service's FWCO biologists work closely with federal, state, tribal, and NGO partners, to manage habitats important for the conservation of native federal trust populations at national, regional, and local scales. Core activities in this area are: assessment of a habitat's ability to support healthy and self-sustaining aquatic populations, identification of important fish habitat needs, removal or bypass of artificial barriers to fish passage, installation of fish screens, in-stream and riparian habitat enhancement projects, monitoring and evaluation of projects, and mitigation of environmental impacts on aquatic species and habitat.

The need for aquatic habitat assessment by FWCOs continues to grow as a result of the expanding network of LCCs, the increase of environmental impacts on freshwater and coastal systems, and resource shifts towards habitat management programs in fisheries agencies across the country. NFHAP and NFPP are two habitat assessment and restoration programs implemented by FWCOs that are vital tools in

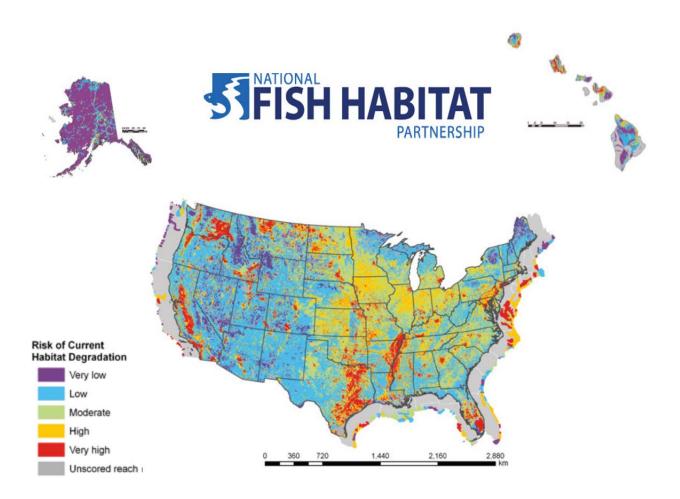
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¹ Jelks, H.L., S.J. Walsh, N.M. Burkhead, S.Contreras-Balderas, E. Díaz-Pardo, D.A. Hendrickson, J. Lyons, N.E. Mandrak, F. McCormick, J.S. Nelson, S.P. Platania, B.A. Porter, C.B. Renaud, J. J. Schmitter-Soto, E.B. Taylor, and M.L. Warren, Jr. 2008. Conservation status of imperiled North American freshwater and diadromous fishes. Fisheries 33(8):372–407.

² Jackson, J.R., J.C. Boxrucker, D.W. Willis. 2004. Trends in agency use of propagated fishes as a management tool in inland fisheries. American Fisheries Society Symposium 44:121–138.

meeting our legal requirements under statutes such as the Fish and Wildlife Conservation Act and the Endangered Species Act.

National Fish Habitat Action Plan (NFHAP): The Service partners with states, tribes, NGOs and other stakeholders in implementing NFHAP. NFHAP fosters locally-driven and scientifically-based partnerships to protect, restore, and enhance aquatic habitats and reverse the decline of fish and other aquatic species. NFHAP's mission and goals are primarily implemented by Fish Habitat Partnerships (FHPs), which are formed and fully operating around geographic areas, keystone species, or system types. FHPs identify projects that strategically focus fish habitat management and funding. The Service approves projects and funding levels which are allocated to the Regions for administration and the Service's FWCOs provide local technical assistance to FHPs on the projects. NFHAP projects are leveraged as much as 3:1 with partner funding.



Service funds support activities of the National Fish Habitat Board, including the national Status of Fish Habitats assessment, used to prioritize actions and monitor results. Data for the 2010 assessment are accessible to natural resource managers and the public through a web-based mapper hosted by the U.S. Geological Survey.

National Fish Passage Program (NFPP): The Nation's rivers and waterways have become a series of fragmented systems with more than 6 million dams and poorly-designed culverts that are at the root cause. These barriers impede the movement of flowing water and aquatic species, contributing to the

depletion of aquatic habitat and native aquatic species, many of which are listed as threatened or endangered, and reducing recreational fishing and boating opportunities. NFPP is a voluntary, non-regulatory, cooperative conservation partnership that works to restore America's fragmented rivers and waterways. Since its inception in 1999, NFPP has collaborated with more than 700 federal, state and local

Okaloosa Darter Swimming in Historic Habitat

Conservation efforts of the National Fish Passage Program and its partners have resulted in the proposed downlisting of the Okaloosa darter from endangered to threatened. The darter is known to exist only in 6 stream systems in Choctawhatchee Bay bayous in Florida. Most of this habitat is under the management of Eglin Air Force Base.

Working with Eglin AFB, the Service has:

- Removed 5 barriers and modified many culverts
- Reopened 30 miles of upstream darter habitat
- Restored over 8,200 ft of stream
- Accomplished a significant number of recovery plan tasks
- Eliminated 98% of the erosion occurring in darter watersheds

with more than 700 federal, state and local governments, private landowners, tribes, and community organization partners, to remove or bypass over 950 barriers, and reconnect over 15,000 miles of river and 81,000 wetland acres. The resulting increase in resiliency to environmental pressures and urbanization has benefitted more than 90 species of fish. NFPP projects have created an economic value of \$9.7 billion to local economies, created or maintained 186,000 jobs and have leveraged funds at a greater than 3:1 ratio.

An important tool in the restoration of aquatic connectivity and aquatic species is the Fish Passage Decision Support System (FPDSS). FPDSS is an online application that features the most comprehensive



inventory of fish passage barriers in the country. FPDSS uses structured decision making to identify the best opportunities for successful population restoration through barrier removal.

NFPP supports the only system of comprehensive fish passage engineering and technical assistance capacity in the country. The fish passage engineers and technical specialists funded by the NFPP ensure that fish passage projects are successful. An increased demand for their services has led the Service to partner with the University of Massachusetts to establish the nation's first graduate degree program in fish-passage engineering.

2013 Program Performance – Habitat Assessment and Restoration

In 2013, the FWCOs will continue their comprehensive efforts through the NFHAP and NFPP to assess the condition of aquatic habitats and populations, restore physical condition and fish passage, reverse declines in populations of federal trust aquatic species, manage subsistence fisheries in Alaska, provide technical assistance to Native Americans, and cooperatively develop and implement plans to restore and recover the Nation's fisheries. The Service's FWCOs will use the Fisheries Operational Needs System and the FPDSS to strategically prioritize work activities. Service biologists will continue to identify and target priority areas which provide the best opportunities to restore connectivity to fish habitat and increase fish species' resiliency.

Population Assessment and Cooperative Management Program Overview

Service assessment activities focus on inventory, monitoring, management, restoration and maintenance of healthy and diverse aquatic species populations. The Service's FWCOs evaluate the causes of species decline, determine the limiting factors for aquatic populations, and implement actions to restore those populations. With a legal mandate to work across habitat types and jurisdictional boundaries, the Service's FWCOs work with tribal nations and state and federal natural resource agencies to restore fish and other aquatic populations to self-sustaining levels to preclude listing under the Endangered Species

Act. The development and implementation of fisheries management plans for federal trust species is a core function which requires population data, which the Service's FWCOs can provide. Species currently being monitored include: American shad, Atlantic sturgeon, striped bass, brook trout, Pecos bluntnose shiner, and Atlantic salmon.

Other Service programs, such as National Wildlife Refuges (NWRs) and Endangered Species, depend on the Service's FWCOs for technical assistance. This technical assistance includes conducting population surveys on NWRs, leading recovery teams, undertaking population status assessments, and developing and implementing restoration and recovery programs for native fish and mussel species. Additionally, working with hatcheries to monitor captive propagation programs, and with stakeholders to develop management and restoration plans that define the appropriate use of hatchery fish, and measure progress toward meeting plan objectives are important tasks. Service personnel provide a critical field presence in the fight against the spread of aquatic nuisance species by reclaiming habitats overrun with non-native species and suppressing invasive species, such as sea lamprey and Asian Carp.

The Service's trust responsibilities to tribes are fulfilled in large part through the Service's FWCOs working with tribal resource agencies to recover fisheries on 56 million acres of tribal trust lands and 44 million acres of Alaska Native lands. Fisheries conservation on tribal lands is advanced through providing technical assistance and tribal engagement in cooperative management, as well as supporting the Fisheries Conservation Education Initiative and the Secretary's Youth in the Great Outdoors Initiative, with Youth Conservation Corps jobs to Native American youth that encourages them to pursue careers in natural resource conservation.

Alaska Subsistence Management Program: More than 135,000 people in over 270 communities in rural Alaska are entitled to subsistence fish, hunt, and trap on federal lands. Across Alaska, the average subsistence harvest is approximately 375 pounds of food per person, or 50 million pounds of food per year. Replacing subsistence harvested foods with store-bought foods would cost \$270 million. The Alaska Fisheries Subsistence Management Program provides a direct benefit to rural subsistence users on more than 237 million acres of federal lands, encompassing 66% of Alaska's lands and 52% of Alaska's rivers and lakes.

The Service is the lead federal agency in administering the program for the Department of the Interior and the Department of Agriculture. Since 1999, the Service's Office of Subsistence Management has implemented an annual regulatory program and a fisheries monitoring program, supported ten Regional Advisory Councils, and has provided administrative and technical support to five federal agencies and the Federal Subsistence Board. The Subsistence Management Program operates with strong stakeholder participation by rural residents and the State of Alaska.

2013 Program Performance – Population Assessment and Cooperative

Information for Restoring America's Fisheries: Service field staff will continue efforts to restore populations of commercially and recreationally valuable species of native fish. Of the 2,360 fish populations for which the Service has management authority, 75% lack some key scientific assessment data. Over 600 of these fish populations are classified as threatened or endangered, 883 are depleted, and 914 are of unknown status. Information on population trends shows that 15% are declining and 30% are stable or increasing, but trends are unknown for 57% of fish populations. The Service will meet this

³ Fall, J. A., D. Caylor, M. Turek, C. Brown, J. Magdanz, T. Krauthoefer, J. Heltzel, and D. Koster. 2007. Alaska Subsistence Salmon Fisheries 2005 Annual Report. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 318, Juneau, Alaska.

information need by using the scientific monitoring, assessment, and evaluation expertise of the Service's FWCOs. For 2013, the Service will bolster its efforts in close coordination with other Service programs.

Working with Tribes: Service field staff will continue working with tribes to assess and manage their fish and wildlife resources on tribal lands. Service biologists develop management plans, restore native fish and fish habitats, and evaluate results of fish and wildlife management actions. In 2013, these efforts include implementing the 2000 Consent Decree to manage fish stocks in the Great Lakes with five Chippewa/Ottawa Tribes and the State of Michigan, working with the White Mountain Apache Tribe to delist Apache trout, and working with tribes to evaluate big game herds such as deer, elk, and pronghorn antelope on tribal lands in Wyoming and Montana. The Service will encourage tribal youth to explore careers in the fisheries conservation field, through expanding its Youth Conservation Corps programs (YCC), in order to promote the growth of conservation expertise within tribal communities and to increase ethnic and cultural diversity within the fisheries management profession.

Aquatic Invasive Species Program Overview

Operating under the authority of the Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended by the National Invasive Species Act, the Service's Aquatic Invasive Species (AIS) Program consists of three components: administration of the Aquatic Nuisance Species Task Force, regional implementation of the National AIS Program, and Injurious Wildlife evaluations and listings through the Lacey Act.

Invasive species have significantly impacted the health of native species and ecosystems, and are considered second only to direct habitat destruction in the U.S. as the cause of declining biodiversity. Nearly half of the imperiled species in the United States are threatened by invasive species.⁴ It has been estimated that the economic and ecological impacts total more than \$120 billion per year in diminished recreational opportunities, agricultural productivity, personal property values, human health, and public utility capacity.⁵

Aquatic invasive species are especially troublesome as they are not always readily detected, their pathways are not always obvious, and their impacts to native species and habitats can be difficult to determine. In addition, they are difficult to eradicate once they become established because they can remain persistent and spread widely even after their pathways of introduction are interrupted. In the Great Lakes, where invasive zebra and quagga mussels have been present since the 1980s, new problems and impacts caused by AIS continue to be identified. Recent University of Michigan studies, for example, reveal changes due to invasive mussels at every level of the Great Lakes ecosystem. Without prevention and management, AIS – such as Asian carp, giant salvinia, and other species not yet in the U.S. – will continue to establish and spread, with damages accelerating over time.

Administration of the Aquatic Nuisance Species Task Force

The Aquatic Nuisance Species Task Force (ANSTF), composed of 13 Federal and 13 ex-officio organizations, was established in 1991 under the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA, as amended by National Invasive Species Act). This unique legislation mandated the ANSTF, the only intergovernmental organization dedicated to preventing and controlling ANS. The ANSTF provides a national infrastructure and forum for collaborative discussion and decision

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⁴ Wilcove, D.S., Rothstein, D., Bubow, J., Phillips, A., Losos, E., 1998. Quantifying threats to imperiled species in the United States. Bioscience 48(8): 607-615.

⁵ Pimentel, D., Lach, L., Zuniga, R., Morrison, D., 2005. Update on the environmental and economic costs associated with alien-invasive species in the U.S. Ecological Economics 52:273-288.

⁶ Erickson, J. 2009. Great Lakes: 'Amazing Change'. Michigan Today, 7/21/2009. http://michigantoday.umich.edu/2009/07/story.php?id=7510&tr=y&auid=5077806

making with a wide variety of organizations on critical ANS issues that can impact prevention, control, and management of ANS at Federal, state, and local levels. As directed in NANPCA, the Service supports the funding and implementation of species management plans and 41 State/Interstate ANS Management plans, provides funding to the ANSTF's six regional panels, co-chairs the ANSTF with NOAA, and provides administrative support through staffing the Executive Secretary position.

Regional Implementation of the AIS Program

The Service contributes to the conservation of trust species and their habitats by preventing the introduction and spread of AIS, rapidly responding to new invasions, monitoring the distribution of and control of established invaders, and fostering responsible conservation behavior through national public awareness campaigns.

The front line for preventing new aquatic species invasions is to address those introduced through pathways such as the trade in live organisms (e.g., food and pets), canals and waterways, and recreational boating. Priority containment (e.g., boat inspection and decontamination), early detection and rapid response (using Incident Command-led responses and cutting-edge genetic tools for species like Asian carp); interjurisdictional coordination, planning, and implementation (Quagga/Zebra Mussel Action Plan and the 100th Meridian Initiative); and regulatory (prohibiting importation and interstate transport of harmful injurious wildlife) and non-regulatory actions (Stop Aquatic Hitchhikers!) have occurred across many jurisdictions. Through the actions of the AIS Program, a national AIS network that includes other federal agencies, states, local governments, Regional Panels, other regional organizations, over 1,000 participants in two national public awareness campaigns, and many other partners has been built. This national network has planned, directed, and accomplished significant regional and landscape-level invasive species prevention and management resource outcomes.

The National AIS Program has three primary focus areas:

Implementation of NANPCA

Recognizing the magnitude of the problem and the need to leverage resources, NANPCA created the State/Interstate ANS Management Plan grant program, through which the Service provides funding to States and Tribal entities for implementation of ANSTF-approved plans. To date, this program has facilitated the establishment of 41 state and interstate ANS management programs and more plans are under development. The State AIS programs coordinate with their partners to prevent the introduction and spread of AIS and have planned, directed and accomplished significant regional and landscape-level invasive species prevention and management resource outcomes such as educating public citizens, inspecting hundreds of thousands of recreational boats, rapidly responding to new infestations, and supporting needed research. Through the leveraging achieved by the Service, states, and tribes, the State/Interstate ANS Management Plan grant program helps the 41 state/interstate AIS programs accomplish far more than Service could ever accomplish on its own. While funds for this effort are significantly reduced in FY 2013 to address higher Service priorities, the Service remains committed to engaging the States and other partners through other mechanisms to the maximum extent possible.

Prevention

The single most cost-effective strategy, and the primary focus of the AIS Program, is to protect the nation's wildlife and their habitats from invasive species by preventing new introductions. The control alternative is extremely costly, and the outcome is uncertain for long-term management of AIS once they become established. Without the program's prevention work, costs to Americans are guaranteed to increase as new introductions occur.

The Service has a broad array of programs that support efforts to prevent introductions and contain invasive species such as public awareness campaigns, risk assessment and mitigation tools, and efforts to identify and prevent species introduction into the country or between states. An example of one of these efforts is the national



"Stop Aquatic Hitchhikers!" campaign, which targets aquatic recreational users and engages them to become part of the solution by cleaning their equipment every time they leave the water. This behavioral change campaign has broken new ground for the Service because it relies upon partners to help spread the prevention message and actively involves citizens to address this global threat. Currently, 1,044 organizations have joined the campaign - including 80 state fish and wildlife, parks and recreation, agriculture and environmental protection agencies, 260 businesses, and many conservation and watershed protection organizations.

Control/Management

For AIS that have already become established, there are often opportunities to prevent further spread or lessen their impacts through various control and management techniques. These measures are best accomplished using an integrated pest management approach. Containment of damage can buy time while new control methods are developed that offer hope for eradication. Because AIS do not always behave as they do in their native habitats, research is often needed before effective control measures can be implemented. Although prevention remains a priority, the AIS Program and its partners focus on control and management to meet their objectives for protection of native fish and wildlife resources and their associated recreational and economic benefits. Currently, the Service leads the implementation of the Asian carp, ruffe, brown tree snake, *Caulerpa* (a seaweed), and mitten crab national species management plans by providing staffing and funding support, and has leveraged these efforts by actively involving local expertise, skills, and resources. The western U.S. focused Quagga/Zebra Mussel Action Plan is also a programmatic priority for implementation. While the Service will reduce funding for many of these activities, it will continue to seek opportunities to work with the States and other partners to address these species.

Injurious Wildlife

Injurious wildlife are defined as species that are injurious or potentially injurious to the interests of human beings, agriculture, horticulture, forestry, wildlife, or wildlife resources of the United States. Under the auspices of the Lacey Act, the AIS Program seeks to prevent the introduction of new invasive species by regulating imports of injurious wildlife which have the potential to harm America's economy and natural resources. The AIS Program does this through an ongoing process of evaluating species under the Lacey Act and listing species as injurious through the rulemaking process. An injurious wildlife listing prohibits the species from being imported or transported across state lines without a permit. Currently, amphibians that carry harmful diseases are being evaluated. More importantly, the listing process is being evaluated for improvements that will allow harmful invasive species to be more efficiently identified, and protect America's economy and natural resources.

2013 Program Performance – Aquatic Invasive Species

In 2013, the Service will focus new funding on minimizing the range expansion and population growth of Asian carp and restoring some of the regional coordination activities that were cut in 2012. With the exception of these efforts, the Service will continue to implement activities generally at a lower level than in 2012, to prevent the introduction, spread, and establishment of AIS. These activities include working with partners to identify potential points of species introduction and define actions that reduce the risk of

spreading invasive species through specific pathways, conducting surveys for early detection of AIS, working with the Aquatic Nuisance Species Task Force on collaborative efforts, improving the injurious wildlife listing process to better address prevention of invasive species, and completing regionally significant rapid response planning exercises to prepare for and build capacity regionally to respond to the next invader. The Service will also continue to lead the implementation of "Stop Aquatic Hitchhikers!" and "Habitattitude TMs"—two social marketing campaigns designed to unify government and interested parties to speak with one voice and to empower target audiences to become part of the solution by promoting their prevention behaviors. In 2013, the Service, through the Strategic Habitat Conservation lens, will use the Fisheries Operations Needs System (FONS) to strategically prioritize work activities that prevent the introduction, spread, and establishment of aquatic invasive species.

Overview - Marine Mammals

Marine mammals are a resource of great aesthetic, economic, cultural, and recreational significance. The Marine Mammal Protection Act (MMPA), enacted in 1972, is one of the most important statutory authorities for conserving and managing marine mammals. This statute provides protection by prohibiting (with certain exceptions): 1) "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and 2) the import, export, and sale of marine mammals and marine mammal parts and products in the U.S. Under the MMPA, marine mammal populations, and the health and stability of marine ecosystems upon which they depend, are required to be maintained at, or returned to, healthy levels. The MMPA assigns the Department of the Interior, through the Service, responsibility for the conservation and management of polar bears, walruses, sea and marine otters and three species of manatees, and dugongs. These prominent species occupy the upper trophic levels of the world's oceans and coastal waters, and provide valuable insight into the health and vitality of these global ecosystems. These species are significant functioning elements in each of their unique ecosystems and serve as sentinels that can provide key understanding of the effects of a variety of environmental impacts on these ecosystems. Through regular monitoring, the Service can learn more about the effects of global changes on the environment by understanding the health and dynamics of marine mammal populations that depend on these environments.

The Service recognizes that meeting our mandate for the conservation of marine mammal species requires communication and cooperation with other federal agencies (including the National Marine Fisheries Service, the Marine Mammal Commission, and the U.S. Geological Survey), state governments, Alaska Native Organizations (ANOs), scientists from numerous institutions and organizations, industry groups, and non-governmental organizations.. Through active collaboration and coordination, the Service is able to enhance the effectiveness of the implementation of the MMPA and achieve its goal of Optimum Sustainable Population for marine mammal stocks. In particular, the Service is involved in: cooperative studies to understand population trends of marine mammals in Alaska, Florida, Puerto Rico, and along the Pacific Coast; aerial surveys to monitor population distribution, abundance, status, and trends and to track changes in baseline information to help us better understand the effects of sea ice retreat, particularly on ice-dependent marine mammals such as polar bears and walruses; coordination with the oil and gas industry to gain information on the location and frequency of sightings for both polar bears and walruses, as well as identifying the location and use of polar bear dens; and cooperative efforts with Alaskan Native subsistence hunters. These efforts provide key information that informs the focus and efforts of Landscape Conservation Cooperatives.

To carry out its responsibilities, the Service:

- Prepares, reviews, and revises species management plans and stock assessments;
- Conducts and supports a variety of biological investigations, scientific research, and studies with management applications;
- Assesses population health, status, and trends;

- Provides support for rescue and rehabilitation of stranded marine mammals;
- Develops and implements management plans and habitat conservation strategies;
- Promulgates and implements various regulations as necessary, including incidental take regulation and authorizations;
- Conducts harvest monitoring projects for Alaska species;
- Implements the Marking, Tagging, and Reporting Program for polar bears, walruses, and northern sea otters harvested by Alaska Natives;
- Implements the 1973 International Agreement on the Conservation of Polar Bears between the U.S., Canada, Russia, Norway, and Denmark (for Greenland);
- Implements the Agreement Between the Government of the United States of America and the Government of the Russian Federation on the Conservation and Management of the Alaska-Chukotka Polar Bear Population; and,
- Develops and supports U.S. bi-lateral and multi-lateral efforts and agreements for the conservation and management of marine mammal species.

The Marine Mammal program is comprised of two elements: Stock Assessment/Conservation Management, and Cooperative Agreements.

Stock Assessment/Conservation Management

The Service's Marine Mammal Program acts to manage and conserve polar bears, Pacific walruses, northern sea otters in Alaska, northern sea otters in Washington State, southern sea otters in California, and West Indian manatees in Florida and Puerto Rico, as well as support recovery of the federally listed polar bear, southwest Alaska distinct population segment of the northern sea otter, southern sea otter, and the West Indian manatee in Florida and Puerto Rico. The majority of the Service's marine mammal funding is provided for monitoring population assessment and health, conservation, and management activities. In 2011, funding was directed to support these activities for all 10 marine mammal stocks under the management jurisdiction of the Service in Alaska, the Pacific Northwest, the California Coast, and Florida and Puerto Rico. In Alaska, some of these funds are for monitoring and recording harvest information, cooperative activities with Alaska Natives, and developing international agreements for marine mammal populations shared with Canada and Russia. National coordination and guidance by staffing the Washington Office is also provided. Accomplishment of much of the Service's priority work is achieved through partnerships with other federal, state, tribal, and private agencies, and additional conservation work on listed marine mammal stocks is supported with Ecological Services funding, primarily through endangered species recovery efforts.

Cooperative Agreements

Section 119 of the MMPA authorizes the Service to enter into cooperative agreements with Alaska Native Organizations to conserve marine mammals and provide for co-management of subsistence use by Alaska Natives. The purpose of the agreements is to develop capability in the Alaska Native community to actively manage subsistence harvest, and determine sustainability of harvests through the collection of information on subsistence harvest patterns and harvested species of marine mammals. Efforts pursued under this program element enhance communications with Alaska Native communities and allow the initiation of projects with the potential to gather information critical for developing long-term conservation strategies and increase the collective understanding of marine mammals.

2013 Program Performance – Marine Mammals

In 2013, the Service will continue to monitor marine mammal populations under its management jurisdiction, and will seek collaborative opportunities with partners and stakeholders to conduct surveys and track status and trends of the marine mammals it manages. The Service will maintain current stock assessment reports through reviews and updates required under the MMPA for all 10 marine mammal stocks. The Service will further enhance its capability to address n workload increases in incidental take

authorizations, population surveys, stock assessment reporting, stranding response, partnerships, and litigation support specific to the MMPA. In 2013, the Service plans to build upon 2012 accomplishments.

Stock Assessment/Conservation Management for Sea Otters, Polar Bears, and Walruses in Alaska

In Alaska, the Service will continue to monitor populations of northern sea otters, Pacific walruses, and polar bears. The 2013 funding will allow surveys and population assessments to continue for northern sea otters in Alaska. Survey efforts for polar bears will continue on the North Slope of Alaska and Canada and in the south Beaufort Sea to determine distribution and abundance, document changing habitat use, and evaluate how sea ice reduction and other factors such as prey availability affect the status and trends of polar bear populations. These data will also fuel a robust population demographics and harvest model that will enable resource managers to better understand risks and consequences of various Alaska Native subsistence harvest options on polar bear populations. The Service will continue collaborative efforts with Russian colleagues to analyze the range-wide survey data collected on Pacific walrus and will also collaborate with USGS and private industry to track walrus movements in the Chukchi Sea. The Service will work with our partners to address the increased number of walrus haulouts that are forming in previously unused and unprotected coastal areas. The Service will also work to address urgent needs due to sea ice retreat of an increasing presence of polar bears on land, and the potential for human/bear interactions. With these efforts, the Service will be in a better position to deliver conservation results for all three species.

Managing Marine Mammal Incidental Take: Comprehensive regulations under the MMPA to authorize incidental taking of polar bear and Pacific walrus in the course of oil and gas industry (Industry) exploration operations in the Chukchi Sea and adjacent western coast of Alaska were promulgated in June of 2008 (effective through June 2013). The Service also promulgated regulations regarding Industry exploration, development, and production operations in the Beaufort Sea and adjacent northern coast of Alaska in August of 2011 (effective through August 2016). These regulations ensure that the total anticipated taking will have a negligible impact on the species and will not have an irreversible adverse impact on the availability of such species for Alaska Native subsistence purposes. At the 2013 requested funding level, the Service will continue to implement these regulations through the issuance of annual Letters of Authorization (LOAs) to numerous Industry operators. The LOAs describe permissible methods of take, measures to ensure the least practicable impact on the species and subsistence, and requirements for monitoring and reporting.

The Service will provide augment its efforts working with industry to minimize potential impacts of expanding offshore and terrestrial oil and gas activities on polar bear and walrus populations by providing technical assistance and incidental take authorizations pursuant to the MMPA. In addition to meeting demands for environmental reviews and federal approvals, this support will extend to planning for conflict avoidance.

Polar Bear Bilateral Agreement: On October 16, 2000, the United States and Russia signed a bilateral agreement for the Conservation and Management of the Alaska–Chukotka Polar Bear population. In 2007, Congress enacted legislation to implement this treaty intended to address concerns regarding the illegal and undocumented harvest of bears in Russia as well as the unrestricted harvest in Alaska. In 2013, the Service will continue efforts on the bilateral planning initiatives with Russia for the shared Chukchi Sea polar bear population. The 2013 funds will enable the Service to plan vital resource management efforts with Alaska Native partners, Government of the Russian Federation, and Chukotka (Russia) representatives as called for in this bilateral agreement and to effectively participate on a joint committee to uphold and implement the United States obligations pursuant to this agreement. This effort will bolster scientific data, conservation planning, and collaborative adaptive management for polar bear.

Cooperative Agreements: In 2013, Service base funds will continue cooperative agreements with the Alaska Nanuuq Commission, the Eskimo Walrus Commission, and the Alaska Native Sea Otter Comanagement Committee for monitoring and management of polar bears, Pacific walruses, and northern sea otters. These cooperative agreements pertain to harvest monitoring, traditional knowledge surveys, and biological monitoring and sampling. Collaborative effort on these issues provide the Service with important information on the health and status of populations of marine mammals subject to Alaska Native subsistence harvest and assist Alaska Native organizations (ANOs) in developing and implementing voluntary marine mammal harvest guidelines. Both the Service and ANOs recognize the importance of maintaining sustainable marine mammal populations to meet Alaska Native subsistence, cultural, and economic needs. Because the MMPA does not provide a mechanism for regulating subsistence harvest of marine mammals unless a stock becomes depleted, the Service and ANOs strive to ensure harvests are conducted in a biologically sound manner. The Service will continue working with its ANO partners and others to incorporate enforceable harvest management mechanisms in the reauthorization of the MMPA.

Status and Trends of Marine Mammal Populations for Sea Otters in California and Washington State: The Service, in cooperation with our partners, continues to support the management and conservation of sea otters in California and Washington. Service efforts for both populations involve review and possible revision of stock assessment reports, periodic population surveys, recovery and disease monitoring of stranded animals, and monitoring of the populations' overall health, size, and interactions with human activities within the sea otters' ranges. Currently, we propose terminating the Southern Sea Otter Translocation Program in a Revised Draft SEIS and Proposed Rule (76 FR 53381). The translocation program has proven to be more costly and less effective for the recovery of the species than originally anticipated. We propose to allow for long-term species recovery via natural range expansion, as

recommended in the 2003 Southern Sea Otter recovery plan.

Stock Assessment/Conservation Management for Manatees in Florida and Puerto Rico: In 2013, the Service will continue to support management and conservation of manatees in Florida and Puerto Rico. Funding in this area complements efforts funded through Endangered Species accounts. The Service will work with partners to monitor the status and trends of this species and implement priority conservation actions, such as mitigating potential loss of warm water habitat in Florida and minimizing watercraft collisions throughout its range. The Service will enhance research efforts on the status and trends of the species (e.g., improved aerial surveys, updated demographic modeling) and also focus on enhancing and creating habitat. This will strengthen the Service's efforts to conserve manatees, both in Florida and in Puerto Rico, and to develop regulations and other management tools under the MMPA.

Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
CSF 12.2 Number of aquatic invasive species populations controlled/managed - annual	11	11	14	19	19	8	-11	11

Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
Comments	11 fewer a for AIS (13	quatic invas	sive species	populations	controlled/r	managed due	to loss of	
12.2.6 # of activities conducted to support the management/ control of aquatic invasive species	1,670	303	269	220	157	55	-102	120
Comments	102 fewer	activities du	ue to loss of	funding for	AIS (1336)	and for FWM	IA (1335 GF	PA)
12.2.7 # of public awareness campaigns conducted and supported re: invasive species	2	2	2	2	2	2	0	2
12.2.9 # of risk assessments conducted to evaluate potentially invasive aquatic species	57	56	60	235	99	80	-19	30
Comments	19 fewer r	isk assessm	ents due to	loss of fund	ing for AIS	(1336) and fo	or FWMA (1	335)
12.2.11 # of surveys conducted for baseline/trend information for aquatic invasive species	405	682	457	311	205	168	-37	165
Comments	37 fewer s	urveys due	to loss of fu	nding for Al	S (1336)			
12.2.12 # of surveys conducted for early detection and rapid response for aquatic invasive species	541	638	270	185	94	53	-41	285
Comments	41 fewer s	urveys due	to loss of fu	nding for Al	S (1336) ar	d for FWMA	(1335 GPA)	
12.2.13 # of state/interstate management plans supported to prevent and control aquatic invasive species	51	87	23	36	33	0	-33	41
Comments			state mana o plans sup		ans due to	loss of fund	ding for AI	S (1336)
12.2.14 # of partnerships established and maintained for invasive species tasks	883	523	469	498	317	237	-80	362
Comments	80 fewer partnerships due to loss of funding for AIS (1336)							

Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
CSF 5.1 Percent of fish species of management concern that are managed to self-sustaining levels, in cooperation with affected States, tribes, and others (GPRA)	29% (48 of 164)	12% (17 of 146)	8% (16 of 211)	8% (17 of 213)	9% (20 of 233)	9% (20 of 233)	0%	8% (17 of 211)
5.1.3 # of habitat assessments completed	1,262	1,971	1,465	1,314	862	714	-148	955
Comments	Two more Agreemen	habitat asset, but 150 fe	essments co ewer habitat	mpleted for assessmen	increase in ts completed	Klamath Bas d due to loss	in Restorati of FWMA (on 1334 GPA)
5.1.4 # of miles of instream and shoreline habitat assessed	10,344	34,126	128,846	6,461	3,681	3,051	-630	7,031
Comments	630 fewer	miles asses	sed due to I	oss of fundi	ng for FWM	A (1334 GPA))	
5.1.9 # of populations managed for subsistence fishery harvest	103	103	103	103	104	81	-23	51
Comments			ed for subsisisheries Sub		ry harvest ir	n Alaska due	to loss of fu	ınding
5.1.10 # miles of stream/shoreline restored in U.S.	258	233	358	166	156	128	-28	162
Comments			due to incre FWMA (1334		math Basin,	but 30 fewer	miles resto	ored due
5.1.11 # of fish passage barriers removed or bypassed	96	160	170	139	102	113	11	111
Comments	more barri	er removed		d in Klamath	Basin; how	Fish Passage ever, 18 few		
5.1.12 # of miles reopened to fish passage - FWMA	732	1,220	1,602	1,205	784	953	169	880
Comments	300 more miles reopened to fish passage due to increase in Fish Passage Improvements, 4 more miles reopened due to increase in Klamath Basin; however, 135 fewer miles reopened due to loss of FWMA (1334 GPA) funding							
5.1.13 # of acres reopened to fish passage - FWMA	29,345	25,277	23,319	36,798	11,069	11,169	100	5,198
Comments						se in Fish Pas 1A (1334 GPA		ovements;

	2008	2009	2010	2011	2012		Change from 2012 Plan to 2013	Long Term Target	
Performance Goal CSF 5.2 Percent of populations of native aquatic non-T&E species managed or influenced by the Fisheries Program for which current status (e.g., quantity and quality) and trend is known	40% (592 of 1,472)	34% (526 of 1,569)	32% (502 of 1,708)	34% (542 of 1,723)	33% (532 of 1,632)	30% (497 of 1,632)	-2%	30% (466 of 1,565)	
5.2.1.7 # of populations of native aquatic non- T&E species managed or influenced by the Fisheries Program for which current status (e.g., quantity and quality) and trend is known - FWMA	568	506	481	511	507	472	-35	446	
Comments	One more native aquatic non-T&E pop would have current status and trend data due to Klamath Basin funding; however, 16 fewer non-T&E native aquatic pops and 20 fewer non-T&E native aquatic pops would have current status and trends data due to loss of funding								
5.2.2.7 # of native aquatic non T&E and non-candidate populations with approved management plans -FWMA	816	813	820	846	836	766	-70	815	
Comments		native aquat for FWMA (pops would	have approv	ed managen	nent plans	due to loss	
5.2.4 # assessments completed	3,933	2,807	2,895	2,909	2,108	1,764	-344	1,642	
Comments						ss of funding ding proposed			
5.2.7 # of management plans completed or revised during the FY	25	7	10	3	11	13	2	9	
Comments		manageme oration Agre		uld be comp	leted or rev	ised due to ir	ncrease for	Klamath	
5.3.1.7 # of tasks implemented, as prescribed in management plans	1,481	1,527	1,870	1,828	1,563	1,152	-411	1,347	
Comments	Nine more FMP tasks accomplished with increase for Klamath Basin funding; however 260 fewer FMP tasks due to proposed decrease in funding for Habitat Assessment (1334) and 160 fewer FMP tasks due to proposed decrease in FWMA Population Assessment (1335)								

Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
CSF 7.21 Percent of populations of aquatic threatened and endangered species (T&E) that are self-sustaining in the wild	12% (70 of 585)	11% (70 of 639)	10% (70 of 701)	10% (71 of 689)	10% (72 of 711)	10% (72 of 711)	0%	9% (66 of 701)
7.21.3.7 # of aquatic T&E populations for which current biological status and trend is known, due in whole or in part to Fisheries Program involvement	265	165	158	148	151	141	-10	175
Comments					ent status ar ment (1335)	nd trend data	due to pro	posed
7.21.4.7 # of aquatic T&E populations with Recovery Plans, due in whole or in part to Fisheries Program involvement - FWMA	365	365	421	414	414	384	-30	416
Comments			pops would oulation Ass			y Plans due	to proposed	d funding
7.21.5.7 Number of Recovery Plan tasks implemented by the Fisheries Program - FWMA (GPRA)	496	505	573	535	508	399	-109	443
Comments	Plans tasks	s accomplish	ned due to l	oss of fundi	ng in FWMA	ing; however Habitat Asse pulation Asse	ssment (13	34) and
CSF 9.1 Percent of marine mammals achieving optimal sustainable populations	30% (3 of 10)	40% (4 of 10)	40% (4 of 10)	30% (3 of 10)	30% (3 of 10)	30% (3 of 10)	0%	40% (4 of 10)
9.1.2 # of marine mammal stocks with voluntary harvest guidelines	2	2	2	2	2	2	0	2
9.1.3 # of cooperative agreements with Alaska Natives for marine mammal management and monitoring	3	2	3	3	3	3	0	3
9.1.4 # of marine mammal stocks with incidental take regulations that require mitigating measures	3	3	3	3	3	3	0	3

Performance Goal	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 PB	Change from 2012 Plan to 2013 PB	Long Term Target 2016
9.1.5 # of current marine mammal stock assessments	3	10	9	8	9	10	1	10
9.1.6 % of populations managed or influenced by the Marine Mammal Program for which current population trend is known	70% (7 of 10)	70% (7 of 10)	70% (7 of 10)	70% (7 of 10)	60% (6 of 10)	60% (6 of 10)	0%	70% (7 of 10)
15.4.9 # of aquatic outreach and education activities and/or events	565	1,026	1,150	1,102	814	564	-250	473
Comments			nd education funding in		nd events c	an be accomp	olished due	to
52.1.3 # of volunteer participation hours are supporting Fisheries objectives for FWMA	14,092	18,789	25,374	18,571	14,347	13,647	-700	12,485
Comments	700 fewer	volunteer p	articipation	hours due to	o proposed	oss of fundin	g for FWM	A (1334)
18.1.3.1 # of planned tasks implemented for Tribal fish and wildlife conservation as prescribed by Tribal plans or agreements	120	186	230	232	213	183	-30	162
Comments						Restoration A to decreases		
18.1.6 # of training sessions to support Tribal fish and wildlife conservation - FWMA	50	100	115	128	102	92	-10	70
Comments						estoration Agr ed due to de		
18.1.9 # of new or modified cooperative agreements with Tribes or IPA Agreements that support Tribal fish and wildlife conservation	5	0	7	3	11	15	4	12
Comments			ents due to			on Agreemer	nt funding;	however 3
18.1.12 # of consultations conducted to support Tribal fish and wildlife conservation - FWMA	60	198	185	213	168	158	-10	92
Comments					asin Restora s in funding	tion Agreeme	ent funding	; however