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Strategic Plan

Fish and Wildlife Service



DEPARTMENT OF THE INTERIOR



Fish and Wildlife Service Strategic Plan

2000 - 2005

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DEPARTMENT OF THE INTERIOR



I am proud to present the U.S. Fish and Wildlife Service's new Strategic Plan that will chart our course for protection and conservation of fish and wildlife resources into the 21st century. This Plan outlines a strong course for the future, calling for a commitment to tackle this country's complex natural resource challenges by working in partnership with industry, communities and all levels of government.

The reality of the last century brings us a continued awareness that the effects of human activity on natural systems are not only visible, they are observable over time. In the past 130 years, about 15 percent of the world's forests disappeared; Atlantic Coast fishery populations are less than 1 percent of historic levels, and on the West Coast 214 salmon and steelhead stocks are at risk of extinction; over 53 percent of the nation's wetlands have been lost; over 1 thousand species have been listed as threatened or endangered; and over 40 percent of the nation's rivers, streams, lakes and estuaries are too polluted for fishing, swimming, or other uses. The pressures on natural resources are myriad.

The American people believe that conservation and protection of the environment and natural resources is a critical step in ensuring quality of life. It is not a choice but an obligation to future generations. In response to the values the public places on conservation of the environment and natural resources, the U.S. Fish and Wildlife Service is entrusted with the protection, conservation, and recovery of threatened and endangered species, migratory birds, some marine mammals, and interjurisdictional fisheries and their essential habitats, and stewardship of the refuge system.

Our comprehensive conservation approach is directed by our Strategic Plan that defines a set of goals to guide and measure our progress and success. Our fourteen goals focus the Service's efforts and resources toward wildlife conservation, habitat protection and restoration, and community interactions at a landscape level; shifting to a more collaborative approach in finding common values to guide community actions. It is through this collaborative approach to conservation that we will continue to prosper as a Nation by balancing economic growth and natural resource protection.

We have actively engaged stakeholders, partners, and employees in the development of common goals and in setting the future direction of the Service in this new century. As a result of our most recent meetings, and the past years' experience managing and measuring program performance, we have revised our Strategic Plan for FY 2001 - FY 2005 to strengthen our commitment to our partners in natural resource conservation; to heighten action in the prevention and control of invasive species; and to meet the challenges in better managing our grant programs.

We are pleased to share our strategic decisions and expectations for our performance. We are determined to build on our progress in managing National Wildlife Refuges for wildlife and people; restoring degraded wetlands and forested areas; stabilizing threatened and endangered populations; sustaining migratory bird populations; and arresting the decline of fish stocks. We will constantly seek innovative measures and creative approaches to ensure that all Americans can experience the joys of wildlife and wild places. I look forward to working with all of our partners as we pursue the goals laid out in this Plan.

Jamie Rappaport Clark

Mission Statement and Mission Goals

OUR MISSION IS WORKING WITH OTHERS TO CONSERVE, PROTECT AND ENHANCE FISH, WILDLIFE, AND PLANTS AND THEIR HABITATS FOR THE CONTINUING BENEFIT OF THE AMERICAN PEOPLE.

Four principal mission goals, which drive the Fish and Wildlife Service Strategic Plan, support the core mission of protection and improvement in the condition of American wildlife, and plants and increase opportunities for the public enjoyment of these resources.

Sustainability of Fish & Wildlife Populations

Conserve, protect, restore, and enhance fish, wildlife, and plant populations entrusted to our care.

Habitat Conservation: A Network of Lands & Waters

Conserve an ecologically diverse network of lands and waters — of various ownerships — providing habitats for fish, wildlife, and plant resources.

Public Use & Enjoyment

Provide opportunities to the public to enjoy, understand, and participate in the use and conservation of fish and wildlife resources.

Partnerships in Natural Resources

Support and strengthen partnerships with tribal, state, and local governments and others in their efforts to conserve and enjoy fish, wildlife, plants and their habitats.

Introduction

THE FISH AND WILDLIFE SERVICE'S (FWS) ORIGIN DATES BACK TO 1871 WHEN CONGRESS ESTABLISHED THE U.S. FISH COMMISSION TO STUDY THE DECREASE IN THE NATION'S FOOD FISH AND RECOMMEND WAYS TO REVERSE THE DECLINE. TODAY, THE FWS HAS THE PRIVILEGE OF BEING THE PRIMARY FEDERAL AGENCY RESPONSIBLE FOR THE PROTECTION, CONSERVATION, AND RENEWAL OF FISH, WILDLIFE, PLANTS AND THEIR HABITATS.

The FWS manages migratory bird populations, restores interjurisdictional fisheries, conserves and restores wildlife habitat, administers the *Endangered Species Act*, and assists foreign governments with their conservation efforts. We oversee the Federal Aid in Fish and Wildlife Restoration Programs, which distribute hundreds of millions of dollars earned from excise taxes on fishing and hunting equipment to state fish and wildlife agencies.

A cornerstone of our conservation effort has been the National Wildlife Refuge System — places where Americans can experience the joys of wildlife and wild places. The FWS is the steward of nearly 93 million acres of public lands across the United States, which compose the network of 529 refuges of the National Wildlife Refuge System. The first National Wildlife Refuge, Florida's Pelican Island, was established by President Theodore Roosevelt in 1903 to protect egrets, herons and other birds that were being killed for feathers used in the fashions of the time. Today, refuges are home to millions of migratory birds, open space for elk and caribou, and wild niches for the rare and endangered.

Complementing the National Refuge System is our National Fish Hatchery System. The Service manages 67 National Fish Hatcheries for the restoration of the Nation's fishery resources. The role of the National Fish Hatchery System has changed and diversified greatly over the past 30 years as increasing demands are placed upon aquatic systems. We are integrating the work of fish hatcheries and fisheries management, resulting in a cohesive, more efficient national restoration program, such as those for Great Lakes lake trout, Atlantic Coast striped bass, Atlantic salmon, and Pacific salmon.

The FWS headquarters is located in Washington, D.C., with field units throughout the United States. The Service employs over 7,000 people and is supported by a volunteer force of 29,000 citizens. Nearly 90 percent of our employees work in field locations providing on-the-ground services in support of our public trust responsibilities.

PURPOSE OF THIS PLAN

This Strategic Plan is the Service's blueprint for tackling the challenges of wildlife conservation, habitat preservation and restoration, and community interactions at a landscape level. This Plan defines the foundation for our strategic management of natural resources over the next five years. Our management perspective is grounded in the common sense standards and values of the American public — to invest in the long-term protection and conservation of our Nation's natural resources. This Strategic Plan provides an opportunity for the Service to explain to the American public how and where it will focus its efforts and resources over the next five years.

You can access information on the Fish and Wildlife Service programs from our Web site, www.fws.gov. The FWS Strategic Plan and Annual Plans are available at www.fws.gov/r9gpra.

CHALLENGES OF RESOURCE CONSERVATION IN THE 21ST CENTURY

Conservation and protection of natural resources is about more than water, earth, and species — it is about our quality of life. Fish and wildlife in America represent

tremendous environmental, recreational, cultural, social, historical, and economic assets for the American people. Communities throughout the United States have a strong commitment to fish and wildlife resources. Many communities realize tremendous economic benefits from tourism and visitors that come specifically to enjoy watching and pursuing fish and wildlife. Hunting and fishing remain strong components of community culture all along the great river systems of the nation.

Natural resource protection and conservation has been underway for many years; however, in the past twenty years Americans committed themselves and their government to understanding and protecting not only fish and wildlife but the ecosystems that support them. There has been a growing realization that sustained economic growth and quality of life are dependent on maintaining the balance of a healthy environment with the full diversity of the creatures that live there. Today, there is an awareness and greater appreciation of our relationship with our environment and how our actions can affect the ecosystems in which we live. Our challenge is not simply about controlling the numbers of waterfowl harvested or fish caught. We face the complex issues of diversity and sustainability of biological resources.



For if one link in nature's chain might be lost, another might be lost, until the whole of things will vanish by piecemeal.

— Thomas Jefferson

Human activity in natural systems will continue to create significant stress on natural resources. Population dynamics and geographic demographics play a significant role in the use and demands made upon natural resources. Over the next 50 years, world populations are expected to grow by more than 50%, with populations in the United States living longer and healthier lives — placing greater demands and stresses on our environment and use of natural resources. Further, the implications of this unprecedented era of prosperity and progress in technology will continue to have a profound affect on the management of natural resources.

Changes in land and water use have altered habitats so that they are more favorable for the establishment of nonindigenous species, which are posing increasing threats because of our more global economy and increased international travel.

Status and Trends of the Nation's Biological Resources. 1998, USGS

Land use activities affect the composition and configuration of wildlife habitats and populations sustainability. Although there have been relatively minor changes in the total area of land use categories, there have been significant shifts among those various land use categories. For example, the Conservation Reserve Program retired approximately 36 million acres of cropland into perennial vegetative cover for 10-15 year contracts, while urban and built-up land has increased by 120% from 1945-1992. This significant increase in urban growth is a primary factor in the continued loss of wetland habitats in this country. Land use changes that are likely to significantly impact wildlife populations include an increase in urban development, the retirement of cropland acreage, changes in forest successional stages, extensive loss of grassland habitats, and the continued loss of wetland habitats.

The public's demand for the products and services of public lands is expected to continue to increase in the future, but the availability of private land for public recreation has declined over the last 20 years and is expected to continue to decline in the future. Today, almost 95 percent of the U.S. population 16 years and older participate in some form of outdoor recreation. Over 40 percent of the adult population enjoys some form of wildlife recreation, which generates over \$100 billion in revenues to our economy. The Fish and Wildlife Service's National Wildlife Refuge System provides recreational opportunities to over 36 million Americans each year. The economic benefits of fish and wildlife recreation are but one way to measure the importance of fish and wildlife to people.

Some people gain value simply from knowing that wild places and unique species still exist. Although such existence values are hard to measure, these values are confirmed by millions of visitors to the Fish and Wildlife Service's National Wildlife Refuge System. While many species of wildlife are abundant and exhibiting stable or increasing population trends, the number of threatened

National Wildlife Refuges support 22 percent of threatened and endangered species.



or endangered species is also increasing. An estimated global extinction rate that appears to be unprecedented in geological time has heightened concern for increasing rarity among the nation's biota. Today, there are over 1,200 species of animals and plants listed as threatened or endangered of extinction, with another 246 candidates species waiting to be added to the list.

The vertebrate group with the greatest increase in listing as endangered or threatened is fish. They have been listed at a rate twice that of other vertebrates. Even though aquatic resources have historically been an important component of this country's social and economic development, the critical link of aquatic resources in providing the overall stability of the aquatic community is often overlooked. As a result, today, many fish species and other aquatic ecosystem components face serious threats. Of the 163 U.S. marine fisheries whose biological status have been assessed, 40 percent are classified as over utilized, 43 percent are fully utilized, and 124 fish species are listed as threatened or endangered. There is generally more than a single cause for the continuing decline of aquatic resources. The most common contributing factors include: habitat loss, effects of introduced species, chemical alteration or pollution and over-harvesting. It is important to recognize that the ecological impact from the loss of aquatic biota can be enormous. For example, the Chesapeake Bay oyster populations are at less than 1 percent of their historical abundance. Historic oyster populations in the Bay could filter the entire Bay every few days whereas today's level of oyster populations takes more than a year to filter the

same volume of water. This filtering provides significant benefits to water quality by balancing nutrient and sediments. The status of aquatic life is often the best indicator of success in managing the landscape and determining the integrity of the ecosystem.

The Fish and Wildlife Service is addressing many of these issues and challenges. The ambitious goals that we have set for ourselves in this Strategic Plan will require new perspectives, new approaches and new partnerships. Virtually all of the results we hope to achieve require the concerted and coordinated efforts of many partners — federal, state and local government, tribes, industry and private citizens. We are finding innovative ways to achieve better results. We have streamlined regulatory processes, built more flexibility into compliance activities, and established new voluntary landowner conservation and restoration programs. FWS believes that better results will be achieved through performance-based approaches that create incentives for continuous improvements in conservation and resource protection. The complex challenge of assuring sustainability of natural resources demands a collaborative approach based on common goals and values.

This new Strategic Plan identifies our opportunities in ways that will better explain our actions and proposals, quantifies expected outcomes, and characterizes benefits to the American people.

Principles of Performance

- Sound fish and wildlife biology
- Collaborative approaches in stewardship
- Build and strengthen conservation partnerships
- Education, information and communication
- Workforce excellence
- Stakeholder participation
- Maintaining fish and wildlife laws
- Ecosystem health

STRATEGIC MANAGEMENT THROUGH MISSION GOALS

Four mission goals — Sustainability of Fish and Wildlife Populations, Habitat Conservation: A Network of Lands and Waters, Public Use and Enjoyment, and Partnerships in Natural Resources — drive the Fish and Wildlife Service's Strategic Plan and support the organization's core mission. The alignment of the Service's programs and activities under these four mission goals represents a new approach to improve the integration, coordination, and management of Service mission delivery.

The four mission goals are intended to facilitate new working relationships and the development of crosscutting policy efforts to strengthen the effectiveness of the Service as a whole and the public we serve. These four mission goals provide a means for identifying relationships among other Department of the Interior bureaus and for building partnerships with other agencies and external parties. The four mission goals and fourteen long-term goals, together with the underlying principles that will achieve them, define the Service's planning, performance, and accountability process.



Mission Goal One encompasses the work that the Service and our partners do to conserve and improve fish and wildlife populations. This includes migratory bird conservation at home and abroad; native fisheries restoration — improving fish passage in major waterways; recovery and protection of threatened and endangered species; prevention and control of invasive species — a significant threat to biodiversity; and work with our international partners — recognizing that fish and wildlife species are unencumbered by geopolitical borders. The Service also represents U.S. interests and provides leadership in international negotiations to ensure the health of wetlands and wetland dependent species around the world, and to protect plant and animal species from unregulated international trade.



Mission Goal Two recognizes the fundamental importance of an ecologically diverse network of lands and waters to the self-sustainability of fish, wildlife, and plants. The mission goal emphasizes three kinds of strategic actions that together define, shape, and conserve the network: 1) the strategic growth and science-based stewardship of the National Wildlife Refuge System, 2) the improvement of facilities on refuges and hatcheries, and 3) stewardship of other lands to include agreements and plans with our partners to provide habitat for multiple species, along with the actual conservation work necessary to protect, restore, and enhance those habitats. Central to the Service's habitat conservation strategy is an ecosystem approach, which focuses on the economic health of communities within watersheds.



Within Mission Goal Three, the Service directs activities at National Wildlife Refuges and National Fish Hatcheries that increase opportunities for the public to participate in the experience of fish and wildlife resources. Such opportunities include hunting, fishing, wildlife observation and photography, environmental education and interpretation, as well as affording the public hands-on experiences through volunteer conservation activities on Service lands.

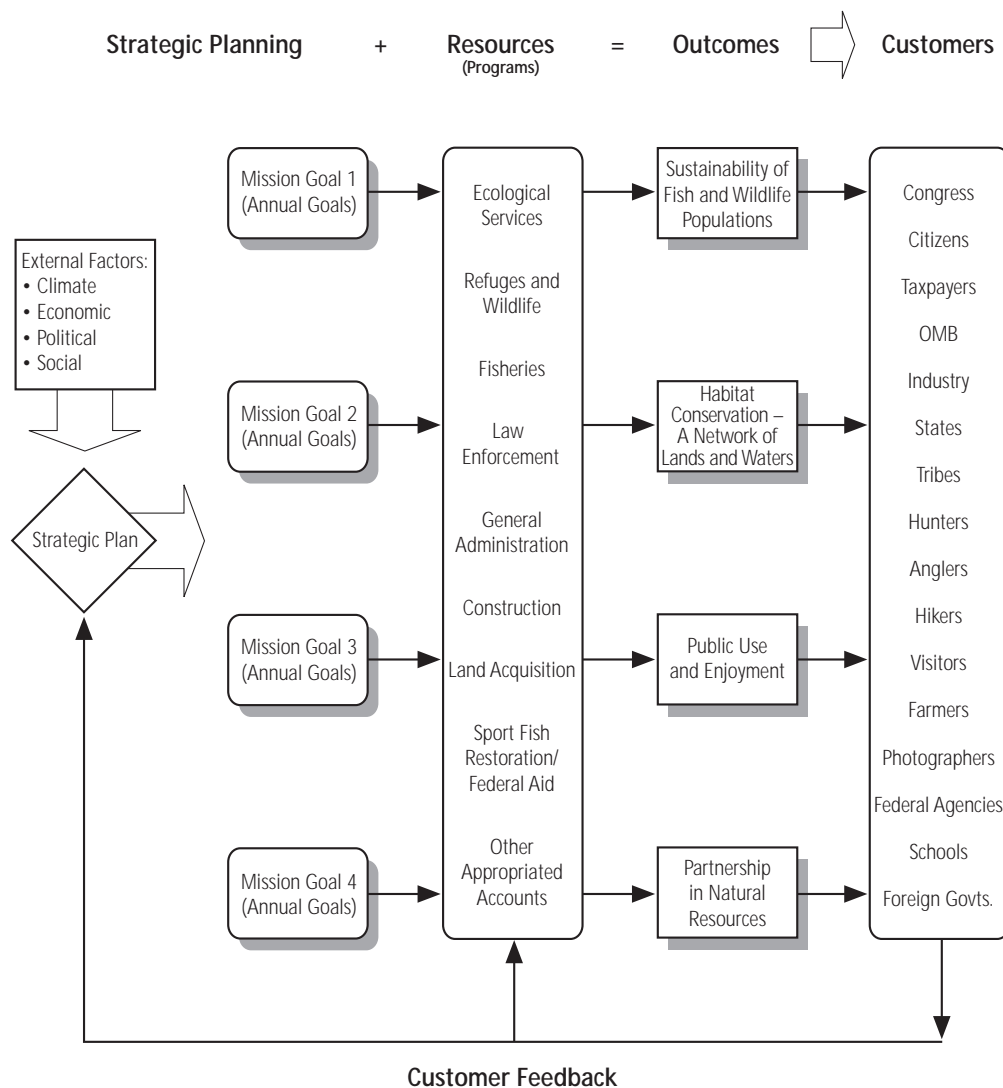


Mission Goal Four includes the Service's key responsibilities for management and stewardship of Federal grants to states and territories for restoration of fish and wildlife resources as well as our continuing commitment to Tribal governments. Further, this goal promotes and facilitates partnerships with other Federal agencies where common goals can be developed in the joint delivery of our Federal responsibilities and mission.

LINKING RESULTS TO RESOURCES

The four mission goals provide a means of aligning the human and financial resources, which are organized functionally by cohesive program activities, with the crosscutting long-term goals. These four key mission goals allow for the consolidation, aggregation and disaggregation of various program activities, creating new opportunities for cross program and cross agency performance. This strategic cross program approach represents significant actions by the Director and the Service management team to move the Service in the direction of a more integrated organization.

The iterative strategic planning and performance management approach, shown below, recognizes the unique contributions of FWS programs, as well as state, tribes, private industry, and other Federal partners. This approach will advance a national effort to continue to improve the integration of activities and enhance performance and accountability. Our strategic management approach, which recognizes stakeholder interests and programmatic uniqueness, will promote a single Service concept — ultimately improving performance and accountability.



STRATEGIC PLAN REVISION & CONSULTATIONS

One of the key requirements of the *Government Performance and Results Act of 1993* is that agencies must update their strategic plans every three years. We believe an integral part of this planning process includes seeking the involvement of our stakeholders and employees to discuss our strategic planning efforts to date and gain their opinions and perspectives on the future direction of the Service. This process is a unique opportunity for stakeholders and employees to identify how we can better respond to a changing world.

Stakeholder/Employee Consultations

The Fish and Wildlife Service initiated consultations with Congress, the Office of Management and Budget (OMB), other stakeholders, and employees in September 1999. We hosted ten consultation sessions with stakeholders and employees across the country to assist us in setting the direction for the Service's actions from 2001 to 2005. We asked for their views on important conservation issues and their opinions on what we are currently doing, what we could be doing, and how we could serve them better.

In the course of this process, more than 200 stakeholder and employee responses were taken into consideration for the development of the revised strategic plan. In addition, we weighed views gathered informally from many areas within the Service and listened to advice from the Congress, Department of the Interior, Office of Management and Budget, and other partners. Responses were analyzed on the relative importance stakeholders and employees assigned to each draft mission and strategic goals, current major programmatic areas of activity, additional goals respondents believed were missing, conservation challenges facing the Service, and customer service issues. As a result, we have revised our Strategic Plan for FY 2001 - 2005 to:

- Strengthen our commitment to our partners, including tribes, states, other Federal agencies, and local governments and industry, in natural resource conservation.



- Accelerate efforts in the prevention and control of invasive species by committing Service actions and resources over a 5-year period to stem a significant domestic and international threat to fish, wildlife, and plants, as well as the costly threat to property and economic assets.
- Upgrade our grants management programs by creating improved business processes for maintaining or improving environmental systems essential to the sustainability of fish, wildlife, plants, and their habitats.

Customer Service

The results of our work have an impact on the quality of life for all Americans. We work hard at keeping a balance between stakeholders' needs and value for the taxpayer as part of our daily operations. Over the next few months, we will develop a baseline for measuring customer satisfaction by conducting a nationwide initial inventory of current customer service activities. The baseline will be established in FY 2001 and performance targets will be set for FY 2002.

RELATIONSHIP OF FISH AND WILDLIFE SERVICE GOALS TO DEPARTMENT OF INTERIOR GOALS

Departmental Goals	FWS Mission Goals and Long-term Goals
<p>1. Protect the Environment and Preserve Our Nation’s Natural and Cultural Resources</p>	<p>1. Sustainability of Fish and Wildlife Populations</p> <ul style="list-style-type: none"> • Migratory Birds • Imperiled Species • Interjurisdictional Fish • Marine Mammal Management • Species of International Concern • Invasive Species <p>2. Habitat Conservation: A Network of Lands and Waters</p> <ul style="list-style-type: none"> • Habitat Conservation On Service Lands • Stewardship of FWS Facilities • Habitat Conservation Off Service Lands
<p>2. Provide Recreation for America</p>	<p>3. Public Use and Enjoyment</p> <ul style="list-style-type: none"> • Greater Public Use On Service Lands • Opportunities for Participating in Conservation on Service Lands <p>4. Partnership in Natural Resources</p> <ul style="list-style-type: none"> • Sport Fish and Wildlife Restoration Grants Management • Partnerships In Accountability
<p>3. Manage Natural Resources for a Healthy Environment and a Strong Economy</p>	<p>The mission of the U.S. Fish and Wildlife Service, as delivered through the strategic goals, contributes primarily to the Department’s goals 1 and 2. However, Service activities and efforts do contribute and support other DOI bureaus whose mission is central to DOI goals 3 and 4.</p>
<p>4. Provide Science for a Changing World</p>	
<p>5. Meet Our Responsibilities to American Indians</p>	<p>4. Partnership in Natural Resources</p> <ul style="list-style-type: none"> • Tribal Governments

Long-term Goals

The Service's fourteen long-term goals propose specific quantifiable and measurable targets that can be achieved by the year 2005. We will plan our programs and activities, set our priorities, and allocate our resources around these goals. We will measure our performance to make sure that we are making progress toward our goals, and as necessary, we will alter our approaches or modify our strategies in order to achieve real results. For each long-term goal, we will discuss the importance of meeting the resource challenges of this century, the strategies we will employ to accomplish our goals, and how these specific accomplishments will move us closer to our desired result.

KEY ASSUMPTIONS

In developing this strategic plan, the Service made a number of critical assumptions regarding key factors in the external environment in which it operates. While some changes in these factors are inevitable, these assumptions must hold in order for the Service to reach these long-term goals. Critical assumptions include —

- The public's understanding of the complex relationships between fish and wildlife and their habitat requirements for survival continues to be an important national issue, requiring commitment by the Service to engage in community outreach programs.
- State laws and regulations continue to support fish and wildlife-dependent recreational activities and environmental health in a manner that conserves natural resources.
- The Service's financial resources will remain at the current level, assuming some adjustments for inflation, over the next five years.

Mission Goal 1

SUSTAINABILITY OF FISH AND WILDLIFE POPULATIONS

Conserve, protect, restore and enhance fish, wildlife and plant populations entrusted to our care.

Fish and wildlife are assets of tremendous environmental, recreational, and economic importance and represent a vital part of Americans' natural heritage. Complex forces are at work that threaten the very survival of many of these resources. The challenges of ensuring sustainable ecosystems energize dedicated citizens who recognize the vital links between the health and safety of human populations and the health and safety of fish and wildlife communities, as they rely on the same shared natural resources. There is a profound feeling in this Nation that a healthy environment and conservation of fish, wildlife and their habitats is a right of this and future generations. In response to the value the public places on conservation of the environment and natural resources, the U.S. Fish and Wildlife Service is entrusted with the protection, conservation and recovery of threatened and endangered species, migratory birds, some marine mammals and some fisheries and their essential habitats.

The mission goal *Sustainability of Fish and Wildlife Populations* charts a strong course to ensure a future that is rich with fish and wildlife. This mission goal

encompasses the specific statutory mandates, international treaties, and agreements delegated to the U.S. Fish and Wildlife Service and the broad conservation ethics of the nation.

Beginning with fish in 1871 and migratory birds in 1885, the Federal government, through the U.S. Fish and Wildlife Service, established programs to work with its partners to ensure that Americans could continue to enjoy fish and wildlife. What began as a group of laws which sought to manage migratory game species has evolved into a broader net of conservation and protection statutes based on the realization that the continued variety and balance of plants and animals makes existence on earth possible. These programs, and laws like the *Migratory Bird Treaty Act* that establish them, have evolved over the years, meeting the changing needs and concerns of millions of hunters, anglers, wildlife watchers and other members of the American public who care about our nation's natural heritage. The *Endangered Species Act* provides protection to well known animals like our national symbol, the bald eagle, as well as to little known and often underappreciated



plants and animals, like the little-wing pearly mussel. Many protected species serve as living barometers of the health of our land and waters. The National Wildlife Refuge System Improvement Act of 1997 instructs the Fish and Wildlife Service to protect and conserve the biological integrity, diversity, and environmental health of refuge lands. As the lead U.S. agency implementing CITES, the *Convention on International Trade in Endangered Species*, the Fish and Wildlife Service helps conserve beloved and valuable plant and animal communities throughout the world.

Effective conservation requires an ongoing partnership and cooperation across state, tribal, and international boundaries. The Fish and Wildlife Service, together with partners, helps to ensure that future generations of Americans will witness the spring and fall migrations of colorful ducks and geese, experience the thrill of landing a native trout or salmon, or find renewal in the song of a wren.

The Fish and Wildlife Service has established six long-term goals that focus our work on the *Sustainability of Fish and Wildlife Populations* in the years ahead.

1.1 Migratory Bird Conservation

Through 2005, 20 percent of migratory bird populations demonstrate improvements in their population status.

1.2 Imperiled Species

Through 2005, 371 species listed under the *Endangered Species Act* as endangered or threatened for a decade or more are either stable or improving, 15 species are

delisted due to recovery, and the listing of 12 species at risk is made unnecessary due to conservation agreements.

1.3 Interjurisdictional Fish

Through 2005, 12 depressed interjurisdictional native fish populations are restored to self sustaining or, where appropriate, harvestable levels.

1.4 Marine Mammal Management

Through 2005, 3 marine mammal stocks will have current censuses available to maintain populations at optimum sustainable levels; harvest guidelines for all marine mammal stocks will be in place, through cooperative management agreements, for continued subsistence uses.

1.5 Species of International Concern

Through 2005, 40 priority species of international concern will be conserved.

1.6 Invasive Species

By 2005, the Service will prevent importation and expansion, or reduce the range (or population density) of aquatic and terrestrial invasive species on and off Service lands by controlling them on 13,450 acres off Service lands and on 850,000 acres within the National Wildlife Refuge System; conducting risk assessments on 20 high risk invasive species for possible amendment of the injurious wildlife list; and developing 5 additional cooperative prevention and/or control programs for aquatic invasive species (coordinated through the ANS Task Force).



MIGRATORY BIRD CONSERVATION

Through 2005, 20 percent of migratory bird populations demonstrate improvements in their population status.

Migratory birds in North America are an international resource, with numerous species breeding throughout the United States and Canada. In the fall of each year, these birds migrate south from Canada to winter in the United States, Mexico, and Central and South America. Because of the migratory nature of these species and their interstate and international movements, ultimate management authority lies with the federal governments in the respective countries. Migratory bird treaties with other countries govern the management of migratory birds in the U.S., distinguishing those species that can be hunted from those that can't and establishing outside limits on hunting-season dates and season lengths. The Fish and Wildlife Service is the principal Federal agency for managing, protecting and conserving migratory birds in the United States. The Service is responsible for management of migratory game and nongame birds, including 58 species that may be legally hunted as game birds and 778 nongame birds.



The long-term goal for the conservation and protection of migratory bird populations recognizes migratory birds as an international resource with special Federal protection responsibility under the Federal statute of the *Migratory Bird Treaty Act of 1918*. Our commitment can be fulfilled only through a collaborative approach

among federal agencies with the cooperation of international, state, private, and other partners.

PURPOSE OF THE GOAL

The purpose of this goal is to improve the status of migratory bird populations that have evidenced decline or other significant problems, including over abundance.

IMPORTANCE OF THE GOAL

The American people clearly recognize and benefit from the enormous value of healthy migratory bird populations. Migratory birds are excellent indicators of the overall health of an ecosystem. From an ecological perspective, migratory birds offer natural control of crop-damaging insects that artificial control measures could never duplicate, and birds eat insects in our own backyards. The birds themselves are also major recreational resources, contributing millions of dollars annually to national and local economies. More than 52 million Americans feed wild birds, nearly 18 million take trips each year to observe birds, and another 3 million adults enjoy migratory bird hunting. These recreational pursuits generate more than \$20 billion in sales each year, and provide jobs for 200,000 Americans.

Unfortunately, many migratory bird populations are currently at risk due to a variety of factors that have caused significant declines in numbers, while other populations have outstripped the ability of key landscapes to support the burden of excessive population growth.

Broad-scale national programs — such as the U.S. Geological Survey's Breeding Bird Survey, annual waterfowl surveys, wintering surveys, and the annual National Audubon Society's Christmas Bird Count — provide status and trend information on as many as 75% of bird species in the United States. On a national scale, data suggests that many species are presently stable, that some generalist species that can adapt to altered habi-



tats are increasing, and that species less able to adapt to habitat degradation and habitat loss are decreasing.

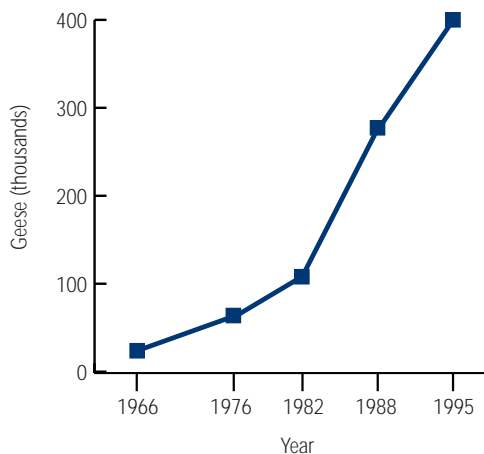
RESOURCE CHALLENGES & ISSUES

Migratory Bird Population Health

For many species of migratory birds, our understanding of their population health falls into one of two categories:

- either the population is clearly declining, or
- we do not have a firm understanding of the population status because of lack of sound scientific information.

This long-term goal focuses on reversing declining population trends and preventing future population losses of species whose individual status is either currently considered healthy or difficult to ascertain. More than 70 species of grassland and shrub land dwelling migratory birds are in decline. Fifty-five percent of all migratory birds whose populations spend the winter in the southern United States have decreased in the past 30 years. The American woodcock, a prized hunted species, has dropped by more than 2.5% *per year* since the 1960s. Atlantic and Mississippi Flyway populations of American black ducks have been cut in half since 1955.



Numbers of lesser snow geese in Central Arctic, 1965-1995. Unpublished data courtesy of R. Kerbes.

Out of Control Population Growth

Some populations are increasing at such a rate that they threaten their own survival and the survival of many other species within their shared habitat. Scientists and managers from across North America agree that snow geese that nest in the central and eastern Arctic and sub-Arctic regions of Canada have become so numerous that their arctic and sub-arctic nesting habitats cannot support them.

The population of mid-continent lesser snow geese has increased in the last 30 years from an estimated 900,000 birds to over 4,000,000 birds and continues to grow at an annual rate of 5%. Central and western Arctic nesting areas now each contain more than 500,000 breeding birds. Mid-continent lesser snow geese are destroying arctic and sub-arctic breeding habitats to the point of desertification, soil salinization, and depletion of vegetative communities. These geese pose an additional threat to other species by transmitting avian cholera.

Declining Populations

Species like songbirds, shorebirds, and sea ducks are known to be declining, some at a disconcerting rate. Tens of thousands of seabirds are being killed incidental to commercial longline fisheries in the world. There are others where the lack of basic scientific information necessary to evaluate their current status and population trends could lead to their eventual disappearance. For instance, wetland-dependent marsh birds are rare and difficult to detect. Black and yellow rails and American and least bitterns are thought to be declining and are identified on the Service's list of species of management concern. These inconspicuous birds are poorly surveyed and reliable population information is simply lacking.

Waterfowl Populations

During the late 1970's through the early 1990's, many waterfowl populations declined significantly because of a severe drought on their breeding grounds. Populations of most species have rebounded in the last few years, primarily in response to wet years and to favorable wetland and upland habitat conditions on the prairies to the far north. According to the Fish and Wildlife

Service's Waterfowl Population Status Report for 1999, the estimate for total ducks in the traditional survey area was 43.4 million birds, the largest population size estimated since operational surveys began in 1955.

STRATEGIES FOR ACHIEVING THE GOAL

The conservation problems faced today are larger in scope, more complex and more demanding of resources than any time in the past. A more strategic approach to migratory bird conservation must begin with an acknowledgment that local problems are more often a result of events occurring at large; that human socio-economic systems are as much a part of the ecology as soil, water, and birds; and that management goals should include ecological understanding, as well as social and economic product. A common interest that has emerged is "regionally-based, biologically-driven, landscape-oriented partnerships delivering the full spectrum of bird conservation across North America.



Because of their different life histories, conservation status, and recreational importance, migratory birds are categorized and managed in different ways by the Service and its partners. The Service will focus on four major strategies:

1. Conserve bird populations

- Conduct population surveys and censuses, band waterfowl and other birds, and control predators. Of the 400 regional migratory bird populations of management concern, only 250 of those populations have reliable baseline information and ongoing

monitoring programs.

- Develop and implement monitoring programs to better track the status of populations and their responses to management actions, and continue education and outreach efforts to enhance the public's awareness and support for migratory bird conservation. The Service closely tracks population changes in species which are hunted, because of the need for the Service and states to establish hunting seasons and limits each year. Some nongame birds also require careful monitoring. The Service monitors populations of the 124 Migratory Nongame Birds of Management Concern to take management actions that ensure they do not decline to the point where they need to be protected by the *Endangered Species Act*.
- Continue to use the valuable tool of law enforcement to support our migratory bird goal. Enforcing federal laws protecting migratory birds has contributed to changing the manufacture and use of toxic pesticides and the implementation of protective measures by the petroleum and mining industries. Fish and Wildlife Service law enforcement agents work with state and local agencies and private groups to reduce human impacts on the breeding activities of rare ground-nesting (protection of beach areas) shore birds, such as piping plovers and least terns. Deterrent efforts focus on monitoring industrial activities, such as cyanide gold leaching ponds, rural electrical utility lines, and open oil field impoundments, that are responsible for the death of over 2 million migratory birds annually.
- Respond to disease outbreaks, provide nesting structures, and reintroduce species as necessary to assist in stabilizing populations.
- Participate in regulatory and other guidance processes.
- Issue permits, and to assist in the issuance of permits, which allow appropriate sustainable uses of migratory birds.

2. Increase effectiveness through partnerships

Partnerships with other Federal agencies, local governments and international communities are essential to



address major migratory bird issues such as pesticide impacts, loss of habitat, and mortality caused by marine fisheries operations. Efforts include: work with the Environmental Protection Agency to establish a process for using FWS expertise in evaluating the effects of pesticides on migratory birds and other non-target organisms; and support for international migratory bird conservation partners recognizing the birds range across thousands of miles during their annual breeding and wintering cycle.

3. Raise Public Awareness

Continue to provide educational materials to schools and the public on the importance of migratory birds. For the vast majority of people, birds represent the sole everyday contact they have with wildlife. Migratory birds connect all of us, from city dwellers to rural farmers, to the environment. Many of us take for granted the beauty, inclusion and balance that birds bring to our day to day living.

IMPERILED SPECIES

Through 2005, 371 species listed under the *Endangered Species Act* as endangered or threatened for a decade or more are either stable or improving, 15 species are delisted due to recovery, and the listing of 12 species at risk is made unnecessary due to conservation agreements.

Although the Fish and Wildlife Service is involved in a number of activities that contribute to the maintenance of fish and wildlife populations, these actions are not always enough to keep species from foreseeable extinction. When this occurs, species receive the protection of the *Endangered Species Act (ESA)*. The ESA was passed in 1973. It represented America's concern about the decline of many wildlife and plant species around the world. It is important to know that over the past 300 years more than 500 North American species have become extinct. That is more than one species disappearing each year. Scientists estimate that the natural extinction rates are one species lost every 100 years. The ESA is regarded as one of the most comprehensive wildlife conservation laws in the world. The U.S. Fish and Wildlife Service, in the Department of the Interior, and the National Marine Fisheries Service, in the Department of Commerce, share responsibility for administration of the Endangered Species Act. Generally, the National Marine Fisheries Service deals with those species occurring in marine environments and anadromous fish, while the Fish and Wildlife Service is responsible for terrestrial and freshwater species and migratory birds. Additionally, the Animal and Plant Health Inspection Service, in the Department of Agriculture, oversees importation and exportation of listed terrestrial plants.

PURPOSE OF THE GOAL

The purpose of the ESA is to conserve "the ecosystems upon which endangered and threatened species depend" and to conserve and recover listed species. This long-term goal defines two important aspects of the Service's reasonable level of performance over the next five years in keeping with the intentions of the statute.

First, the ESA asks the Service to identify species that are in danger of extinction and to pursue recovery of

Principles for Recovery

Decisions based on sound and objective science.

Minimize social and economic impacts.

Provide quick, responsive answers and certainty to landowners.

Treat landowners fairly and with consideration.

Create incentives for landowners to conserve species.

Make effective use of limited public and private resources by focusing on groups of species dependent on the same habitat.

Prevent species from becoming endangered or threatened.

Promptly recover and delist threatened and endangered species.

Provide state, tribal and local governments with opportunities to play a greater role in carrying out the ESA.

these species. This part of the long-term goal defines our five year performance level for the protection of endangered and threatened species and restoration of them to a secure status in the wild.

Second, while the ESA focuses on protection and recovery of listed species, the Service also works to make listing of additional species unnecessary. The second part of this long-term goal defines the results we intend to achieve in conserving declining species — making listing unnecessary.

IMPORTANCE OF THE GOAL

Sustainable communities depend on healthy and diverse populations of fish and wildlife. Many communities have recognized that declining species have served as



“canaries in the coal mine,” alerting them to take action to protect their quality of life and long-term economic well-being. The *Endangered Species Act* recognizes that plants and animals in peril reflect the condition and health of the ecosystem. They often indicate more serious problems. At the same time, many of these plants and animals themselves provide invaluable and irreplaceable benefits.

Although all Federal agencies are responsible for preventing endangerment and for recovering endangered species, the Service identifies imperiled species and focuses efforts on their recovery.



STRATEGIES FOR ACHIEVING THE GOAL

The challenges of restoring these species and their habitats before they become extinct are enormous but not insurmountable. Species conservation requires the joint efforts of private landowners, local communities, and state and Federal governments. To meet these challenges, the Service has designed its recovery strategies to encompass the basic requirements of the ESA:

Working with States:

The Service will partner with the States to protect species. The law encourages States to develop and maintain conservation programs for their federally listed threatened or endangered species. Financial assistance is available to promote conservation participation.

Status of Threatened and Endangered Species and Candidate Species

As of May 31, 2000 there were 53 species proposed for listing and 1,231 species listed as threatened or endangered.

Did you know:

72% of freshwater mussels are imperiled.

40% of U.S. amphibians are imperiled.

37% of U.S. fish species are at risk.

246 U.S. species are candidates for protection under the *ESA* (as of August 16, 2000).

20 million acres protect 200 endangered or threatened species through habitat conservation plans.



Listing of Species under the ESA:

The Service will follow federal rulemaking procedures and specific ESA requirements to determine whether to list a species. A formal peer review process and an opportunity for public comment ensure that the Service obtains the best available scientific information to support its decisions. Listing affords species the full protections including prohibitions on killing, harming, or otherwise taking a species as well as restrictions on import/export to prevent trade-related declines.

Candidate Species:

The Service will work to reduce the threats to declining species and avoid listing through partnerships with public agencies, private organizations, tribes and landowners. While the ESA mandates the recovery of listed species, Congress and the Service encourage efforts to prevent species in decline from reaching the point where the statute's protections are necessary. Although the ESA offers no regulatory authority for protecting non-listed species, voluntary partnerships provide mechanisms to benefit unlisted but declining species in conjunction with the protection of listed species.

Consultation with Federal Agencies

Federal agencies are required to consult with the Service to ensure that the actions they authorize, fund, or carry out will not jeopardize listed species. If any proposed action will jeopardize the species, the Service will issue a "biological opinion" offering reasonable

Ways That Species Become Endangered

1. Habitat loss
2. Unregulated or illegal killing or collection
3. Pesticides, pollution
4. Competition with other species
5. Disease
6. Predation

and prudent alternatives about how the proposed action could be modified to avoid jeopardy to listed species.

Habitat Conservation Plans

The Service will work with private landowners and other non-federal entities to develop Habitat Conservation Plans designed to relieve restrictions on private landowners who want to develop land inhabited by endangered species. This planning process is intended to relieve restrictions on private landowners who want to develop land inhabited by endangered species, promoting negotiated solutions to endangered species conflicts and providing an alternative to litigation. Private landowners and non-federal parties who develop and implement an approved "habitat conservation plan" providing for conservation of the species can receive an "incidental take permit" that allows their development project to go forward.





Safe Harbor Policy

Landowners are often reluctant to voluntarily manage their property for the benefit of listed species for fear of their efforts resulting in additional land use restrictions. The innovative Safe Harbor program provides incentives for private and other non-federal landowners to implement conservation measures for listed species. A landowner who enters into a Safe Harbor Agreement will receive assurances from the Service that their proactive conservation actions for endangered or threatened species will not result in additional land use restrictions.

Recovery

The ultimate goal is the recovery of species so they no longer need protection under the ESA. The law provides for recovery plans to be developed describing the steps needed to restore a species. The Service will develop recovery plans which identify the needed coordination of private, federal, tribal, and state actions to stabilize or improve populations. Service-led recovery efforts include a wide range of management actions, such as controlled propagation and habitat protection and restoration, that reduce threats or otherwise benefit populations so they will stabilize and ultimately increase. As recovery is achieved, actions appropriate to upgrade species status from endangered to threatened and/or to delist species will be initiated.

ANTICIPATED RESULTS

Protecting endangered species will result in important sources of new drugs, medicines, or foods. Nearly 40 percent of all medical prescriptions dispensed annually in the United States have been derived from nature, and scientists have only investigated about 2 percent of the known plant species for possible medicinal values. Various species are important for maintaining the country's agricultural productivity through use as biocontrols against crop pests or in development of disease-resistant crops.

The preservation of endangered and threatened species through protection or restoration of ecosystems can also provide direct benefits to humans who share these ecosystems. For example, healthy watersheds required by many species also provide human populations with clean water and protection from flooding. Indeed, without healthy ecosystems, society would be forced to bear the enormous costs of attempting to mitigate the damage or replace the functions through costly infrastructure.

Endangered and threatened species often serve as environmental barometers signaling the potential loss of healthy living conditions for humans and other species alike. The species serve as an early warning system for pollution and environmental degradation that might adversely impact human health.

Service-led recovery efforts, including a wide range of management actions such as habitat protection and restoration, will reduce threats or otherwise benefit populations so they will stabilize and ultimately increase. Thus, the species will no longer need the conservation measures afforded them under the ESA.



INTERJURISDICTIONAL FISH

Through 2005, 12 depressed interjurisdictional native fish populations are restored to self-sustaining or, where appropriate, harvestable levels.

Preserving living resources of this Nation's inland and coastal aquatic ecosystems has been a core responsibility of the Service for more than 120 years. As a leader in fisheries science since 1871, the Service directs fishery management, protection and technical support in the interest of our primary concern of fishery conservation and sustainability. Our stewardship challenge is maintaining and improving the health and productivity of the resource, which will assure future opportunities for the sustainable use of these resources.



The Service is responsible for managing, restoring and recovering inland, anadromous and coastal dependent interjurisdictional fish and other aquatic populations. Primary activities include assessment and monitoring surveys of populations and habitat; habitat conservation and restoration; and stocking hatchery fish. This is often done in cooperation with the Department of Commerce, National Marine Fisheries Service and other federal agencies; states, local and tribal governments; and private and non-government entities. For example, even though the National Marine Fisheries Service traditionally has jurisdiction to manage a fishery off-shore, between the 3 mile and 200 mile limit, both the Fish and Wildlife Service and the National Marine Fisheries Service have responsibility to assist coastal states in managing their fisheries under the Atlantic Coastal Fisheries Cooperative Management Act.

Interjurisdictional fish are populations that are managed by two or more states, nations or Native American tribal governments because of their geographic distribution or migratory patterns. The size and complexity of interjurisdictional fish stocks pose some of America's most difficult natural resource management challenges.

PURPOSE OF THE GOAL

The Service will focus efforts on restoring declining interjurisdictional native fish populations and communities that have suffered significant adverse changes. These changes generally tend toward reduced distributions, lowered diversity, and increased numbers of species considered rare. The long-term and annual goals addressing these resource issues focuses the Service and its partners on the importance of restoring native fish populations.

IMPORTANCE OF THE GOAL

Living marine resources support extensive commercial, recreational, and subsistence uses. In 1996, 35 million U.S. residents over the age of 16 enjoyed a variety of fishing opportunities throughout the United States and anglers spent almost \$38 billion on fishing-related expenses. However, marine resources are under stress from overexploitation and habitat degradation, with native fish populations declining or are at historic low levels. Some populations of marine mammals, turtles and fish are in danger of extinction, and many more are threatened by various human activities.

It has long been recognized that fishery resources are not inexhaustible. Many factors, both natural and human-related, affect the status of fish stocks, protected species, and ecosystems. Although we do not have the means to control all of them, our scientific and management tools enable us to have a strong influence on many of them.

STRATEGIES FOR ACHIEVING THE GOAL

Many living marine resources often cross political or geographic boundaries, complicating their assessment and management. The boundaries can be between states and between adjacent countries. Sometimes boundaries are crossed by juvenile or adult fish during migrations. These movements complicate even the most comprehensive fisheries assessment and management regimes. Effective oversight of these species requires coordination, coopera-



tion, and agreement among all interested parties. Fishery management plans provide the foundation for cooperative management of fishery resources. Service strategies for restoration of depleted native fishery populations include:

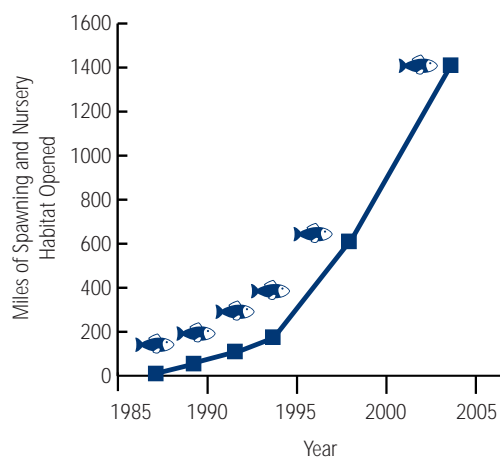
- **Assess and monitor aquatic populations and their habitats:** The Service will continue to monitor trends of populations and their habitats to evaluate their status in regards to community balance, distribution and numbers. Service fisheries biologists will conduct population studies to determine trends of nationally significant fish stocks, evaluate habitat for aquatic resources, and develop fishery management plans for interjurisdictional species and for federal landowners (e.g. National Wildlife Refuges and military).
- **Conserve and restore aquatic populations through cooperative management:** Fishery watershed management plans provide the foundation for cooperative management of aquatic resources. Fishery management plans are usually for single species that are commercially and recreationally harvested and developed by interstate commissions. Watershed/ ecosystem restoration plans address both terrestrial and aquatic linked issues that relate to species and their habitats. The Service participates and assists the interstate commissions in the development of fishery management plans providing strong scientific advice for formulating biologically sound management for conservation and restoration of fisheries. The Service also develops management plans for federal landowners (i.e. National Wildlife Refuge System or military) and other non-private lands.
- **Improve Fish Passage:** The Service, working with our partners, works to restore native fish and other aquatic species to self-sustaining levels by reconnecting historical habitats and reestablishing watershed function through removal of, or passage around, manmade barriers in rivers and streams. These projects will be identified in management plans developed by the Service and its partners. It has long been recognized that the Nation's fisheries and the economies they support depend on the ability of fish to reach healthy aquatic habitats. U.S. rivers contain over 75,000 dams larger than six feet, blocking over 600,000 miles of riverine habitat. Populations of sturgeon, river herring,

shad and salmon have plummeted along the Atlantic coast. We are struggling to maintain Atlantic salmon populations at 1% of their historic levels.

- **Supplement and reestablish aquatic populations through the National Fish Hatchery System:** The Service will supplement and reestablish depleted fish stocks, providing for restoration and recovery of native fish populations. In 1998, the National Fish Hatchery System produced more than 107 million anadromous fish to aid restoration efforts throughout the Atlantic, Gulf and Pacific coasts.
- **Improve Law Enforcement Capabilities:** The Service will deter illegal take and commercial trade of native fish stocks, including freshwater mussels, paddlefish and sturgeon, through an active law enforcement effort.

ANTICIPATED RESULTS

Over the next several years, FWS, together with states, local and tribal partners, industry and private citizens, will continue to improve the status of declining fisheries. We will participate in the interstate Marine Commissions — Gulf, Pacific, and Atlantic — and Regional Fishery Councils to assure coastwide cooperative management of fish stocks. Restoration of native fish populations will allow for increased recreational and commercial fishing activities, not only providing quality leisure opportunities for Americans, but increasing the revenue to local and regional economies.



Chesapeake Bay Program — fish passage improvements. As of 1994, 160 river miles of nursery and spawning grounds have been reopened.

MARINE MAMMAL MANAGEMENT

Through 2005, 3 marine mammal stocks will have current censuses available to maintain populations at optimum sustainable levels: harvest guidelines for all marine mammal stocks will be in place, through cooperative management agreements, for continued subsistence uses.

The Alaska region has 39 stocks of 24 species of marine mammals. Three of these species (sea otter, polar bear, and walrus) are managed by the Department of the Interior, U.S. Fish and Wildlife Service, and the remaining cetaceans and pinnipeds are managed by the Department of Commerce, National Marine Fisheries Service under the provisions of the *Marine Mammal Protection Act* (MMPA). The Fish and Wildlife Service is also responsible for the protection and recovery of two endangered marine mammal species — the West Indian manatee (Florida and Antillean) and the southern sea otter (California). We discuss progress toward recovery of these two endangered species as part of our long-term goal 1.2 Imperiled Species.

PURPOSE OF THE GOAL

There are marine mammal populations that are in severe decline, or are already listed as threatened or endangered under the Endangered Species Act. The purpose of this goal for the Fish and Wildlife Service is to protect or maintain these marine mammal stocks at sustainable levels. Under the *Marine Mammal Protection Act*, marine mammal stocks “should not be permitted to diminish below their optimum sustainable population” (OSP). Further, the Service is directed by the *Marine Mammal*

Protection Act to complete stock assessments of marine mammals and negotiate cooperatively with Alaskan Native Organizations....” To adequately protect and maintain stocks at the optimum sustainable population level, the Service must conduct periodic censuses to monitor population status and trends. The *Marine Mammal Protection Act’s* short-term goal is to reduce incidental take to at or below the stock’s *potential biological removal*.¹

IMPORTANCE OF THE GOAL

Since the 1500’s people have interacted with marine mammals in waters off the coast of the United States. Although the U.S. whaling industry ended in the 1920’s, marine mammals are still in jeopardy today as a result of entanglement in fishing nets, bycatch and ship collisions. The importance of each of the three species under the jurisdiction of the Fish and Wildlife Service are unique.

RESOURCE CONDITION

Polar Bear

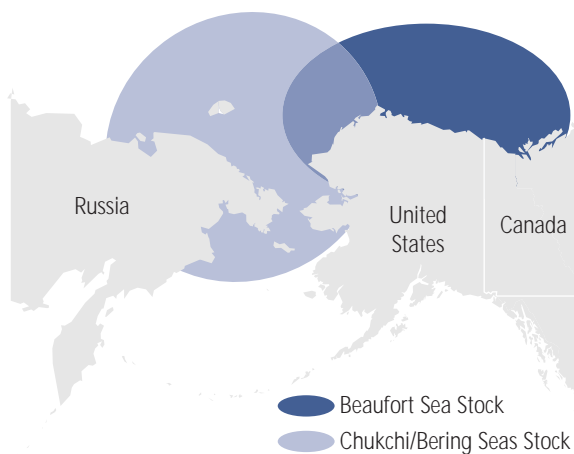
Polar bears have been, and continue to be, an important renewable resource available to coastal communities throughout northern Alaska, where they are hunted by coastal dwelling Native people. The public has been strongly committed to the conservation of polar bears as evidenced by international agreements and domestic legislation for their conservation. The Fish and Wildlife Service, along with other federal agencies, has been assigned the responsibility for conducting studies on polar bears to increase our understanding of the animal and the requirements for its protection. This Plan provides a means to strengthen the conservation of polar bears in Alaska for the benefit of the larger public.

¹ Potential Biological Removal (PBR), a management term set by 1994 amendments to the *Marine Mammal Protection Act*, to define the removal rate beyond which a marine mammal stock would be impeded from recovery and reaching or maintaining its optimal sustainable population level.





Polar Bear Range



Of the two polar bear stocks in Alaska, the Chukchi/Bering Seas stock appears to be increasing slightly or stabilizing at a relatively high level, while the Southern Beaufort Sea stock is increasing slightly or stabilizing near carrying capacity. Neither stock is listed as depleted or strategic under the MMPA, nor threatened or endangered under the ESA. Although reliable estimates of the minimum population, PBR level, and human-caused mortality and serious injury are currently not available, the stock appears to have increased during the past 27 years despite a substantial annual harvest.



Northern Sea Otters

Sea otters have inhabited the northern coasts of the Pacific Ocean for hundreds of years. Current estimates are approximately 100,000 sea otters in Alaska.

Although sea otters are protected from commercial hunting, the largest threat still comes from humans.

The return of sea otters from near extinction, and the re-occupation of most of their historic range, is one of the great wildlife conservation stories of the century. However, the species' recovery has not come without controversy. The conflict between sea otters and humans over shellfish resources is probably the most serious problem that has arisen. With healthy populations of

sea otters firmly established in most of their historic range in coastal Alaska, now is an appropriate juncture to examine existing and potential management problems and resource conflicts, and consider potential solutions to those management problems and conflicts.

It is estimated that 90% of the world population of sea otters reside in the near shore, coastal waters in Alaska. Sea otters in Alaska are currently estimated to be within their optimum sustainable population level. They are not listed as depleted or considered a strategic stock under the *Marine Mammal Protection Act*, or as threatened or endangered under the *Endangered Species Act*. Impacts resulting from the Exxon Valdez oil spill may have resulted in temporal declines and continuing reduced growth rates and low densities within limited areas; however, it is believed that recovery is occurring in these areas. One area of concern for Alaskan otters is the decline in population in the Aleutian archipelago. The Aleutian sea otter population has been experiencing severe declines in the central portion of the range, and the magnitude and extent of this decline is unknown. The last survey of the entire archipelago for sea otters was completed by the US FWS in 1992. A current abundance estimate for sea otters is needed to assess the extent of the recent population decline and to develop management strategies to restore the population where feasible. The US FWS will be repeating the 1992 sea otter surveys this spring (2000).



Pacific Walrus

The Pacific walrus has been an important resource for human inhabitants of the Bering and Chukchi sea coasts for thousands of years. These large

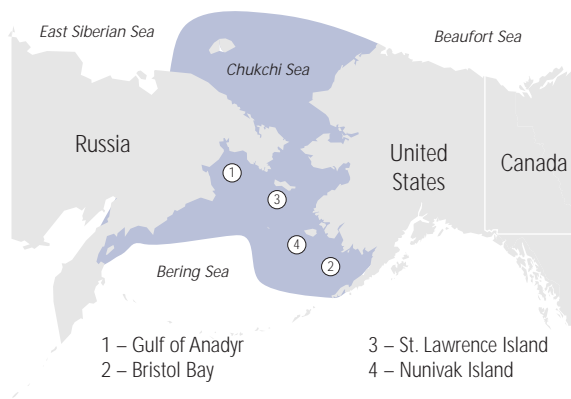
marine mammals have provided meat, oil for fuel, and raw materials for a variety of needs. Today the harvest of walrus adds significantly to the economy of coastal Natives as a source of meat and money from the sale of ivory carvings.

The mission of the Service's walrus program is to ensure that the Pacific walrus remains a healthy, functioning

component of the Bering/Chukchi Sea ecosystem. Despite an inability to determine precisely the bounds of optimum sustainable populations (OSP), the Pacific walrus population in Alaska is believed to be within the bounds of OSP, given the most recent estimates of a large population. The Pacific walrus currently has an estimated mean annual level of human mortality and serious injury of 4,890 walrus per year, which is less than the acceptable removal rate of 7,533 (PBR). It is not listed as depleted or strategic under the *Marine Mammal Protection Act*, or threatened or endangered under the *Endangered Species Act*.

The three species of marine mammals managed by the Fish and Wildlife Service are subject to subsistence harvests by Alaska Natives. Harvest guidelines are necessary to ensure that populations remain above the optimum sustainable populations levels.

Pacific Walrus Range



STRATEGIES FOR ACHIEVING THE GOAL

Service actions to achieve this long-term goal focus on removing significant threats; completing high priority marine mammal population studies in the Bering Sea; coordinating co-management efforts with Alaska Native organizations; conducting population assessments of the polar bear, walrus, and sea otter; developing species management plans; and revising stock assessments in coordination with Alaska Native organizations. Finalizing the stock assessments for sea otters represents one of the Service's current priorities. A second priority includes fulfilling the requirements to update the stock assessments for all Alaska species under our jurisdiction no later than 2001. Because the polar bear and walrus are highly migratory, international agreements are important in their management. Conservation agreements lay out specific criteria for harvest and take of marine mammals while ensuring their long-term survival. The Service will remain active in implementing existing cooperative agreements and encourage new cooperative agreements as necessary to sustain populations.



SPECIES OF INTERNATIONAL CONCERN

Through 2005, 40 priority species of international concern will be conserved.

The Service promotes and sustains a coordinated domestic and international strategy to conserve global biodiversity and provides assistance to other countries to conserve wildlife, manage wildlife reserves, and protect global biodiversity. The long-term goal supports the conservation of priority species of international concern. International conservation of wildlife is essential because geophysical boundaries have no meaning for wildlife. For conservation to succeed in this country, we must reach beyond our own borders. The Service's international conservation program implements a number of international treaties which involve fish and wildlife conservation commitments, encourages the global conservation of wildlife species and their habitats, and focuses on global resources which are of the greatest importance and benefit to the American people.

PURPOSE OF THE GOAL

This goal underscores the Service's commitment to help conserve global biological diversity. The Service will focus its efforts on foreign and domestic species that are traded internationally, species the U.S. shares with

other nations, and highly endangered species non-native to the U.S. Commitment to the conservation of these species demonstrates understanding that geophysical boundaries have no meaning for wildlife and that, for conservation to succeed, it must extend beyond geophysical borders.

IMPORTANCE OF THE GOAL

Species of international concern are important to Americans for their economic, biological and intrinsic value. Conserving priority species of international concern contributes to environmental health and economic development. However, species status may range from stable to highly endangered or nearing extinction. Even for apparently stable populations, a variety of unanticipated threats ranging from habitat destruction to increased trade can adversely impact stability. The international programs attempt to conserve remaining populations of endangered species and prevent stable populations from declining in parts of the world that experience political, economic, and environmental change.



- Migratory birds, which fly annually from North America to Mexico, Central and South America, and Asia, must be conserved on their migration routes and wintering grounds if they are to return to our country every spring in healthy numbers;
- Marine mammals move across the Bering Sea and other adjacent waters to Russia and Asia and back;
- Endangered and threatened species are shared in value among other countries or of special concern to the American people (such as elephants, rhinos, tigers, parrots, and cacti);
- Fisheries harvested in one nation may have counterparts in other countries (such as sturgeons in the U.S. and in Russia and other countries around the Caspian Sea).

STRATEGIES FOR ACHIEVING THE GOAL

The Service strategies are directed toward:

- sharing of Service wildlife management expertise with countries that want to protect their natural resources and meet their obligations under international conservation agreements such as the Convention on International Trade in Endangered Species (CITES).
- increasing the capacity for international wildlife trade regulation, particularly in the area of CITES implementation for new listings such as medicinal plants and marine species, which pose unique implementation challenges;
- increasing partnerships to assist in the long-term conservation of species of international concern, with special emphasis on partnerships promoting on-the-ground migratory bird conservation, habitat management, and training for natural resource managers, CITES party countries, and the public;

- focusing on key critical areas for identified species — particularly countries where highest biological diversity and highest incidence of illegal wildlife trade intersect — to create the greatest benefit for wildlife conservation. Service Wildlife Inspectors, stationed at major international airports, ports, and border crossings, monitor wildlife shipments to stop the flow of illegal wildlife commodities into and out of the United States. The Service is the first line of defense in reducing consumer demand for these species or their products. Thus Service actions necessary to deliver this goal focus on inspecting import/export shipments to reduce illegal trade in protected species.

ANTICIPATED RESULTS

In fulfilling this goal, the Service assumes responsibility for oversight and monitoring of conservation efforts that directly impact selected species of international concern. Service involvement in Latin America, Mexico, and the Caribbean helps to conserve migratory birds in areas that constitute as much as 50% of the bird population during non-breeding season. These species include orioles, thrushes, warblers, shorebirds and raptors that return to the U.S. to breed. Likewise, Service implementation of CITES results in conservation benefit for such economically and ecologically valuable species as sturgeon, elephants, and pandas. In fulfilling this goal, the Service seeks to use its resources to have the greatest impact on high priority global biodiversity conservation.





INVASIVE SPECIES

By 2005, the Service will prevent importation and expansion, or reduce the range (or population density), of aquatic and terrestrial invasive species on and off Service lands by controlling them on 13,450 acres of off Service lands and on 850,000 acres within the National Wildlife Refuge System; conducting risk assessments on 20 high risk invasive species for possible amendment of the injurious wildlife list; and developing 5 additional cooperative prevention and/or control programs for aquatic invasive species (coordinated through the ANS Task Force).

An increasing number of organisms are arriving unintentionally on people and products as hitchhikers that escape into the environment. Some of these organisms, even those that are brought on purpose, come with costs as well as benefits.

In 1993, the Office of Technology Assessment concluded that the number of invasive species and their cumulative impacts are creating a growing burden for the United States. Four years later, more than 500 scientists and natural resource managers from across the country wrote the Administration to express their deep concern about the damage done by invasive species every year. The President responded with the Invasive Species Executive Order (13112) on February 3, 1999. In addition to establishing a federal invasive species council, the Executive Order directs federal agencies to develop and implement national prevention and control plans.

Invasive species are among the most significant domestic and international threats to fish and wildlife populations, and the scope of the problem is only now becoming known by the scientific community and the

Invasive species are those non-native organisms that harm, or have the potential to harm, the environment, economy, or human health.

Did you know that invasive species:

- Cost Americans \$138 billion annually (Cornell University Study).
- Are partly responsible for 35% of the listing of threatened or endangered species.
- Infest over 100 million acres of the U.S. and spread across 3 million acres per year.
- Destroy up to 4,600 acres daily of public natural areas.

public. For most Americans, invasive species are a crisis of silence; they are invaders that can't be heard and many live completely out of sight.

PURPOSE OF THE GOAL

The increasing impacts to and displacement of native species by invasive exotic species is placing great pressure on our ecosystems and causing significant impacts to our fish and wildlife resources. The purpose of this goal is to prevent introductions and control invasive species that severely impact fish and wildlife resources.



IMPORTANCE OF THE GOAL

In the past decade, several harmful aquatic invasive species such as the zebra mussel, ruffe, and Asian clam have been unintentionally introduced into the United States with substantial immediate financial and ecological effects. Ballast water carried by international freighters can harbor aquatic plants and animals. When ballast is discharged, the species can colonize waterways and eventually clog industrial and municipal water systems. Great Lakes water users spend tens of millions of dollars on zebra mussel control every year. As the zebra mussel spreads to inland lakes and rivers across North America, such as the Mississippi River Basin and Lake Champlain, so do the costs to water users. Zebra mussel infestations cause pronounced ecological changes in the Great Lakes and major rivers of the central United States. The zebra mussel's rapid reproduction, coupled with consumption of microscopic plants and animals, affects the aquatic food web and places valuable commercial and sport fisheries at risk.

An estimated six million acres of the National Wildlife Refuge System, about 38% of the system in the lower 48 states, are affected by non-native plants that interfere with crucial wildlife management objectives. Many refuges also suffer habitat degradation or reduced numbers of native wildlife from the invasion of nonindigenous animals such as carp, snakes, rats, feral cats, nutria and feral pigs. The National Wildlife Refuge System has identified over 300 invasive plant and animal prevention/control projects at a cost of \$45 million annually to reduce the impacts to fish and wildlife habitats.

Major Environmental Threats

Plants

Purple Loosestrife Nutria • Brazilian Pepper Tree
Canada Thistle • Melaleuca Alewife • Leafy Spurge
Ruffe • Cogon Grass • Phragmites • Chinese Tallow
• Perennial Pepperweed

Animals

Saltcedar Round Goby • Brown Tree Snake
Mediterranean Fruit Fly • Hoary Cress (Whitetop)
Gypsy Moth • Russian Knapweed • Eurasian water
milfoil • Kudzu Feral Pigs • Zebra Mussel • Japanese
Shore Crab • Rusty Crayfish • Sea Lamprey • Mitten
Crab

STRATEGIES FOR ACHIEVING THE GOAL

The Director's Priority for Invasive Species directs the Fish and Wildlife Service to develop and implement an aggressive program to respond effectively to present and future invasive species problems that threaten the Nation's fish and wildlife resources. Our strategy of first choice is to prevent invasive species. The most cost effective approach to combating invasive species is to keep them from becoming established in the first place. When prevention cannot be achieved, we will focus specifically on four key program strategies:

1. The **Partners for Fish and Wildlife Program** will work with private landowners on a voluntary basis to implement on-the-ground restoration projects that eradicate, control and manage invasive species.
2. The **National Wildlife Refuge System** will address invasive species problems on refuge lands by:
 - identifying infestations of invasive species throughout the refuge system through surveys and field observations;
 - initiating a comprehensive survey of harmful invasive species populations and their impacts on refuge lands;
 - controlling invasive species on refuge lands using a fully integrated management approach
 - coordinating invasive species prevention and control activities with local, state, and national partners;
3. The **Fisheries Program** will provide technical assistance in the development of cooperative prevention and control plans. Principal strategies outlined by the Fisheries Program include:
 - prevention of the introduction and spread of aquatic nuisance species;
 - detection and monitoring of invasive aquatic species;
 - control, when warranted, in established aquatic nuisance species;
 - technical assistance to facilitate local, state, tribal, and regional involvement in aquatic nuisance species problems and concerns; and
 - acceleration of outreach and education activities to increase public awareness of the devastating impact of invasive species.



4. The **International Affairs Program** will evaluate the importation of new, potentially invasive species ensuring that they do not have the opportunity to become established. We have begun developing new export guidelines that consider U.S. species with potential for invasion in other countries. To address imports and exports of invasive species, we will:
- conduct risk analyses and biological assessments to identify species safe for import, those with low risk under specific conditions, and those species that pose unacceptable risks and should not be imported;
 - develop outreach and partnership efforts with the scientific community, industry, non-governmental organizations and the public; and
 - restrict exports of invasive species from the U.S. to prevent invasive species problems in other countries caused by U.S. exports.

ANTICIPATED RESULTS

By meeting our goal of controlling invasive species on 850,000 acres of the Refuge System, we will restore ecosystem integrity that supports native wildlife and plant communities. Activities undertaken by the Fisheries Program in developing invasive species control programs will prevent the introduction of certain high risk species, reduce the risk of spreading aquatic nuisance species from one part of the country to another, allow for early detection and quicker responses to invasions, and establish environmentally sound control programs for invasive species that do become established. The risk assessments conducted by the International Affairs program will provide the opportunity to proactively evaluate and take action on species that pose unacceptable risks to native species or habitats.



Purple loose shife

KEY FACTORS AFFECTING MISSION GOAL 1

There are several key factors external to the Service and beyond its control that could significantly affect the achievement of this goal.

The natural environment, the behavior of others, court-established schedules, and the economy all affect the Service's ability to meet many of the Mission Goal 1 long-term goals. Further, the Service depends on the work of states, tribes, local governments, other federal agencies, and volunteers to collect essential species populations data, and changes in their priorities or resources can also impact our ability to accomplish the goals. Much of the monitoring data upon which the Service depends for analyses of trends and baselines for migratory bird management are gathered by governmental and private/volunteer partners; a change in the methodology for gathering this data or in data quality, regardless of the actual change in populations over time, can skew FWS' assessment of that change. Other factors that should be considered include:

- Severe wet or dry weather or major storms can have considerable influence on the population status of species. Species populations are also affected by natural processes such as fire, disease cycles, predator and prey cycles or insect outbreaks, and human activities such as land use, exposure to contaminants and other pollutants and harvest of and trade in fish and wildlife products. Because many of these species are migratory, these factors influence populations in the U.S. and throughout the world.
- Much of the success of Service programs relies on the collaboration of other federal agencies and the voluntary cooperation of the private sector and general public. Economic factors may provide incentives to increase the unlawful take of fish and wildlife. Social, political, and economic factors influence the willingness of people to take individual responsibility for compliance with the legal and ethical requirements of resource protection.

- The long-term goal 1.4 for conservation of marine mammal species relies on the adoption of a proposed amendment for inclusion of harvest guidelines as part of the re-authorized *Marine Mammal Protection Act*. The Fish and Wildlife Service has proposed this provision as an amendment to the *Marine Mammal Protection Act* as part of re-authorization consideration by the Congress. The *Marine Mammal Protection Act* currently does not provide a provision for harvest guidelines.
- Lawsuits and court actions may also impact FWS' ability to achieve goals, requiring the bureau to adjust schedules and delay accomplishment of certain goals and measures.
- The cooperation of other countries is key to the success of our long-term goal for conservation of international species of special concern (1.5). Where the United States and its partner countries differ on program development or focus, or when a partner country fails to maintain environmental programs, enforce existing laws or meet treaty obligations, the effectiveness of our initiatives might be compromised. The success of international agreements on conservation of priority international species is contingent both on U.S. provision of technical assistance and financial resources to developing countries and on the commitment of other developed countries to provide similar assistance. Failing the provision of such assistance, key countries to the continued stability of some international species might not develop the technical skills and management infrastructure necessary for the survival of the species.

Mission Goal 2

HABITAT CONSERVATION: A NETWORK OF LANDS AND WATERS

Cooperating with others, we will conserve an ecologically diverse network of lands and waters — of various ownerships — providing habitat for fish and wildlife resources.

This mission goal, *Habitat Conservation: Network of Lands and Waters*, recognizes the fundamental importance of an ecologically diverse network of lands and waters to the self-sustainability of fish and wildlife and plants. Habitat includes a rich variety of community types and covers a range extending from nearly aquatic wetlands along our coasts and myriad rivers, lakes and streams, to mountaintops and arid desert locations.

Our goal is to conserve fish and wildlife by protecting and restoring the habitat upon which they depend. The Service has both a regulatory and a land management role in protecting and restoring habitat. One of our most visible programs, the National Wildlife Refuge System, supports at least 700 species of birds, 220 mammals, 250 reptiles and amphibians, over 1,000 fish, and countless species of invertebrates and plants. Nearly 260 threatened or endangered species are found on refuges, and it is here they often begin their recovery or hold their own against extinction.

The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction.

— Rachel Carson

The National Wildlife Refuge System, encompassing 529 refuges, 38 wetland management districts, and more than 93 million acres, supports endangered and threatened species, resident wildlife and plant species, and migratory birds, including neo-tropical migrants. The Refuge System includes wetland easements and waterfowl production areas, with more than 2.6 million acres in 208 counties, which provide nesting and breeding habitat for diverse migratory birds. The National Wildlife Refuge System is the world's most significant system of



habitat protected and managed for the benefit of fish and wildlife species. The National Fish Hatchery System, with 67 hatcheries, nine fish health centers, and eight fish technology centers, is also part of the Service's land base. These, too, are public trust resources that will contribute to the overall success of ecosystem restoration. The Service has and will continue to make every effort to have National Wildlife Refuges and National Fish Hatcheries be the example of ecosystem stability in areas throughout the country and an available tool to ecosystem recovery. But it is also recognized that the systems of Refuges and Hatcheries cannot do the job alone. Nearly 70% of all fish and wildlife habitats in the United States are in private ownership. The Service actively reaches out to federal, state, local, and tribal governments, as well as private landowners who are willing to protect and conserve threatened and endangered species on their lands. The primary reason for the addition of species to be listed under the *Endangered Species Act* is the loss of habitat. The Service is committed to bonding efforts on Service lands with those of the private sector to stabilize ecosystems, which in turn helps prevent species from declining to the point where protection under the *Endangered Species Act* is necessary. Ecosystem teams and partnerships contribute to our success in conserving America's biological diversity and helping the Service meet the challenges of conserving fish and wildlife by protecting and restoring natural ecosystems.

This mission goal emphasizes two kinds of strategic actions that together define, shape, and conserve the network: 1) the development of formal agreements and plans with our partners that provide habitat for multiple species, and 2) the actual conservation work necessary to protect, restore, and enhance those habitats vital to fish and wildlife populations. Central to the Service's habitat conservation strategy is an ecosystem approach which focuses on the interaction and balance of people, lands and waters, and fish and wildlife.

The Fish and Wildlife Service has established three long-term goals that focus our work on Habitat Conservation — creating a Network of Lands and Waters essential to the sustainability of fish and wildlife populations.

2.1 Habitat Conservation On Service Lands

Through 2005, meet the identified habitat needs of Service lands by supporting fish and wildlife species populations objectives through the restoration of 600,000 acres, and annual management enhancement of 3.2 million acres of habitats and the addition of 1.275 million acres within Refuge boundaries.

2.2 Stewardship of FWS Facilities

By 2005, 23 percent of mission critical water management and public use facilities will be in fair or good condition as measured by the Facilities Condition Index.

2.3 Habitat Conservation Off Service Lands

By 2005, improve fish and wildlife populations focusing on trust resources, threatened and endangered species, and species of special concern by enhancing, restoring and establishing 280,000 acres of wetlands habitat; restoring 524,000 acres of upland habitats; and enhancing and restoring 4,150 riparian or stream miles of habitat off Service land through partnerships and other conservation strategies.



HABITAT CONSERVATION ON SERVICE LANDS

Through 2005, meet the identified habitat needs of Service lands by supporting fish and wildlife species populations objectives through the restoration of 600,000 acres and annual improvement or enhancement of 3.2 million acres of habitats and the addition of 1.275 million acres within the Refuge System boundaries.

PURPOSE OF GOAL

The purpose of this goal is to protect and manage habitat quality of the lands and waters owned and managed by the Service, principally the National Wildlife Refuge System. (<http://refuges.fws.gov/>). The goal meets the needs of endangered and threatened species, migratory birds, marine mammals, fish, and other trust species that require habitats to meet their life cycle requirements. The authorities to provide for these species needs include the *Endangered Species Act*, the *Migratory Bird Treaty Act*, the *North American Wetlands Conservation Act (NAWCA)*, *North American Waterfowl Management Plan (NAWMP)*, and the *National Wildlife Refuge Administration Act*. Lands purchased for the Refuge System often require restoration or enhancement to meet the full needs of trust species or to improve depressed populations. This goal measures progress on the land and waters where these species live.

IMPORTANCE OF GOAL

Lands protected through the Refuge System are in public ownership to meet the life-long habitat needs of fish, wildlife, and plant resources. The American public expects that refuge habitat should be protected or

enhanced in order to meet those needs for the benefit of current and future generations. The Service has primary responsibility for endangered and threatened species, migratory birds, certain marine mammals, and fish that migrate across state and international waters. The Refuge System mission is to administer a national network of lands and waters for the conservation, management, and restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations.

STRATEGIES FOR ACHIEVING THE GOAL

The Service has organized its habitat conservation strategy on refuges around four basic premises:

- First, refuge habitats must be managed to improve their value for fish, wildlife and plants;
- Second, refuge habitats will require restoration of degraded lands to a more natural condition;
- Third, additional refuge lands may be needed to support fish and wildlife populations; and
- Fourth, the biological integrity, diversity, and environmental health of the Refuge System must be maintained and monitored.



“Refuges are places where the music of life has been rehearsed to perfection, where nature’s colors are most vibrant, where time is measured in seasons, and where the dance of the crane takes center stage. They are gifts to ourselves...”

— U.S. FWS, 1999. Fulfilling the Promise, The National Wildlife Refuge System

A refuge does not exist in isolation. Habitat on refuges can be threatened by external factors, such as contaminated air and water, altered or depleted water supplies, and other land and water uses within the ecosystem. Therefore, refuges must be managed in concert with adjacent lands. The Service will work cooperatively with partners, private landowners, tribes, local governments and other federal agencies to sustain healthy habitats on refuge lands.

Healthy ecosystems are necessary to sustain quality habitat on lands in the Refuge System. There is a growing need to identify threats and contaminant issues that may compromise the ecological integrity of refuge lands. The Service will develop a comprehensive resource assessment system across refuge lands.

The Service will manage habitats using moist-soil techniques; manipulation of impoundment water; prescribed fire; invasive species control; and cooperative haying, grazing, and farming. Rather than hold water high in impoundments year-round just for waterfowl, levels are timed to provide habitat for migrant shorebirds or to accommodate fish passage and spawning. Rather than plant tame grasses just for ducks, a full array of native grasses start to become available to help rebuild prairie diversity. The Service will restore previously drained wetlands, replant native grasslands or forests, protect water rights, resolve contaminant problems, and put in place infrastructure for required habitat management.

The Service will acquire land for the Refuge System by purchasing either in fee title or less than fee title interest in real property to ensure adequate protection of lands. Lands are also acquired through transfer from other federal agencies. (<http://realty.fws.gov/>). The Service will utilize our Land Acquisition Priority System that provides a nationwide biologically-based evaluation procedure to prioritize lands and waters for acquisition.

ANTICIPATED RESULTS

Enhanced and restored habitats for endangered plant communities and improved biological integrity of unique ecosystems will bring the habitat nearer to a fully restored or naturally occurring condition.

Did you know that:

- The Refuge System plays a significant role in the recovery of endangered species. More than 400 refuges provide a home for at least one threatened and endangered species during some part of the year.
- Ducks, geese, and swans are among the most visible and economically important migratory birds on the North American continent. The Refuge System contains millions of acres of breeding and wintering habitat, and corridors of vital migration stopover habitats, assisting to meet the objectives of the North American Waterfowl Management Plan. Over 600 species of migratory birds other than waterfowl are increasingly the focus of management efforts by the Refuge System and the Service as a whole.
- In the United States, the Service has primary jurisdiction for four species of marine mammals — manatee, polar bear, walrus and sea otter — which extensively use refuge land or immediately adjacent waters.
- Fishery management is a regular part of the management program on many refuges. About 300 refuges support sport fishing, and four have been established specifically to conserve and enhance fisheries.
- Science-based management of habitats is essential to enabling the Refuge System to support the full range of fish, wildlife, and plants of the country. Refuges maintain or restore an ecosystem's biodiversity.
- Millions of citizens visit and recreate on National Wildlife Refuges, which not only adds significantly to the economy but to the overall quality of life for U.S. citizens and visitors.

The recovery of threatened and endangered species, prevention of species becoming endangered, maintenance of wildlife habitats and populations will ensure that the American public is able to enjoy wild land recreation and wildlife-dependent recreation. Ultimately, preservation of these species and the ecological framework of our natural resources benefit the American public by helping to maintain a healthy environment and an improved quality of life for present and future generations.

- The restoration of hydrology of wetlands, reestablishing native grasslands, and reforestation provides secondary benefits of air and water quality improvement.



STEWARDSHIP OF FWS FACILITIES

By 2005, 23 percent of mission critical water management and public use facilities will be in fair or good condition as measured by the Facilities Condition Index.

PURPOSE OF GOAL

To accomplish its conservation mission, the Service must maintain an extensive infrastructure which includes over 5,000 buildings, 9,000 miles of roads, more than 500 bridges, more than 600 dams, 8,000 miles of dikes, 500 miles of hiking trails, thousands of water control structures, 10,000 miles of fencing, and a wide variety of vehicles and equipment. This goal focuses on maintenance of two high priority facilities and has the objective of bringing deteriorated water management facilities essential to protecting critical fish and wildlife resources back to full operating capacity, and ensuring public use facilities are accessible and safe. The Service chose water management and public use facilities because of their importance to our mission; they represent about one-half of the property items under Service ownership.

IMPORTANCE OF GOAL

Adequate, well-maintained equipment and facilities are necessary to carry out the extensive natural resource, fish production, and public use functions of the Service. The average condition of facilities in the National Wildlife Refuge System and the National Fish Hatchery System is poor. This evaluation is based on a facility condition index which measures the cost of deferred maintenance projects as a fraction of the total capitalized value of a facility.

Fully functional water management facilities are essential to the high priority fish recovery, restoration, mitigation, and management missions, especially in the National Fish Hatchery System where about 80 field stations devote extensive effort to propagation of fish and other aquatic animals. One hundred and twelve fish species in the U.S. are listed under the *Endangered Species Act*. Fish hatcheries are recovering 33 of these listed species, and need quality water supplies managed

in a mix of raceways, ponds, and other water management facilities to fulfill their roles as propagation and refugia centers. Water management facilities are also crucial to fish and wildlife habitat management goals in the 93 million acre National Wildlife Refuge System. Wetlands are among the most productive habitats for a wide variety of fish and wildlife; the refuge system manages water levels on about two million acres each year to improve conditions for migratory birds, endangered species, and resident fish and wildlife associated with wetland habitats.

More than 36 million people visit refuges and hatcheries each year. Adequate signage and interpretation as well as safe and functional public use facilities such as trails, boardwalks, observation decks, fishing piers, kiosks, visitor centers, tour roads, aquariums and fish ponds, boat ramps, and access points are essential to meet legislatively mandated public use goals.





STRATEGIES FOR ACHIEVING THE GOAL

The Service is working to improve management of various databases dealing with maintenance, ownership, inspection, and management of its equipment and facilities.

Through the development of an integrated management information system, increased data sharing will allow for linkage of the other critical maintenance management systems and real property inventory systems. A uniform, comprehensive facility condition assessment process is being implemented that will require a real property inspection every five years to document maintenance deficiencies and repair costs.

Collectively, the above efforts are providing continual improvement of maintenance and real property data and are improving both facility management and appropriation's accountability, with safety and resource protection as high priorities.

ANTICIPATED RESULTS

The benefits anticipated from improving the condition of water management and public use facilities include the ability to meet fish restoration and recovery goals, wildlife habitat management objectives, and visitors' expectations of safe, enjoyable visits where they experience and learn about the Service's fish and wildlife conservation mission. By improving the condition of our facilities, the Service's partners in its many cooperative management programs will continue to regard the Service as a fully capable, willing partner in these integrated efforts.



HABITAT CONSERVATION OFF SERVICE LANDS

By 2005, improve fish and wildlife populations focusing on trust resources, threatened and endangered species, and species of special concern by enhancing, restoring and establishing 280,000 acres of wetlands habitat; restoring 524,000 acres of upland habitats; and enhancing and/or restoring 4,150 riparian or stream miles of habitat off Service land through partnerships and other identified conservation strategies.

PURPOSE OF GOAL

The primary objective of this goal is to enhance and/or restore various important habitats off Service lands to improve fish and wildlife populations. The focus will be on wetland, upland, riparian, and stream habitats that benefit those trust resources for which the Service has primary responsibility, including threatened and endangered species, migratory birds, anadromous fish, and certain marine mammals.

IMPORTANCE OF GOAL

The major threat to coastal fish and wildlife habitats is development pressure associated with human population growth. Human population density in coastal counties is five times that in the rest of the country, and it is estimated that 75% of the U.S. population will live within 50 miles of the coast by 2010. With more and more people moving to the Nation's coasts, the demand increases for strong public-private partnerships to conserve the health of such areas for the benefit of people, fish, wildlife, and plants.

More than 70% of the Nation's riparian habitats have been lost or significantly degraded, 53% of the Nation's wetlands have been destroyed, and 95% of our tall grass prairie has been lost. Consequences of habitat loss include decreases in wildlife populations and many other economic impacts to the American people including decreased water quality, loss of valuable topsoil, decreased land productivity, invasions by exotic species, declining watershed health and, ultimately, a decreased quality of life.

Wetland acreage in the U.S. has been reduced by 50%. Only 42 rivers greater than 125 miles in length remain free-flowing, less than 2 percent of the Nation's 3.1 million miles of rivers. Approximately two and one-half million dams and many more million smaller obstructions block our Nation's waterways. One hundred and twelve fish species are listed as threatened or endangered under the *Endangered Species Act*. Over one-third of all freshwater fishes in the U.S. are at risk of extinction. Two-thirds of the U.S. freshwater mussels are vulnerable to extinction or already extinct.

Waterfowl and other migratory birds continue to decline throughout their ranges and the demand for protection and restoration of habitats is ever-present.



STRATEGIES FOR ACHIEVING THE GOAL

We achieve our habitat conservation off FWS lands through a variety of voluntary conservation approaches:

The **Partners for Fish and Wildlife Program** will provide private landowners with restoration expertise and financial assistance to improve the condition of fish and wildlife habitats on their lands. The Partners program forms partnerships with other entities interested in habitat restoration at the local level and leverages significant additional funds to provide private landowners with both technical and financial assistance to restore habitats for Federal trust species such as migratory birds, anadromous fish, and threatened and endangered species. (<http://www.partners.fws.gov/>).

The **Coastal Program** conserves fish, wildlife, and their habitats in the Nation's coastal areas by forming partnerships with Federal and State agencies, local governments, conservation organizations, businesses, and private landowners. The Coastal Program leverages funds with these partners, takes an ecosystem-based approach to habitat mapping and assessment, focuses on on-the-ground projects, and catalyzes interagency projects by providing partners with coastal habitat restoration expertise and financial assistance. (<http://www.fws.gov/cep/coastweb.html>)

The **Fisheries Program** provides technical assistance to states, local governments and private groups on the development of fishery restoration plans that identify and restore key habitats. The Fisheries Program is developing a national river barrier database and working with partners to remove or provide fishways past barriers. (<http://fisheries.fws.gov/>)

The Service is building partnerships through the *North American Wetlands Conservation Act* and the *North American Waterfowl Management Plan* (<http://www.northamerican.fws.gov/>). Approximately 4.6 million acres of wetlands and associated uplands have been acquired, restored, or enhanced in North America since 1991. These programs represent a diverse mix of government and non-government organizations dedicated to the conservation and restoration of wetlands and associated uplands to assure protection of migratory bird populations.

ANTICIPATED RESULTS

- The Partners for Fish and Wildlife program will work cooperatively with private landowners to restore native habitats for Federal trust species and improve the overall condition of water, air, soil, plants, and animals. Habitats restored will include: inland and tidal wetlands, native grasslands, prairie and rangelands, riparian habitats, in-stream aquatic habitats, and other habitats for declining species.
- The American public, both anglers and non-anglers, will benefit from an improved aquatic habitat. Fish and other aquatic species will have access to more of their historic spawning and rearing areas, therefore increasing populations. Not only will fish populations increase, but humans, other mammals, birds and other aquatic organisms will benefit.
- The Coastal Program will conserve fish, wildlife and their habitats in the Nation's coastal areas by forming partnerships with Federal and State agencies, local governments, conservation organizations, businesses, and private landowners. The Coastal Program will leverage funds with these partners, take an ecosystem-based approach to habitat mapping and assessment, focus on on-the-ground projects, and catalyze interagency projects by providing partners with coastal habitat restoration expertise and financial assistance.
- NAWCA-supported projects will focus on protecting, restoring, and/or enhancing critical habitat. Mexican partners will develop training and management programs and conduct studies on sustainable use as well.





KEY FACTORS AFFECTING MISSION GOAL 2

There are several key factors external to the Service and beyond its control that could significantly affect the achievement of this mission goal. They include:

- Natural phenomena, such as weather and earthquakes, that can affect the occurrence and abundance of fish and wildlife and destruction of their habitats do not exceed their normal occurrences.
- Much of the success of Service programs relies on the collaboration of other Federal agencies and the voluntary cooperation of the private and public. Economic factors may provide incentives to increase the unlawful take of fish and wildlife.
- There are adequate incentives for public, private and corporate entities to participate in the conservation or enhancement of habitats for fish and wildlife.
- Social, political, and economic factors influence the willingness of people to take individual responsibility for compliance with the legal and ethical requirements of resource protection.
- No major spills or other man-made environmental accidents affecting fish and wildlife resources will occur.
- Expansion of the network of land envisioned under this goal depends on maintaining a broad base of support for conserving lands and waters important to the country's fish and wildlife.



Mission Goal 3

PUBLIC USE AND ENJOYMENT

Provide opportunities to the public to enjoy, understand and participate in use and conservation of fish and wildlife resources.

This mission goal, *Public Use and Enjoyment*, recognizes the public benefit that Americans enjoy from experiencing fish, wildlife and their habitats. Our goal is to inform and provide opportunities to the public to experience fish and wildlife resources in their natural settings. We will focus activities on National Wildlife Refuges and National Fish Hatcheries that increase opportunities for the public to participate in the experience of fish and wildlife resources. Our challenge is to provide environmental information in a manner such that the public understands how their well-being is linked to the well-being of fish and wildlife populations and their habitats. The interdependence of the Service, its partners and the American public with fish and wildlife and their habitats is the foundation of this mission goal.

More than 36 million people visit the National Wildlife Refuges and National Fish Hatcheries each year. Visitors to refuges and hatcheries represent a broad spectrum of

constituents including hunters, anglers, wildlife and plant observers, and photographers. While these visitors enjoy the varied facilities that the Service offers, few really understand how best to provide the habitat essential to wildlife's survival. The public will have access to information about fish and wildlife needs and the balance between healthy wildlife environments and healthy human environments.

The results of a knowledgeable public should be improved conservation of fish and wildlife in habitats throughout the country. We plan to continue our tradition of excellence in interpretative programs and exhibits throughout its National Wildlife Refuge System and National Fish Hatchery System, as well as alerting the public to activities that may jeopardize fish and wildlife resources. Public acceptance of responsible stewardship is necessary to sustain ecosystems. Public stewardship of fish and wildlife resources should reduce



pressure to include habitats only in federal reserves and should minimize threats to species causing their listing as threatened or endangered under the *Endangered Species Act*.

In this world it is not what we take up but what we give up, that makes us rich.

— Henry Ward Beecher

An informed and involved public understands the decisions of resource management agencies. Traditionally, policies ranging from endangered species protection to prescribed burns and refuge predator control have not always been viewed as positive actions because these concepts have not always been well understood. Improved interaction and increased communication between our citizens, visitors, and Service staff should increase the effectiveness of public participation in conservation programs on refuges and hatcheries and

private lands. Private citizens, whose voluntary participation in fish and wildlife protection efforts have laid a foundation on which we operate today, have much to contribute to the continuing conservation of fish and wildlife resources.

The Fish and Wildlife Service has established two long-term goals that focus our work on providing opportunities for *Public Use and Enjoyment* of fish and wildlife resources.

3.1 Greater Public Use On Service Lands

By 2005, compatible, wildlife-dependent recreational visits to National Wildlife Refuges and National Fish Hatcheries have increased by 20 percent from the 1997 levels.

3.2 Opportunities for Participating in Conservation on Service Lands

By 2005, increase volunteer participation hours in Service programs by 7 percent, and refuges and hatcheries have 155 new friends groups above the 1997 levels.



GREATER PUBLIC USE ON SERVICE LANDS

By 2005, compatible, wildlife-dependent recreational visits to National Wildlife Refuges and National Fish Hatcheries have increased 20% from the 1997 level.

PURPOSE OF THE GOAL

The National Wildlife Refuge System and National Fish Hatchery System offer the public the opportunity to gain direct experience with the natural world and wildlife management concerns. Visitors to refuges and hatcheries represent a broad range of constituents including hunters, anglers, school groups, wildlife and plant observers, and photographers. The intentions of this goal are to increase public participation and educational and recreational opportunities on Service lands.

IMPORTANCE OF THE GOAL

Approximately 98% of the land in the National Wildlife Refuge System is open to the public for wildlife dependent education and recreation. Visitors to refuges contributed more than \$400 million to local economies in 1995 based on the Service's economic evaluation in 1997.

More than 36 million people visit National Wildlife Refuges annually. Refuges are places where visitors can observe, learn about, and enjoy plants and animals in natural surroundings. Recently new legislation, the *National Wildlife Refuge System Improvement Act*, directed expanded opportunity for six primary public uses for refuges: wildlife photography, fishing, hunting, wildlife observation, environmental education, and interpretation. Refuges offer a visitor center, auto tour routes, wildlife observation facilities, nature trails, interpretive tours, outdoor classrooms and workshops. Along with on- and off-site education programs, these activities help build an understanding and appreciation for wildlife, habitat and the role management plays in the stewardship of

Americans' resources. More than 50% of refuges offer recreation hunting and fishing. Approximately 90% of refuge visitors participate in wildlife-dependent recreational and educational activities.

Nearly two million people visit the National Fish Hatchery System annually. National Fish Hatcheries are places where people can heighten their environmental awareness and become informed about fishery management and aquatic ecosystem management. Most hatcheries have visitor centers that provide information on the role of hatcheries and the importance of maintaining a quality environment for fish and other wildlife. Some National Fish Hatcheries provide nature trails, and outdoor laboratories for school groups, environmental organizations, and universities. Additionally, many National Fish Hatcheries have initiated cooperative programs with secondary schools providing instruction in fish biology, aquaculture, fishing, and ecosystem stewardship. For further information on our Fisheries program, please visit our web site: (<http://.fisheries.fws.gov/>).





National Fish Week, an annual activity designed to provide increased opportunities for public enjoyment of the resource, is supported by 67 National Fish Hatcheries. A fishing clinic, display aquariums, demonstrations, and environmental education sessions are highlights of the week's events.

STRATEGIES FOR ACHIEVING THE GOAL

The National Wildlife Refuge System and National Fish Hatchery System offer visitors the opportunity to gain direct experience with the natural world and wildlife management concerns. As the number of visitors keeps increasing, the Service must improve public use, environmental education, recreational, and interpretive programs on refuges and hatcheries to better serve these visitors. This challenge requires a broad set of strategies:

- Increase outreach with local and national communities, school groups, and associations. Outreach efforts promote interdisciplinary approaches and perspectives that encourage innovative solutions to resource problems, and increase our expertise and effectiveness through team effort.
- Collect and report visitation information using Fisheries Operational Needs System for components of the National Fish Hatchery System. This feedback will enable Service managers to more effectively manage their programs and provide improved customer service.
- Continue local and national involvement in National Fishing Week. Tens of thousands of people across the country participate in thousands of events and activities organized in conjunction with the annual National Fishing Week. The events are aimed at encouraging Americans to fish and learn about natural resource stewardship.
- Improve and/or provide disability access to visitor centers, aquariums, education buildings, and other public access facilities at National Wildlife Refuges and National Fish Hatcheries. The Service is committed to enhancing opportunities for everyone to enjoy fish and wildlife in their natural settings.

- Through the National Wildlife Refuge System Centennial in 2003, we will take advantage of strategic opportunities to highlight the Refuge System and the opportunities it provides to experience some of America's wildlife spectacles. The Refuge System as well as other Service programs will focus on delivering quality programs for our visitors.
- In response to the Refuge System Improvement Act and the vision defined in the July 1999 "Fulfilling the Promise" document, the Refuge System is updating policy to provide clear, consistent guidelines for administering priority wildlife-dependent recreation; is pursuing improved training to enhance skills in managing visitor programs; and is targeting funding increases toward improved public use programs.

ANTICIPATED RESULTS

- Visitors to Service lands will be well-oriented to refuges and hatchery opportunities. They will have the opportunity to understand key resource issues through interpretive and educational programs (both on- and off-site). They will have modest but well-maintained facilities that support wildlife-dependent recreation. They will have access to courteous and helpful Service staff to provide for safety, security, and to answer questions.
- The American public will understand the need for healthy ecosystems and fish populations, resulting in improved conservation of fish and wildlife in habitats throughout the country.
- Visits to refuges and hatcheries will increase through increased outreach with local communities, school groups, and associations. These visits will increase the American public's understanding of the contribution of the National Wildlife Refuges and National Fish Hatcheries and their role in good science management practices.

OPPORTUNITIES FOR PARTICIPATING IN CONSERVATION ON SERVICE LANDS

By 2005, increase volunteer participation hours in Service programs by 7%, and establish 155 new friends groups at refuges and hatcheries above the 1997 levels.

PURPOSE OF THE GOAL

The purpose of this goal is to a) provide opportunities for members of the public who wish to take an active role in the conservation of fish and wildlife; and b) offer additional public recreational opportunities on refuges and hatcheries through volunteer assistance that would not otherwise be available.

This goal will increase opportunities for citizens to gain direct experience with the natural world through volunteer activities either as an individual or within an organized such as "Friends" group. "Friends" groups are local citizens who come together to form nonprofit volunteer organizations in support of the mission of their local National Wildlife Refuge, National Fish Hatchery, or other Service office. These volunteers are a vital link to the community and to conservation of fish, wildlife, and plants. For further information on becoming a volunteer or joining a "friends" group, please visit the Service's web site: (<http://refuges.fws.gov/people.html>).

IMPORTANCE OF THE GOAL

For nearly 100 years, the Refuge System has tapped into an almost unlimited reservoir of support from individuals, organizations, academia, nonprofit groups, community leaders, and businesses.

Because the Fish and Wildlife Service is the principal Federal agency responsible for conserving, protecting, and enhancing fish, wildlife, and plants and their habitats, we could not begin to carry out these tremendous responsibilities without the assistance of volunteers and our "Friends" groups. They accomplish 18-20% of work we would not accomplish without their efforts. Their efforts save taxpayers over \$14 million per year.

As development, habitat fragmentation, and other threats occur, private citizens make the difference. We depend on volunteers and grassroots organizations to

assist us the conservation and protection of natural resources. Recruiting and retaining volunteers, forming new relationships with "Friends" groups and sustaining them takes time, commitment, and dedication of our employees.

Public interest in participating in Service programs exceeds capacity and we expect it to continue to do so. The National Wildlife Refuge and National Fish Hatchery Systems will continue to offer unique opportunities for interested individuals or organizations to improve natural resource programs or visitor experiences.

STRATEGIES FOR ACHIEVING THE GOAL

Volunteers are recruited and trained to assist in a variety of refuge activities including habitat management, education, public use, maintenance, and research. These hands-on experiences provide tremendous benefits to





refuges, while increasing public understanding and appreciation of wildlife resources and management of wildlife resources. Working side-by-side with Service employees, volunteers protect, conserve and restore our nation's fish, wildlife, plants and habitat. To ensure a constant supply of volunteers, the Service must deploy a variety of strategies:

- Establish a team to implement the *Volunteer and Community Partnership Enhancement Act of 1998*. The Act reaffirms the commitment and need to work with volunteers and partners to expand the ability to accomplish the mission of the National Wildlife Refuge System.
- Evaluate the pilot volunteer coordinator program through a contractor and take their recommendations for improving and enhancing the effectiveness of the refuges and hatcheries.
- Implement cooperative agreements with private groups and academic institutions to make information about volunteering and its benefits more readily available to individual citizens and guests. Recruitment will also be conducted on the Service's home page on the Internet (<http://refuges.fws.gov/>), where a volunteer database provides access to information about available volunteer positions.
- Host workshops and training sessions for volunteers and prospective partners to increase the effectiveness of volunteer partnerships, to strengthen ties with local communities, and to assist in improving existing and initiating new "Friends" organizations. One hundred Service employees will receive training in developing "Friends" Groups.



KEY FACTORS AFFECTING MISSION GOAL 3

- Weather catastrophes could damage and/or destroy public visitation facilities and could hamper construction projects directed toward creating outreach, visitor, or education facilities.
- Social, political, and economic factors influence the willingness of people to take individual responsibility for compliance with the legal and ethical requirements of resource protection.
- In some instances, the Service's ability to meet this goal is dependent upon finalizing agreements with others, which often requires complex negotiations at local, state, and federal levels.
- State of the economy and employment rates.

ANTICIPATED RESULTS

- Volunteers will develop a greater understanding and appreciation of refuges, hatcheries and other areas through their hands-on experiences, thereby helping protect, conserve, and restore our nation's fish, wildlife, plants, and habitat.
- Volunteers will enable expansion of the number of field projects, information and education programs, recreational opportunities, and propagation programs undertaken by the Service.
- Creation of additional "Friends" groups will supplement the Refuge System's interpretation education, biological, and public service programs.
- Volunteers will promote partnerships with state and local governments, individuals, and private groups. This will result in leveraging resources among organizations dedicated to the conservation and management of fish and wildlife resources.

Mission Goal 4

PARTNERSHIPS IN NATURAL RESOURCES

Support and strengthen partnerships with Tribal Governments, States, local governments, and others in their efforts to conserve and enjoy fish, wildlife, and habitat.

As the Service strives to create a stronger system for maintaining or improving environmental systems essential to the sustainability of fish and wildlife, we know this job cannot be done alone. The intention of this goal is to focus our efforts to support a network of working relationships by building on common interest and values to achieve the greatest possible benefit for the resource. This mission goal encompasses the statutory mandates, formal agreements, and less formal arrangements where we have responsibility or may assist others in conserving natural resources. While we appreciate and are committed to working with all of our partners and stakeholders collaboratively, for this Strategic Plan we are concentrating on two areas that are currently in need of particular attention — our Tribal relations and our Federal Aid program.

TRIBAL

The Service understands our trust responsibility to tribes across the country. The Service is committed to working with tribes to assist them in the protection and conservation of fish and wildlife resources. The Service has a long history of working with Native American governments in managing fish and wildlife resources. These relationships will be expanded, within the Service's available resources, by improving communications and cooperation, providing fish and wildlife management expertise and assistance and respecting the traditional knowledge, experience and perspectives of Native Americans in managing fish and wildlife resources. We are working to enhance partnerships with the tribes to address specific resource issues. The long-term goal acknowledge our commitment and support for Tribal Partnerships.



STATE PARTNERSHIPS — GRANTS MANAGEMENT

The Service has partnered with state governments for many years in the conservation of fish and wildlife populations. State agencies are integral to the successful conservation of American fish and wildlife resources. Through the *Sport Fish Restoration and Wildlife Restoration* grants to States programs, States have been key contributors in the conservation of important fish and wildlife habitats, restoration of declining migratory bird populations, expansion populations of resident species such as wild turkey, white-tailed deer, pronghorn antelope, and American elk, and the development of wildlife management areas providing opportunities for birdwatching, nature photography and other outdoor pursuits.

The Service administers state grants programs in support of sport fish restoration and wildlife restoration activities. The Service maintains a Federal fiduciary responsibility to ensure that Federal grant funds are used consistently with legislative requirements. After the Service awards funds to states, each state has full responsibility and authority to implement funded actions. The Service recognizes that these assistance programs offer unique opportunities to build commonly held understandings about how to reach commonly shared goals for protecting and restoring fish and wildlife habitat throughout the United States. The long-term goals set standards of performance for the Service over the next few years to improve the business operations and internal and external accountability of the grants programs.

OTHER FEDERAL AGENCIES

Among the partners with whom FWS works closely are other Federal agencies. Our responsibilities for threatened and endangered species, migratory birds, some marine mammals, and fisheries intersect with or support the work of many Federal offices. We must work closely with these Federal partners to ensure that the Service resources are directed in a way that complements other Federal efforts, without duplication, and supports the achievement of common goals. This new element in our revised strategic plan underscores the importance of strong coordination among Federal partners.

LOCAL GOVERNMENTS, INDUSTRY AND PUBLIC ORGANIZATIONS

Natural resource issues often originate and are resolved at the local level. The Service engages and assists local leaders and communities in an effort to meet and resolve these challenges. The Service works with stakeholders across the country, providing resource information of concern and technical assistance to them. Furthering electronic government, we are employing new technologies to make information more accessible and relevant to the public.

Ecosystems do not respect political or bureaucratic boundaries. Neither do the natural resources that inhabit these systems. Full, collaborative public stewardship of fish, wildlife, and plant resources and habitats should reduce pressure to conserve only Federal lands, and thereby minimize threats to species and habitats, reducing the need to list species as threatened or endangered under the Endangered Species Act. Together, we can create and maintain a network of interconnected, healthy ecosystems for the public's health and enjoyment.

As our partners take a greater role in maintaining our natural resource heritage, working together, we can more effectively use Federal dollars and expertise to supplement local efforts. The Service encourages public stewardship activities by offering a variety of grants programs for restoration of wetlands, related habitats, and coastal areas as well as for other conservation efforts. We match funds and provide in-kind services

and share information under a host of agreements with partners as diverse as the Wildlife Management Institute of the New York Department to Safari Club International. Many of these entities provide us with a valuable source of volunteers who can carry out a multitude of services to further deliver our mission, from bird banding to distributing educational material.

By delivering the long-term goals set out below, we will significantly further Mission Goal IV as well as our overall mission of conserving fish, wildlife, plants and their habitats for the continuing public benefit.

The Fish and Wildlife Service has established three long-term goals that focus our work on strengthening our *Partnerships in Natural Resources*.

4.1 Tribal Governments

Through 2005, improve fish and wildlife populations and their habitats by increasing the annual Service fish and wildlife assistance to Native American tribes in furtherance of the Native American Policy to 8 training sessions, 75 tribal participants, 20 technical assistance projects, 10 new cooperative agreements, and 20 Tribal consultations.

4.2 Sport Fish and Wildlife Restoration Grants Management

By 2005, the Service will improve grants management through automation for 80 percent of the States' and territories' grant proposals.

4.3 Partnerships in Accountability

By 2005, the Service will have in place processes and procedures to ensure accuracy, consistency, and integrity in all its Federal Aid internal and external financial programs.



TRIBAL GOVERNMENTS

Through 2005, improve fish and wildlife populations and their habitats by increasing the annual Service fish and wildlife assistance to Native American Tribes in furtherance of the Native American Policy to 8 training sessions, 75 tribal participants, 20 technical assistance projects, 10 new cooperative agreements, and 20 Tribal consultations.

There are over 572 Federally recognized Indian Tribes in the United States. Federally recognized Tribes within the lower 48 States have jurisdiction over a reservation land base of over 52 million acres. Alaskan Native lands comprise another 45 million acres. Some Tribes control resources outside of reservations due to Federal court decisions and voluntary cooperative agreements that allow a co-management status between Tribes and States. These lands are called Ceded and Usual and Accustomed Areas and equal over 38 million acres. In these areas, Tribes maintain co-management jurisdiction for fisheries and wildlife management and utilization.



To Native Americans their land provides a cultural, religious, and economic subsistence base as well as an important source of outdoor recreation. Implicit in their culture, many Tribes take a holistic, integrated approach to resource management, which complements our ecosystem approach. Tribal lands contain habitat critical to recovery of numerous threatened and endangered species as well as preservation of a vast variety of fish, wildlife, and plant species.

Recognizing the importance of Tribal partnerships, in 1994, the Service issued its Native American Policy to help guide and expand on existing conservation partnerships. This policy sets forth ten principles within which the Service cooperates with Tribes to conserve fish and wildlife resources through government-to-government relations and consultation.

Secretarial Order 3206, issued June 5, 1977, provides significant guidance on our Federal-Tribal trust relationship. This order directs us to work with Tribes on a government-to-government basis; i.e., recognizing Tribal governments as the governments of separate, sovereign nations to whom we owe a trust responsibility, to promote healthy ecosystems on which sensitive species (including candidate, proposed, and listed species) depend. Secretarial Order No. 3206 and other policies we adhere to may be found at <http://www.doi.gov/oait> or <http://www.fws.gov/>.

PURPOSE OF THE GOAL

The purpose of this goal is to identify areas where both Federal and Tribal conservation efforts can most effectively conserve fish, wildlife, plants, and their habitats.

IMPORTANCE OF THE GOAL

This goal is important because it demonstrates to Native Americans the Service's willingness and commitment to advancing conservation by working cooperatively with our Tribal partners. In many instances, the Service's trust species are often the same as the animals and plants that are deeply linked to the Native American culture and tradition. Through Memoranda of Agreement (MOA) with Tribes, we have helped enhance and restore listed species across the nation, such as the gray wolf, the bald and golden eagles, and the Mexican spotted owl.

Where the Service provides training and hands-on technical assistance to Tribes, we can maximize conservation benefits for Tribal lands and for ecosystems overall. We have provided matching funds financial assistance for projects through our administration of the North American Wetlands Conservation Act.



In order to articulate mutual resource goals, the Service and Tribes must establish excellent communications and build trust. Once these are firmly established, successful resource programs and projects are generally the result. This approach is important because it helps empower Tribal resource managers to establish long-range resource goals, and increases the Tribe's economic potential.

STRATEGIES FOR ACHIEVING THE GOAL

Government-to-Government Relations: The Service will expand and improve its government-to-government approach to address mutual resource interests and concerns by engaging in Tribal consultations with each Tribe potentially impacted by our activities. We will ask any Tribes potentially impacted by our activities if we have identified a proper role for them in our processes, and we will address any concerns recognizing the rights of Native Americans to be self-governing. We will actively seek Tribal feedback on how well we are performing by surveying Tribal members, holding focus group meetings, and making our draft policies and regulations more readily available to Tribes, using the Native American Fish & Wildlife Society and other Native American organizations to ensure broad Tribal participation. We will evaluate and acknowledge this important feedback to help us improve our performance in a variety of ways.



Choctaw Dancers at Evening Dinner and Cultural Event

Training Tribes: The Service's primary focus will involve building skills to ensure that Tribes have a greater degree of flexibility and autonomy in managing

Cooperative wildlife programs have enhanced wildlife populations such that tourism on White Mountain Apache Land now represents a substantial portion of the Tribal economic base. Recreational fishing on the seven reservations in Montana, which are stocked in part by our hatcheries, accounts for an estimated \$26 million annually in revenues for the Tribes and the State.

resources on their lands. We will seek Tribal input in developing priorities for technical assistance and training. Between 2000-2005, we will develop and administer numerous training programs, including training on resource data collection, data management, and conservation law enforcement. The law enforcement training includes a 40 hour course load that leads to a certification widely recognized by State and Federal agencies to help Tribes further develop professional wildlife law enforcement operations on Tribal lands. As of May 2000, we have conducted nine such training sessions involving over 150 different Tribes.

We will expand our role in teaching technical skills, mentoring, and covering expenses for promising Native American students pursuing degrees in natural resources through our Co-op Education and Training Program. We will develop and implement a mentor program for Tribal students pursuing environmental stewardship careers.

In addition, we will make our employee natural resource training courses at the National Conservation Training Center (NCTC) in Shepardstown, West Virginia available to Tribes with cost waivers, when funding is available. We will support a Tribal liaison position at NCTC to help develop courses that will foster our Tribal partnerships.

Training Ourselves: To enable us to work together more effectively, between 2000-2005, we will train all Service employees who interact routinely with one or more Tribes on trust responsibilities, cultural awareness, traditional uses, treaty rights, and relevant legal and policy issues. In addition, we will work with the DOI University and the Native American Fish & Wildlife Society to refine a diversity and cultural awareness

training program for DOI employees that includes Native American issues and Tribal recruitment. We will reinstitute our trust responsibility course at NCTC, and offer that course to Service employees on a semi-annual basis. We will train our law enforcement and resource personnel on proper disposition of sensitive animal parts, e.g., eagle feathers, to Native Americans.

Grants and Technical Assistance: The Service will make challenge cost-share grants, including North American Wetlands Conservation funds, and Fish & Wildlife Management Assistance (FWMA) more accessible to Tribes. Each fiscal year, we will work with Tribes and the Native American Fish & Wildlife Society (NAFWS) to develop priorities and a formula for eligibility and allocation for technical and financial assistance to Native American governments for fish and wildlife conservation. At a minimum, we require that a Tribe be able to match 25%, which can include in-kind services. When funding is available, we will distribute grants to Tribal applicants, based on the importance of the resource issue. In addition, we will strive to publicize other sources of funding that will enable us to partner with Tribes, such as the Native Plant Conservation Initiative Program.

We will provide technical expertise to Tribes in the collection of natural resource data on Tribal lands, and share information on the development and management of mutually beneficial facilities, such as black-footed ferret quarantine facilities and the national Eagle and Wildlife Property Repository. We will extend our fish hatcheries' expertise to Tribes by providing assistance on invasive species and fish stocking issues. For example, in July, we executed an agreement with the Keweenaw Bay Indian Community to continue our partnership in the co-management of interjurisdictional fishery resources and exchange classes of trout hatched in our respective facilities to restore trout in the Great Lakes.

We will expand our assistance in ungulate and waterfowl management related to subsistence, restoration, recovery, or recreational activities.

Partnership for Law Enforcement: Through a partner-

ship with the Native American Fish and Wildlife Society, the Service has provided training to over 350 Tribal conservation law enforcement officers across the country. This effort addresses a concern brought to the attention of the Service through a 1996 *Needs Assessment* conducted by the Native American Fish and Wildlife Society in two of the FWS geographic regions. Recognizing certain budgetary and time constraints, the FWS law enforcement office in the western region will continue to partner with the Society in providing this training.

MOA for Restoration and Enhancement Activities: We will develop work plans and carry out restoration and enhancement activities for Tribes seeking our technical habitat and fisheries assistance. We will strive to replicate the fine example set by our existing partnerships with the Colorado River Indian Tribes to restore razor-back sucker and the bonytail chub to Lake Mojave and the recently signed Cooperative Agreement with the Northern Cheyenne Tribe, which creates an umbrella agreement by which the tribe can more effectively run programs to conserve targeted species and their habitats.

MOA for Communication: We will also use MOA to set out channels of communication to ensure that close trust relationships are developed and enhanced for each Tribe we share impacts with, using the MOA developed in 1999 with the Wampanoag Tribe of Gay Head as a model. By fostering closer working relationships and better understanding each others' cultures we will jointly improve fish, wildlife, and plant populations and their habitats.

Ecosystem Teams: Service ecosystem teams will seek to incorporate tribal input and partnership in Service ecosystem management goals. All Tribes potentially affected by our ecosystem plans will be afforded the opportunity to participate in developing and implementing such plans. Should a Tribe decline our invitation to be a full partner, each ecosystem plan will identify any known impacts to Tribal lands and how we are addressing any known Tribal concerns.



SPORT FISH AND WILDLIFE RESTORATION GRANTS MANAGEMENT

By 2005, the Service will improve grants management through automation for 80 percent of the States' and territories' grant proposals.

The Service has partnered with States and U.S. territories for many years to conserve fish & wildlife populations. The *Federal Aid in Wildlife Restoration Act* and the *Federal Aid in Sport Fish Restoration Act* receive funds from the excise taxes on such items as sport fishing tackle and equipment, motorboat fuel, firearms, ammunition and archery equipment. Funds are distributed to states and territories in the form of grants to restore, conserve, manage and enhance sport fishery and wildlife resources. Under these laws, our Federal Aid Office currently distributes more than \$480 million each year to support over 3,500 active grants to States and territories for approved conservation projects. In the more than 50 years since these grant programs began, State funds (chiefly from hunting license fees) of more than \$500 million have matched over \$2 billion in Federal excise taxes for wildlife restoration activities.

In addition to the Sport Fish and Wildlife Restoration programs, Congress enacted similar grant processes for coastal wetlands conservation, clean vessel pumpout stations, boating infrastructure and partnerships for wildlife. Currently, over \$20 million is available annually for grants to States and territories for these purposes.

Because of the size and scope of this program, it is essential for us to develop and maintain effective professional grants management practices. We have recognized the need to improve our technological capability and grants management process in order to fully meet the exponential growth and complexity of the grants programs. Together with the General Accounting Office, our Inspector General and our State/Federal Review Team and other workload analyses, we have identified strategies that will be undertaken over the next few years to strengthen our management and business practices supporting the federal aid grants activities.

PURPOSE OF THE GOAL

The objective of this goal is to develop a state-of-the-art electronic grants management system to provide efficient, effective delivery and tracking of grants and standardization of documentation for accountability, reporting, and auditing. Automation of grants processes will reduce data entry error and allow faster grant funding, so that States and territories can put the money to work to benefit resources.



IMPORTANCE OF THE GOAL

We have found that State and territorial agencies are integral to the successful conservation of American fish and wildlife resources. Through the Sport Fish Restoration and the Wildlife Restoration grants, States and territories have been key contributors to fish and wildlife conservation. These grants have enabled work with important fish and wildlife habitats to restore declining migratory bird populations and develop populations of resident species such as wild turkey, white-tailed deer, pronghorn antelope, and American elk. In addition, these grants have aided in the development of multiple use wildlife management areas, providing opportunities for birdwatching, nature photography, and other outdoor pursuits.

Getting grant funds to the States and territories in a timely manner to fund projects is the first step in fish and wildlife conservation in the Federal Aid program. Nationwide adoption of a standardized grants management system will greatly increase our efficiency and effectiveness in the processing and accountability of grants. It will also provide a standardized approach, common data sets/files, accurate financial accounting and reporting, and a consistent audit trail for effective grants management and enhanced data security. Reporting accomplishments to stakeholders and Congress in a timely manner is critical for developing and maintaining program credibility.

STRATEGIES FOR ACHIEVING THE GOAL

Working with the Department of the Interior, State and territorial partners, and others, we will:

- **Implement a fully operational interactive federal aid information management system.** We envision that this will be a multi-user system that accommodates real-time data collection and reporting. The system will economize the entry of data to an “enter once, use often” concept.

Our initial phase will address the development of a grant document tracking component. Grants must be processed in Federal Aid offices to make federally appropriated moneys available to eligible grantees for eligible activities. Information on receipts, processing, status and ultimate disposition of grant applications must be maintained. A critical element of the new system is a financial system component that is required to track financial information pertinent to individual grants and grants programs.

Improvements in grants information management will include a component to accommodate collection of information about various aspects of the grant programs for production of required Congressional or other national reports.

- **Train 100% of Federal Aid and State and territorial coordination staff in current grants management practices.** Using our National Conservation Training Center (NCTC), we will develop a standard core curriculum on best practices in grants management. This training will include how to use the Federal Aid Information Management System and our electronic grants application. We will have practical workshops and interactive learning as part of the curriculum so that participants will be prepared to handle complex, real-life situations. Our aim is to ensure that each Federal Aid employee and each State and territorial grants management employee is certified and able to implement best practices consistently in their daily work. The curriculum will emphasize accomplishment reporting so that all of our partners and stakeholders will be able to learn and benefit from our efforts. Knowledge clearly and timely recorded is knowledge that can be used for continuous performance improvement over time.

As an ongoing process, we are testing ideas with our State and territorial partners and using their valuable input to improve system development. As of this year, we are pleased to announce that we have developed the first phase of this integrated system, which allows access and real-time updating for all Federal Aid offices nationwide. By 2002, we will have developed a mechanism to bring this system to the Internet allowing State and territorial partners to provide updates and queries for the system in a consistent, verifiable manner. Most of the information will be available to the public for review so that the American people will be able to see how their tax dollars are put to work to benefit natural resources.

With regard to the President’s December 17, 1999 memorandum on Electronic Government (e-govt.), we will partner with technical experts to enable us to post and receive grant application materials on the web and to respond to inquiries on-line. We will also have information available concerning approved grants, so that



applicants will have models to replicate, but not duplicate. With an interactive system, we will be able to share information quickly and provide excellent customer service.

ANTICIPATED RESULTS

We will establish a single, web-based point of data entry for all grants resulting in consistency and fewer errors nationwide. We will use current technology to automate grant application, grant approval, accomplishment tracking, and management reporting. The Federal Aid Information Management System electronic grants component will provide simultaneous posting to both the Federal Aid and the Service's accounting system, virtually eliminating data entry differences in the two systems. The end result will be a more efficient, reliable, verifiable grants management system that ensures the public trust and provides dollars on the ground to effectively benefit the resources that need the most help.



PARTNERSHIPS IN ACCOUNTABILITY

By 2005, the Service will have in place processes and procedures to ensure accuracy, consistency, and integrity in all its Federal Aid internal and external financial programs.

PURPOSE OF THE GOAL

The objective of this goal is to establish, maintain and implement consistent standards, operating procedures, and regularly scheduled internal reviews and assessments of program operations.

IMPORTANCE OF THE GOAL

Because we maintain a Federal fiduciary responsibility to ensure that use of Federal grant funds is consistent with legislative requirements, the Service must provide for the conduct of an objective audit of the grants accountability, including financial and project performance. Further, we believe that as stewards of the public trust, the Service must also provide for the conduct of an objective audit of the Service use of administrative funds in the administration of the Federal Aid grants programs.

Removing errors and inconsistencies in the Service's and Federal Aid's financial systems and our use of these systems is critical in meeting our fiduciary responsibility for grants management as well as ensuring responsible use of public funds. As part of recent reviews of the federal aid programs, we discovered a lack of uniformity in the application and interpretation of federal aid standards guidance at field locations. During 1999, we successfully initiated the first cycle audit of the state grant activity. Further, the Service has recently initiated the first internal administrative review audit of the Federal Aid operations including funds accountability.

STRATEGIES FOR ACHIEVING THE GOAL

The Service will use a variety of strategies focusing on the two objectives for this goal. Critical to the success of these strategies will be consistency in communication of Federal Aid policies and guidance among Service Federal Aid staff and cooperation with partners in the delivery of the grants program.

- Developing criteria and requirements for the conduct of objective program audits.
- Promoting a work environment that fosters internal program assessments and evaluation of program delivery by the Federal Aid staff.
- Analysis and utilization of audit and program assessment findings as means to improve Federal Aid program delivery and strengthen internal administrative practices.

ANTICIPATED RESULTS

We believe that audit, evaluation and assessment provides important information for decision makers to assess the contribution programs are making to the results we want to achieve in the administration of the federal aid program. Evaluation allows us to determine or identify factors affecting performance and highlight opportunities to improve. Evaluation also avoids an incorrect assessment of program performance.



KEY FACTORS AFFECTING MISSION GOAL 4

There are several key factors external to the Service and beyond its control that could significantly affect the achievement of this goal.

- Changes in key Tribal positions relative to resource management. Different leaders could have different opinions of the importance of working with FWS and of conserving resources.
- Shifts in Tribal views regarding resource use and allocation. For example, a Tribal decision to develop

mineral resources at the potential expense of wildlife resources could complicate an MOA.

- Lack of stabilized Tribal fish and wildlife codes. Changes in Tribal leadership often lead to major changes in Tribal law. These changes may or may not be compatible with our mission. In addition, some of the laws are written in such a way as to be unenforceable or in direct conflict with other laws.



Delivering The Strategic Plan Through The Annual Plan

RELATIONSHIP OF LONG-TERM TO ANNUAL GOALS

The Service developed performance goals for its three annual performance plans, including FY 1999, FY 2000, and FY 2001 that relate directly with its long-term goals presented in our initial and revised Strategic Plans. The FY 2001, annual performance goals represent a significant step toward meeting the long-term goals set out in this revised five-year strategic plan. The Service will use this revised strategic plan as a basis for developing annual performance goals for the life of this plan from FY 2001 - 2005.

Each of the long-term goals has a performance target. The associated annual performance goals for each of the long-term goals is either:

- the same goal stated to achieve some reasonable or incremental proportion of the five year target embedded in the long-term goal statement, or
- an indicator(s) that represents an important contribution and/or initial process toward achieving the long-term goal within a five year time frame.

ASSESSING THE RESULTS

The final section of the five year strategic plan addresses the Service's approach to evaluating its progress and reporting its results in achieving the long-term goals presented in this document. The reporting process will support the Service's managers in assessing our results and making informed decisions about the priorities and direction of programs. An effective accountability process not only provides feedback on the success of specific programs, but also introduces a higher level of integrity into planning and resource allocation by holding managers responsible for performance. By analyzing actual performance, the Service can make better esti-

mates so that planning and resource allocation become more accurate and reliable.

The accountability process will involve annual performance reports, longer-term assessments of progress toward strategic objectives, and program evaluations. The annual performance reporting process will track progress the Service is making toward the results it is committed to achieving in its strategic plan. The annual assessment will include an evaluation of the relationships among Service actions, program activities, their results and the strategies used to achieve those results. The key to our accountability system is the development of sound performance measures; we will track results or activities to determine whether we are making progress toward our goals. We continue to refine, change and drop some of our measures in an effort to select the correct measurement tool of our performance. Annual performance reporting will help the Service determine if specific strategies worked well, or if progress is being made toward achieving its long-term goals. If progress in achieving the Service long-term goals is not being made, the annual performance report will indicate a need to change strategies to better achieve targeted results.

Achievement of long-term goals, as represented in this strategic plan, is reported incrementally through the annual performance reporting process. At the present time the Service has incorporated the annual performance report for the past year's results with the upcoming year's annual performance plan. The Service's long-term goals identify quantifiable targets. These targets can be used to develop the annual performance plans, which are then incorporated into specific field work guidance. Most baselines are measured from FY 1997.

The Service is committed to meeting reporting processes under the Government Performance and Results Act and allows for the assessment of its successes in accomplishing its long-term and annual performance goals.

COMMON GOALS ACROSS AGENCIES

The Fish and Wildlife Service is responsible for the protection and conservation of the nation's fish and wildlife resources, and recognizes the importance of partnerships with others in order to fulfill this mission. It is through a collaborative approach to conservation that the Fish and Wildlife Service can realize the accomplishment of the strategic plan's long-term performance goals outlined in this document.

Virtually, all of the results that we strive to achieve require the concerted and coordinated efforts of two or more agencies. Our long-term performance goals create a structure to involve more people and partnerships in shaping natural resource management. This dialogue can begin with the development of joint or common performance goals with other federal agencies concerned with natural resource management issues. Although the Fish and Wildlife Service plays an important role in conservation and protection of fish and wildlife resources, we recognize that no single government agency or collection of agencies can accomplish this task alone.

During the past three years, we have and will continue to make progress in the coordination of cross-agency efforts to ensure a more effective and efficient method for conserving and protecting natural resources. Examples of ongoing efforts include:

South Florida Everglades

Restoring the ecological integrity of fish and wildlife resources in the South Florida Everglades is a top National priority. The South Florida Ecosystem Restoration Task Force was established to provide leadership and coordination among federal agencies involved in meeting this natural resource challenge. As part of the Task Force, the Service engages in on-the-ground restoration activities. The Service manages 16 National Wildlife Refuges within the South Florida Ecosystem. Some of the other federal agencies participating in the combined restoration efforts are the National Park Service, National Marine Fisheries Service, Department of Defense, U.S. Coast Guard, Federal Aviation Agency, and U. S. Forest Service.

Northwest Forest Plan

In 1994, the Northwest Forest Plan was initiated and represents a comprehensive and cooperative approach to managing forest in the Pacific Northwest region. The Forest Plan provides economic and employment assistance to communities impacted by changing forest management practices, and for significant long-term conservation and management benefits of key species on federal lands, such as the northern spotted owl, marbled murrelet, grizzly bear, and gray wolf. In 1995, the Fish and Wildlife Service, National Marine Fisheries Service, Bureau of Land Management, and U.S. Forest Service signed an interagency memorandum implementing streamlined consultation for forest health projects.

Invasive Species

Invasive species are among the most significant domestic and international threats to fish and wildlife. Only habitat destruction has a greater impact on ecosystems and the fish and wildlife they sustain. Several pieces of legislation were passed to address this threat. The *National Invasive Species Act* was passed in 1996 amending the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990*. The 1990 Act established the Aquatic Nuisance Species (ANS) Task Force to direct ANS activities annually (<http://www.invasivespecies.gov/>). The Task Force is co-chaired by the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration. Other members include the National Marine Fisheries Service, Environmental Protection Agency, Department of Agriculture, the U.S. Coast Guard, the U.S. State Department, and the Army Corps of Engineers.

The National Invasive Species Council indicates that entry of invasive species is generally detected by federal agency staff (the Animal and Plant Health Inspection Service for plants and insects; U.S. customs and the Environmental Protection Agency for any living organism that is intended as a pesticide and potentially for organisms having certain consumer and industrial uses; the U.S. Fish and Wildlife Service for wildlife and fish; the U.S. Coast Guard for ballast water; U.S. Customs for general shipments; and the U.S. Postal Service for shipments by mail, state eradication boards, and state or local agency scientists.

The Fish and Wildlife Service, participating as a member of the National Invasive Species Council, is committed to the prevention and control of invasive species on all Service-managed lands and waters.

Recovery of Threatened and Endangered Species

The *Endangered Species Act of 1973*, one of the most comprehensive wildlife conservation laws in the world, demands a collaborative effort from a broad spectrum of partners in order to implement the Act's complex provisions. The law is administered by the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Both agencies work with other federal agencies to plan or modify federal projects so they will have minimal impact on listed species and their habitats. Under the Act, all federal agencies are required to protect species and protect their habitats. Federal agencies must utilize their authorities to conserve listed species and make sure that their actions do not jeopardize the continued existence of listed species.

Wetlands Working Group

In FY 1999, the Administration formed a White House Wetlands Working Group tasked with determining the contributions that Federal agencies were making to the quantity and quality of wetlands in the United States. The Fish and Wildlife Service was one of many Federal agencies, including Army Corp. of Engineers, Bureau of Land Management, Bureau of Reclamation, and Forest

Service that participated this national effort. Federal Agencies will jointly report wetlands conservation activities beginning in FY 2000.

Protection of Marine Mammals

The Service is currently working with the National Marine Fisheries Service and Alaska Native Organizations on an amendment package for the *Marine Mammals Protection Act (MMPA)*. Following reauthorization of the MMPA, the Service will establish cooperative management agreements with the appropriate Alaska Native Organizations to determine harvest guidelines.

Tribal Wetland and Waterfowl Enhancement

Long-term management and protection of waterfowl populations and wetland habitats throughout the Great Lakes Region have been a continuing, high-priority, natural resource concern. To address this issue, the Circle of Flight program was created in 1991, consisting of reservations and inter-tribal organizations, federal agencies, state and local governments, and private organizations. Some of the key federal partners include the Fish and Wildlife Service, Federal Energy Regulatory Commission, U.S. Department of Agriculture, Bureau of Indian Affairs, and Environmental Protection Agency. To date, we have provided technical assistance to 26 reservations for waterfowl and wetland enhancement projects.



*Restoring
Everglades*

Program Evaluation

In addition to annual performance reports, the Service will prepare periodic reports of progress toward our long-term goals. For some programs, we will conduct program assessments to analyze relationships between activities being conducted and the resources results. Criteria for selecting programs to assess will include the importance of the fish and wildlife issue being addressed and whether programs are on schedule to meet their long-term and annual performance goals. If timely progress is being made, the assessments will help show what is working and why. If not, we will examine the strategies

undertaken, program contributions toward achievement of the goal, as well the appropriateness of the performance measures being used to demonstrate success.

Recent evaluations have included GAO and IG Reports on oversight of the Federal Aid Program, National Fish Hatcheries' alignment of operations and priorities, and land acquisition activities. Appendix II contains a listing of all program evaluations that have been used in the development of this new strategic plan.



Appendix I

Index of Common GPRA Terms

Goal Category: This optional classification exists only to provide a common way of grouping the major themes of an organization.

Mission Goal is a classification identifying outcome-oriented goals that define how an organization will carry out its mission.

Long-Term Goals are the “general performance goals and objectives” identified in the *Government Performance and Results Act*. They define the intended result, effect, or consequence for what the organization does. They provide a measurable indication of future success by providing target levels of performance and a time frame for accomplishment. Long-term goals should focus on outcomes rather than outputs (products and services).

Annual Goal is a one-year increment of the long-term goal. It contains a targeted level of performance to be achieved for a particular year. It is to be expressed in an objective, quantifiable, and measurable form. OMB approval of an alternative form of evaluating the success of a program is required if the annual goal cannot be expressed in an objective or quantifiable manner.

GPRA Program Activity is described as the consolidation, aggregation or disaggregation of program activities that are covered or described by a set of performance goals, provided that any aggregation or consolidation does not omit or minimize the significance of any program constituting a major agency function or operation.

Strategic Goal Terms

(includes strategic goal numbers)

A

Adequate Population Information: Information on the status or trends of bird populations or habitats, gathered over a period of years, that has sufficient credibility to serve as a basis for undertaking management actions. [1.1]

Approved for removal (candidate species):

A candidate removal form has been signed by the Director. [1.2]

Approved for removal (proposed species):

A notice of withdrawal of the proposed listing rule has been published in the Federal Register. [1.2]

Approved management plan: A plan approved by the responsible management authority. [1.3]

B

Baseline Monitoring Programs: Long-term surveys designed to provide information on population status and trends of migratory birds. [1.1]

C

Conservation Plan: A document that identifies issues associated with a migratory bird species or population, or a group of species or populations, in a defined geographic area, and lists the strategies and tasks that must be accomplished to resolve the issues. [1.1]

Candidate: Species for which the Service has sufficient information on biological vulnerability and threats to propose them for listing and which have been approved by the Director for adding to the Service's Candidate list. [1.2]

Candidate Conservation Agreements: Formal agreements between the Service and one or more parties to address the conservation needs of proposed or candidate species or other nonlisted species before they become listed as endangered or threatened. Participants voluntarily commit to implementing specific actions that will remove or reduce the threats to these species. [1.2]

Conservation Agreements: Agreements entered into between the Service (on behalf of the U.S. Government) and Alaska Native Organizations and/or state and foreign governments that describe methods of enhancing conservation efforts of a marine mammal stock, outline responsibilities of each party in achieving stated goals, and define limitations of the agreement with respect to existing governmental and tribal legislation. Conservation agreements may be used to achieve reductions in human-caused mortality of marine mammals or to protect special areas (critical habitat), such as breeding, resting, and feeding areas, from unnecessary human disturbance. [1.4]

Conserve: To use all methods and procedures necessary to bring any species of international concern to the point at which such methods and procedures are no longer necessary. Such methods and procedures include but are not limited to all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance. [1.5]

D

Depressed interjurisdictional fish population: A population that is below its management goal as specified in an approved management plan. [1.3]

Deferred Maintenance Cost: The total cost to repair maintenance deficiencies identified in the Maintenance Management System. These costs may be aggregated at either the individual property level, the field station level, or in other combinations. [2.2]

Deferred Maintenance: Maintenance that was not completed on schedule. [2.2]

Delist: A process for removing a listed species from the lists of threatened and endangered species due to recovery, extinction, change in taxonomy, or new information. Delisting requires a formal rulemaking procedure, including publication in the Federal Register. [1.2]

Downlist: A process for changing a species' status from endangered to threatened due to a reduction in threats or improved status of the species. Downlisting requires a formal rulemaking procedure, including publication in the Federal Register. [1.2]

E

Endangered: In danger of extinction throughout all or a significant portion of its range. [1.2]

Enhanced: Areas where the quality of the habitat, which was previously destroyed, converted, or degraded (in whole or in part), has been improved for one or more species. Enhancement generally refers to an effort of lower intensity than restoration. [1.2]

Enhancement: The act of heightening or intensifying qualities, powers, values etc.; improving something already of good quality. [2.1]

F

Facility Condition Index (FCI): The ratio of accumulated deferred maintenance to the current replacement value as measured by the Maintenance Management System database and the Real Property Inventory. A ratio of less than 5% indicates a "good" condition, a ratio between 5% and 10% indicates a "fair" condition, and a ratio greater than 10% indicates a "poor" condition. FCI is an indicator of the depleted value of a bureau's constructed assets. In other words, the FCI illustrates the percentage of capital amount that a bureau would have to spend to eliminate the deferred maintenance. [2.2]

Facility: An individual item or group of similar items of real property valued at \$5,000 or more and documented in the Real Property Inventory. [2.2]

Field Station: An individual unit of the National Wildlife Refuge System, the National Fish Hatchery System, or other field unit managed by the U.S. Fish and Wildlife Service. [2.2]

Final Rule: A rule published in the Federal Register finalizing a previously proposed change in status of a species (list, delist, or downlist). [1.2]

G – NONE

H

Habitat Conservation Planning (HCP): Authorized in section 10(a)(1)(B) of the *Endangered Species Act of 1973*, as amended, the Habitat Conservation Planning process provides species protection and habitat conservation within the context of non-federal development and land use activities. Through development of a HCP, private landowners minimize and mitigate, to the maximum extent practicable, the incidental take of listed species associated with their actions (proposed, candidate species, and other non-listed species may also be included if requested by the applicant). In return, the Service issues an incidental take permit as long as the action will not "appreciably reduce the likelihood of the survival and recovery of the species in the wild." HCPs also provide a process that promotes negotiated solutions to endangered species conflicts while furthering conservation of listed and non-listed species. [1.2]

Habitat Enhancement: Improving habitat through alteration, treatment, or other land management of existing habitat to increase habitat value for one or more species without bringing the habitat to a fully restored or naturally occurring condition. [2.1]

Habitat Restoration: Returning the quantity and quality of habitat to some previous condition. Historic baseline considered suitable and sufficient to support healthy and self-sustaining populations of fish and wildlife is often established. [2.1]

I

Improved: Species whose numbers have increased since the last assessment and/or whose threats to their continued existence have lessened since the last assessment. This includes species that have reached stability following the last assessment. [1.2]

Interjurisdictional: Jointly managed by two or more states or national or tribal governments because of the scope of a population's geographic distribution or migration. [1.3]

Interjurisdictional fish population: [1.3]

- (a) A management unit, specified in an approved management plan, that at a minimum, consists of a reproductively isolated interjurisdictional fish stock.
- (b) Populations that are managed by two or more states, nations, or native American tribal governments because of geographic distribution or migratory patterns of those populations.

Instream: Waters within the confined width and depth of a flowing water-course; at or below bank-full conditions; flows are not impeded by over-bank obstructions or flood plain vegetation. [2.3]

Instream Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to former or degraded instream aquatic habitats. Example: Returning meanders and sustainable profile to a channelized stream. [2.3]

Instream Enhancement: The manipulation of the physical, chemical, or biological characteristics of an instream aquatic site (undisturbed or degraded) to change specific function(s) present. Example: Placement of structures in a stream channel to increase habitat diversity — spawning logs, lunker structures, etc. [2.3]

Interpretive, educational, and recreational visits: Such visits include the six primary (wildlife dependent) uses for refuges: wildlife photography, fishing, hunting, wildlife observation, environmental education, and interpretation. [3.1]

Invasive species: An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.

J

Joint Ventures: Federal, state and local governments, corporations and small business, hunters and environmentalists, and communities and private landowners working together to make a difference. [2.1]

K – NONE

L

Listed: Listed as threatened or endangered under the ESA. [1.2]

M

Management Action: An activity directed specifically at a target population or habitat which is designed to bring about a desired change in the status of that population or habitat. [1.1]

Migratory Bird: Any of the more than 830 species of birds protected by the *Migratory Bird Treaty Act*, as listed in 50 CFR 10.12. [1.1]

Migratory Species: Species that move substantial distances to satisfy one or more biological needs, most often to reproduce or escape intolerable cyclic environmental conditions. [1.1]

Monitoring: The systematic and comprehensive gathering of data to track trends in bird habitats or populations. [1.1]

Marine Mammal: Any mammal that: (a) is morphologically adapted to the marine environment (including sea otters and members of the orders Sirenia, Pinnepedia, and Cetacea), or (b) primarily inhabits the marine environment (such as the polar bear); and, includes any part of any such marine mammal, including its raw, dressed, or dyed fur or skin. For the purposes of the FWS, marine mammals are: Northern sea otters, Pacific walruses, polar bears, and manatees. [1.4]

Management: The process of organizing or regulating. [2.1]

Mission Critical Water Management Facility: Any water management facility under maintenance codes in the 400 series as documented in the Real Property Inventory and not slated for disposal or demolition. Non-critical property items that are excess to program needs will be slated for disposal or demolition and will not be included in calculations of facility condition indices. [2.2]

Mission Critical Public Use Facility: Any public use facility under maintenance codes identified below as documented in the Real Property Inventory and not slated for disposal or demolition. Non-critical property items that are excess to program needs will be slated for disposal or demolition and will not be included in calculations of facility condition indices. [2.2]

- 101 Office Buildings
- 102 Visitor Centers
- 320 Public Use Paved Roads
- 322 Paved Parking Areas
- 323 Other Parking Areas
- 324 Public Use Gravel Roads
- 328 Public Use (Foot) Trails/Boardwalks
- 329 Service Owned Vehicle Bridges
- 556 Signs
- 557 Historical Structures
- 558 Boat Launching Ramps
- 559 Beaches

N

National Wildlife Refuge System: Consists of National Wildlife, Waterfowl Production Areas, and Coordination Areas as listed in the Division of Realty's Annual Report of Lands Under the Control of the U.S. Fish and Wildlife Service. [2.1]

Native Species: With respect to a particular ecosystem, a species that, other than as a result of an introduction, has always been there or arrived via "non-man caused" introduction (natural migration). [1.3]

Nonlisted: For purposes of GPRA reporting only, non-listed (sometimes referred to as "unlisted") species are defined as those species that do not have official Endangered Species Program status (species that are not endangered, threatened, proposed, or candidate species). For purposes other than GPRA reporting, non-listed species generally include proposed and candidate species. [1.2]

O

Overabundant Population: A migratory bird population near to or exceeding the ecological or social carrying capacity of its habitat, and thus causing biological, social, or economic problems. [1.1]

P

Population Monitoring: Assessments of the characteristics of populations to ascertain their status and establish trends related to their abundance, condition, distribution, or other characteristics. [1.1]

Population: A group of marine mammals of the same species or smaller taxa in a common spatial arrangement, which interbreed when mature. [1.4]

Populations of Management Concern: Those populations of migratory birds for which management actions are needed to prevent further population declines, or other problems (such as overabundance), that may lead to additional biological, social, or economic problems. Species can be identified through a variety of surveys conducted by both the Service and other agencies. Nongame species of management concern have been identified primarily through the breeding bird survey that is managed by the Biological Research Division of the USGS. [1.1]

Proposed: Species for which a proposed listing rule has been published in the Federal Register. [1.2]

Proposed rule: A rule published in the Federal Register proposing a change in status of a species (list, delist, or downlist). [1.2]

Precluded from listing under ESA: Not resulting in a listing as threatened or endangered. [1.2]

Protected: Habitat where one or more threats have been removed or reduced through acquisition, easement, dedication, deed restriction, or some other means of protection (may include areas that are restored and/or enhanced). [1.2]

Protected: Once a population is identified as a “Strategic Stock” or “Depleted,” which (a) is a marine mammal stock for which the level of direct human-caused mortality exceeds the potential biological removal; (b) has been identified as declining and is likely to be listed as a threatened species under the *Endangered Species Act of 1973* (ESA) within the foreseeable future; or (c) is already listed as a threatened or endangered species under the ESA or is designated as depleted under this Act, the FWS can regulate human caused mortality. [1.4]

Protection: The act of keeping safe, defending, or guarding. [2.1]

Q – NONE

R

Regional Migratory Bird Populations of

Management Concern: A population delimited by ecological or administrative boundaries of varying scales (e.g., physiographic regions, watersheds, states, and Flyways), which represents a recognizable unit for management actions or for estimating status or trends. Breeding Bird Surveys are the primary source for this information that is available from the Biological Research Division of the USGS. [1.1]

Restored: Areas where the quality of the habitat, previously destroyed, converted, or degraded (in whole or in part), has been improved for one or more species. Restoration generally refers to an effort of higher intensity than enhancement. [1.2]

Restored Habitat: Returned to a previous, normal condition or use as defined in an approved management plan. [1.3]

Restoration Population: The act of bringing back or attempting to bring back to the original state by rebuilding, repairing, etc. [2.1]

Note: The word restoration includes both reestablishment and rehabilitation.

Reestablishment: The act of establishing again.

Rehabilitation: The act of restoring effectiveness.

Replacement Value: The estimated cost to completely replace an item of real property as identified in the Real Property Inventory. [2.2]

Riparian: A landscape position — lands contiguous to perennial or intermittent streams, channels and rivers. Riparian areas may include upland, wetland, and riparian plant communities. Riparian plant communities are affected by surface or subsurface hydrology of the adjacent water source. Riparian plant communities have one or both of the following characteristics: 1) distinctively different vegetative species than adjacent areas, and 2) species similar to adjacent areas but exhibiting more vigorous or robust growth forms. [2.3]

Riparian Enhancement: The manipulation of the physical, chemical, or biological characteristics of a riparian site (undisturbed or degraded) to change specific function(s) or the seral stage present. Example: cutting or shearing existing native woody riparian vegetation to stimulate rapid growth of an earlier successional plant community for the benefit of a particular federal trust species. [2.3]

Riparian Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to former or degraded native riparian habitat.

Example: Removal of invasive plant species to allow reestablishment of original native plant community; fencing a riparian area to exclude livestock to allow native riparian vegetation to reestablish; replanting native vegetation into cropland to reestablish likely original riparian plant community. [2.3]

S

Species: Includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife that interbreeds when mature. [1.2]

Species populations: Species, subspecies, or distinct population segments (see “Species” definition). [1.2]

Sustainable population level: With respect to any population, the number of animals that will result in the maximum productivity of the population or the species, keeping in mind the carrying capacity of the habitat and health of the ecosystem of which they form a constituent element. [1.4]

Species of International Concern: Those species covered under an international mandate or protocol of priority interest to the American people that are in need of conservation efforts. [1.5]

Service Lands: Those lands and holdings identified in the Division of Realty’s Annual Report of Lands under the control of the U.S. Fish and Wildlife Service. These lands consist of the National Wildlife Refuge System, National Fish Hatchery System, and administrative sites. This report is published annually and lists by category all the holdings of the U.S. Fish and Wildlife Service as of September 30 of a given year. [2.1]

Stabilized: Species whose numbers have remained relatively stable since the previous assessment and whose threats have remained relatively constant in the wild since the last assessment. [1.2]

Support Groups: Support groups are any groups that are formed for the purpose of supporting the refuge or hatchery established through a written document signed by the project leader. Support groups can include friends groups, Audubon Refuge Keeper Groups, and cooperating and sponsoring groups. [3.2]

T

Technical Assistance (Tribes): Service-provided expertise and programmatic information to tribal representatives to facilitate the development, enhancement, and management of tribal natural resources. [4.1]

Threatened: Likely to become endangered within the foreseeable future throughout all or a significant portion of its range. [1.2]

Training (Tribes): Service-provided formal presentation of at least one hour designed to develop enhanced knowledge and/or skills in fish and wildlife issues and/or programs to Tribal staff or representatives to educate Service staff on Native American issues. [4.1]

U

Upland: Land or an area of land lying above the level where water flows or where flooding occurs. [2.3]

Upland Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to former or degraded native upland plant communities. Example: Planting native vegetation into cropland to reestablish likely original plant community [2.3]

Upland Enhancement: The manipulation of the physical, chemical, or biological characteristics of an upland site (undisturbed or degraded) to change specific function(s) or the seral stage present.

Example: Implementing grazing management to improve quality of existing native rangeland. [2.3]

V

Volunteers: Volunteers include individuals or groups, providing not-for-fee services to a refuge or hatchery to assist with the accomplishment of the Service’s goals and objectives. Volunteers can include individuals operating under an individual agreement or organized groups such as scouts, church, or youth groups, and corporate groups, as long as the group operates under a signed agreement. Other volunteers may include community service workers, detention center or other similar type work crews that have agreements with the agency, clubs and other partners, and the Friends group. [3.2]

W

Wetland: From Cowardin et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. — “Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soils; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.” By definition wetlands include areas meeting specific criteria included in the 1987 Corps of Engineers Wetlands Delineation Manual, as well as in the USDA - NRCS’s *National Food Security Act Manual*. [2.3]

Wetland Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to former or degraded wetland. For the purpose of tracking net-gains in wetland acres, restoration is divided into: [2.3]

Wetland Reestablishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to former wetland. Reestablishment results in a gain in wetland acres. [2.3]

Former Wetland: An area that once was wetland but has been modified to the point it no longer meets the technical criteria for wetlands. The area is considered to be upland. Former wetlands include by definition Prior Converted Croplands (PC). In addition, formerly vegetated shallow coastal open water areas are also considered to be “former wetlands”. When they were converted from wetland marshes to open water areas the conversion was considered to result in a loss of wetland acreage both by the FWS Wetlands Status and Trends criteria and NRCS’s National Resources Inventory. [2.3]

Wetland Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. [2.3]

Degraded Wetland: A wetland with one or more functions reduced, impaired, or damaged due to human activity. When determining whether or not a wetland is degraded, consider: physical alteration, including the conversion of a wetland from one system (e.g., estuarine or marine) to a different system; chemical contamination; and biological alteration, including the significant presence of non-indigenous invasive species. [2.3]

Wetland Establishment: The manipulation of the physical, chemical, or biological characteristics present to support and maintain a wetland that did not previously exist on the site. Establishment results in a gain in wetland acres. [2.3]

Wetland Enhancement: The manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to change specific function(s) or the seral stage present. Enhancement results in a change in wetland function(s), but does not result in a gain in wetland acres. [2.3]

Appendix II

Summary of Program Evaluations Used in Revision of the Strategic Plan

Author	Title
General Accounting Office (January, 2000)	Need to Inform Congress of Future Costs Associated with Land Acquisition
General Accounting Office (June, 2000)	National Fish Hatcheries — Authority Needed to Better Align Operations with Priorities
General Accounting Office (July 20, 1999)	Management and Oversight of the Federal Aid Program Needs Attention
General Accounting Office (June, 1996)	<i>Effectively Implementing Government Performance and Results Act</i>
The President's Council on Sustainable Development (February, 1996)	<i>Sustainable America - A New Consensus</i>
The President's Council on Sustainable Development (February, 1997)	<i>Public Linkage, Dialogue, and Education</i>
U.S. Fish and Wildlife Service - Division of Realty (September 30, 1996)	<i>Annual Report of Lands Under Control of the U.S. Fish and Wildlife Service as of September 30, 1996</i>
U.S. Fish and Wildlife Service	<i>Annual Report of Volunteer Activity</i>
U.S. Fish and Wildlife Service, Division of Refuges	<i>National Wildlife Refuge Policy Studies and Reviews</i> (completed and ongoing): <ul style="list-style-type: none"> Fire Management Refuge Biology Habitat Management Contaminant Investigations and Cleanup on Service Lands Recreation Fee Management Comprehensive Management Planning for All Refuges

SUMMARY OF PROGRAM EVALUATIONS USED IN REVISION OF THE STRATEGIC PLAN (CONTINUED)

Author	Title
Keystone Group (Final Report October 1996)	<i>The Keystone National Policy Dialogue on Ecosystem Management</i>
U.S. Fish and Wildlife Service, Ecological Service, National Wetlands Inventory	<i>National Wetlands Inventory, Strategic Plan 1998-2002</i>
Federal Interagency Flood plain Management Task Force (1992)	<i>Floodplain Management in the United States: An Assessment Report</i>
U. S. Fish and Wildlife Service, Division of Refuges (1987)	<i>Assessment of Contaminant on Service Land</i>
U.S. Fish and Wildlife Service (Operational Draft, 1997)	<i>Riparian Inventory and Mapping Conventions for the Western United States</i>
U.S. Fish and Wildlife Service (1995)	<i>Hydropower Licensing, The U.S. Fish and Wildlife Service Role</i>
U.S. Fish and Wildlife Service, Ecological Services, Division of Habitat Conservation (September, 1995)	<i>National Hydropower Workshop</i>
U.S. Fish and Wildlife Service	<i>Endangered Species — Candidate Notice of Review (published annually)</i>
U.S. Fish and Wildlife Service	<i>Endangered Species — Annual Delisting Report</i>
U.S. Fish and Wildlife Service (1994)	<i>Endangered Species — Recovery Report to Congress</i>
U.S. Fish and Wildlife Service (Annual Report)	<i>Endangered Species — End of Year Candidate Report</i>

