

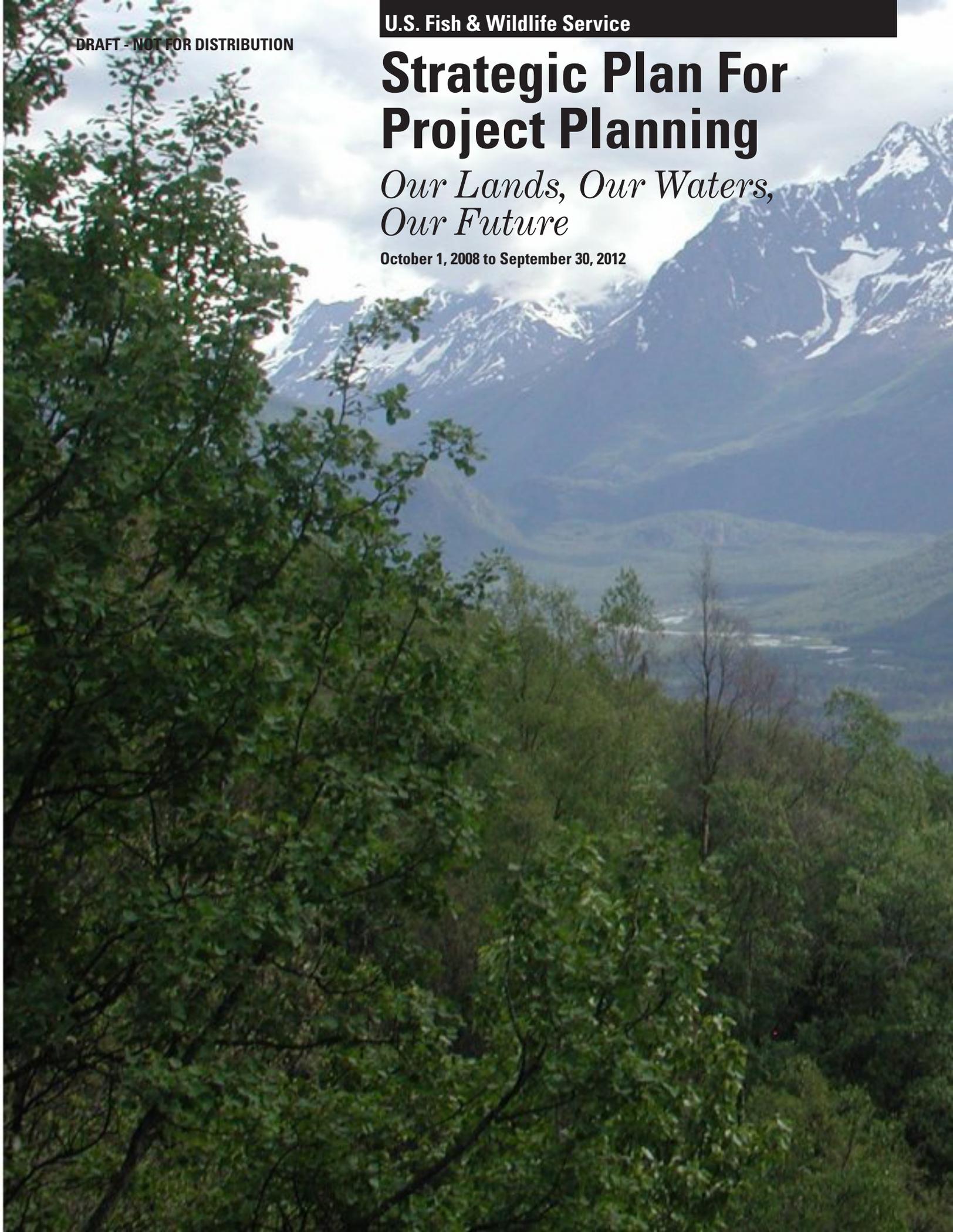
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U.S. Fish & Wildlife Service

# Strategic Plan For Project Planning

*Our Lands, Our Waters,  
Our Future*

October 1, 2008 to September 30, 2012





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Our Future*

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# PREFACE

Few environmental issues are more challenging than the anticipated species extinctions, habitat change and loss, and socio-economic disruption that are expected to occur in the next 50 to 100 years. Emerging environmental issues such as sea-level rise, habitat losses, and global climate change due to the growing scale of human activities (Vitousek et al. 1997) are now prominent conservation challenges.

The Fish and Wildlife Service's Project Planning Program has played a vital role in conserving America's natural resources since the 1940s. However, global environmental changes are occurring in ways that are fundamentally different at any other time in our history (Markham 2006), and rapid changes are expected to continue into the foreseeable future (United Nations 2005).

Today, the Project Planning program must strategically focus and engage on these emerging conservation issues. The 2008 Strategic Plan, *Our Lands, Our Waters, Our Future*, describes the refocusing of the program to address these changes.

To moderate the potential adverse effects of the anticipated environmental changes, it will be imperative to work with communities and other stakeholders, employing a variety of planning approaches and providing technical assistance to help them adapt to, and mitigate the effects of climate change, growth and development. We will employ strategic habitat conservation principles to conserve and restore native species, habitats, and maintain the ecological processes and structure crucial for ecosystem integrity. Consensus-

based, landscape-level planning approaches provide a framework to guide land use decisions necessitated by expanding populations that could be impacted by sea-level rise, climate change, and land development. The resulting plans for key geographic focal areas will protect human health and safety, as well as preserve community assets (e.g., cultural/historical resources, open space) and vital natural resources. The desired future condition is sustainable ecosystems for fish, wildlife, and people.

Tremendous challenges beget tremendous opportunity, and now more than ever we need to work with multiple stakeholders to strategically plan for healthy communities and healthy fish and wildlife populations.

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# EXECUTIVE SUMMARY

Since the Planning Program was established in 1946, we have worked in partnership with Federal, State, tribal, and local governments; industry ; land developers and managers; private landowners and citizens; non-governmental organizations, and others to advance the mission of the U.S. Fish and Wildlife Service. But while we have achieved a great deal, we recognize that much work remains. This strategic plan, *Our Lands, Our Waters, Our Future*, outlines the direction for the Project Planning Program for fiscal years 2008 – 2012. During this period and beyond, the program will need to respond to major environmental, social, and political challenges. These challenges include sea-level rise, global climate, anticipated and unprecedented increases growth and development, and changes in biological resources and ecosystems themselves, potentially resulting in species and habitat losses, and in human resource and funding constraints.

*Our Lands, Our Waters, Our Future* articulates a new emphasis for the program - foregoing much of the smaller, case-by-case project reviews and instead focusing on large-scale planning and project review. Large-scale approaches increase our ability to understand and predict changes not just on a single site, but after considering the biological and physical factors of the surrounding landscape. This type of approach will help communities adapt to, and mitigate, effects of climate change, sea level rise, and the accelerated rate of growth and development that is anticipated. Rather than the unplanned development and habitat conservation that frequently occurs now, working with communities will guide community growth and development so that it is compatible with sustainable fish and wildlife resources, preserves community assets, and protects human health and safety.

The Strategic Plan emphasizes concentrating efforts in either



*Photo by USFWS*

geographic or theme-based (i.e., salmon, riparian habitats, etc.) focus areas to prioritize efforts and increase cross-program coordination. We will continue working on the Nation's high priority projects, including projects that involve energy, water supply and delivery, transportation, large-scale habitat restoration, and issues such as climate change and sea level rise. These development project categories present some of the most important current and future resource challenges, frequently having impacts across large areas on the scales of watersheds, landscapes, or regions. By encouraging landscape-level approaches, the Program can substantially improve the outcome of such developments for project proponents and fish and wildlife resources, as well as assist communities to conserve fish and wildlife resources as they cope with the effects result of climate change and sea level rise (e.g., inland migration, coastal erosion, etc.).

The Strategic Plan also reflects a new perspective and a sharpened focus on achieving measurable results, and we continue to assess our effectiveness through the use of new or revised performance measures. The Plan reaffirms that overarching elements, such as using

sound science, prioritizing project involvement, and implementing the Directorate's priorities, apply to the Program's day-to-day operations.

The plan outlines 4 broad goals, and each lays out strategies, performance measures, and targets that will be used to measure progress over the next five years. Once the plan is finalized, regional step-down plans will be developed to tailor these goals and strategies to meet regional needs.

## **Goal 1: Conserve, Restore and Enhance Fish and Wildlife Habitat**

Multiple and diverse habitats are essential to the functioning ecosystems upon which fish and wildlife depend; consequently, healthy habitats support healthy fish and wildlife populations. Achieving this goal has multiple components: preventing the further loss and degradation of natural landscapes and watersheds; minimizing unavoidable habitat impacts and compensating for such losses where possible; restoring degraded habitat to a healthy condition; and enhancing habitats that are performing below their full potential. Strategies:

- Promote and participate in large-scale planning and

## Strategic Plan Project Planning Program

- project review approaches, with special emphasis on planning partnerships at the local level.
- Promote development of programmatic approaches to planning and project review.
- Focus efforts on priority projects (energy, transportation, water supply/delivery, and large-scale restoration) and emerging environmental issues (sea level rise, climate change, accelerated rate of growth and development).
- Promote application of the Service's new directive on Strategic Habitat Conservation
- Continue efforts to work with partners early in the planning process.

### Goal 2: Develop Effective Partnerships.

The Program's shift towards landscape-level planning will involve developing new partnerships, especially with local entities, as well as continuing partnerships with the Program's more traditional partners (i.e., government agencies and tribes, and the interested public during project planning and throughout the review, permitting (if applicable), and development period. Successful partnerships take time to come to fruition, so in addition to simply documenting the number of groups we partner with, we also will assess effectiveness of these partnerships by measuring outcomes of those partnerships. Strategies:

- Foster partnerships with groups associated with land-use, watershed, and habitat management.
- Continue providing technical assistance to, and improve partnerships with, our 'traditional' partners (i.e., Corps of Engineers, etc., Federal Energy Regulatory Commission, etc.)

### Goal 3: Develop Targeted Communication.

We strive to connect people with nature, educating them about conservation to ensure the future of conservation. In addition, we need to effectively communicate to external and internal audiences about how Project Planning can assist in conservation efforts. Strategies:

- Improve communication with others outside the Service.
- Improve communication within the Service.

### Goal 4: Foster Employee Excellence.

The Service's dedicated and professional workforce is its most valuable asset. The extensive conservation successes of Project Planning are directly attributable to the skill and dedication of these individuals. In response to emerging environmental issues as well as changes in the Nation's development needs, we must have a diversified workforce that is technically qualified, trained, and able to communicate effectively with others. Strategies:

- Maintain employee skills through employee development and training programs.
- Periodically hold national meetings to provide staff training and information exchange.
- Encourage participation in professional societies and meetings.

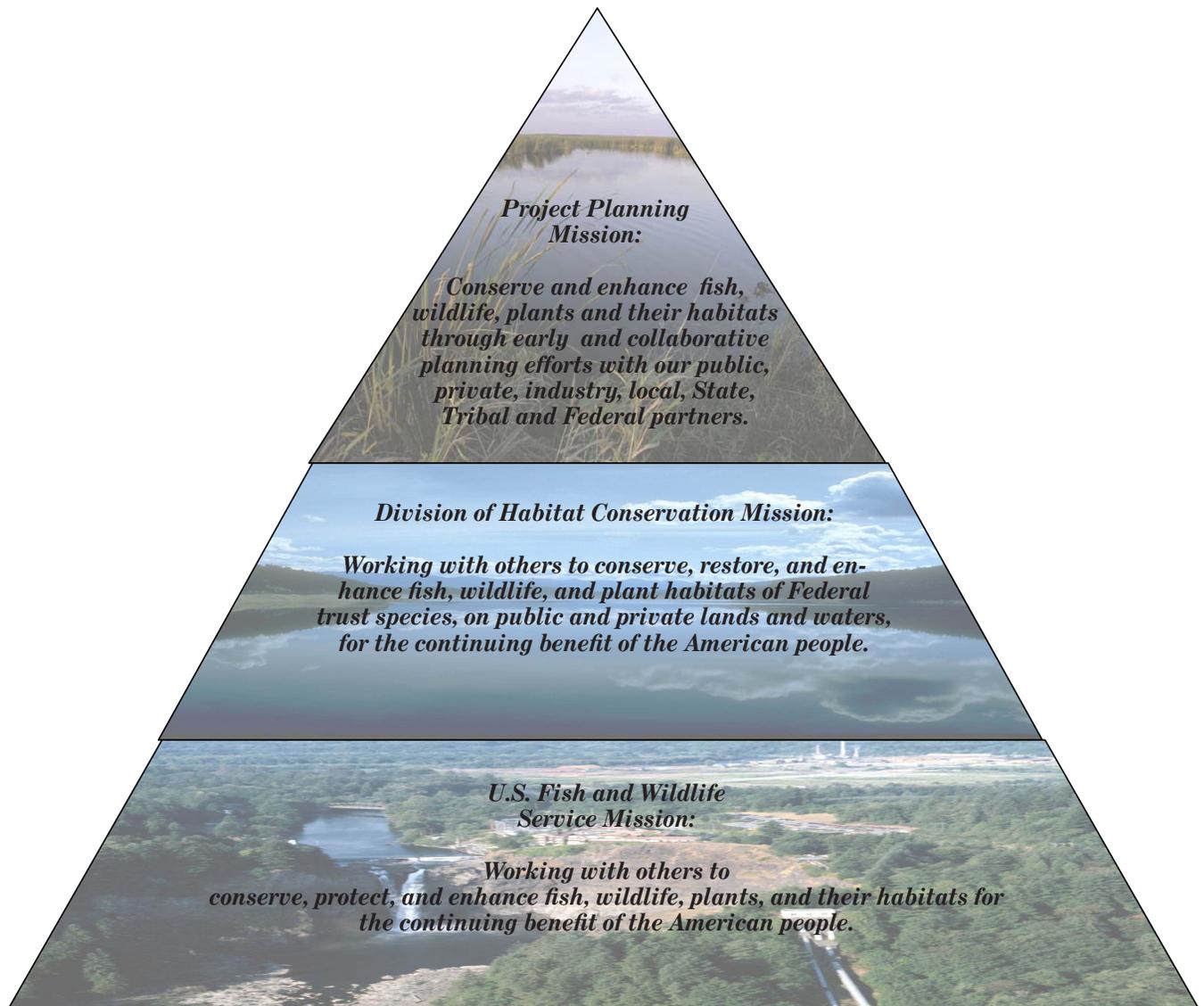
Despite our best efforts to anticipate and prepare for the future, a number of forces outside of our control could affect the Program's results over the next five years, including economic, demographic, social, environmental, governmental and institutional forces among others. The Nation and global environment in which we deliver services and carry out our mission is changing, and rapid changes are expected to continue into the foreseeable future. Factors affecting our ability to carry out our mission include soaring population pressures that increase demands for water and energy, as well as new houses, roads, and schools. Climate change and sea level rise are projected to have substantial impacts on the biological diversity of plant and animal species, as well as the demographics of coastal communities.

While it is impossible to predict the changes to come, our new emphasis on large, landscape-level planning approaches Given this potential rate of environmental change, project proponents, planners, action agencies, and others will continue to need and to rely on the

expertise and coordination skills of Project Planning biologists well into the future. We are poised to address the threats to habitat and species through an emphasis on integrated, landscape-level approaches. Tremendous challenges beget tremendous opportunity, and now more than ever we need to work with multiple stakeholders to strategically plan for healthy communities and healthy fish and wildlife populations.

Given the anticipated rate of environmental change, project proponents, planners, action agencies, and the public will continue to need and to rely on the expertise and coordination skills of Project Planning biologists as well as other Service programs. Our Lands, Our Waters, Our Future positions Project Planning to address the threats to habitat and species through an emphasis on landscape-level planning and conservation approaches. Tremendous challenges beget tremendous opportunity, and now more than ever we need to work with multiple stakeholders to strategically plan for healthy communities and healthy fish and wildlife populations.

# MISSION STATEMENT



# INTRODUCTION

## Service Trust Resources



*Migratory birds*



*Interjurisdictional fishes*



*National Wildlife Refuges*



*Certain marine mammals (sea otter, polar bear, walrus, manatee, dugong) and their habitats*



*Wetlands: Provide important habitat for trust resources (i.e., they provide habitat for approximately 50 percent of federally-listed plants and animals, and nesting, migratory and wintering areas for more than 50 percent of the Nation's migratory birds species; 70 percent of salt-water fish require wetlands).*



*Threatened and endangered species and their habitats*

The Fish and Wildlife Service's Project Planning program was created on the heels of President Franklin Delano Roosevelt's New Deal and the era of large-scale water projects. Since its inception, Project Planning biologists have been helping integrate fish and wildlife conservation with development projects for over sixty years. Established in 1946 as the Office of River Basin Studies, Project Planning's first order of business was working with Federal and State agencies to incorporate conservation strategies into large public works projects. The responsibilities of the program expanded as the public's demands for conservation grew and environmental mandates broadened, particularly in the form of amendments to the Fish and Wildlife Coordination Act. The Program soon became the nucleus of Ecological Services field offices across the country. Today, 80 field offices and approximately

260 dedicated biologists provide technical advice to communities, agencies and the builders of our Nation's infrastructure. Their collective heritage is a creative, can-do attitude that has crafted countless win-win solutions to complex resource issues and played a vital role in conserving our Nation's fish and wildlife resources. We work as a program to foster healthy fish and wildlife populations by maintaining healthy habitats, which in turn contribute to healthy people and healthy economies.

Project Planning is the Nation's leading "environmental consultant". The Program is the Service lead for assessing impacts to fish and wildlife resources of federally licensed or funded projects and for recommending measures that would minimize those impacts to the Service's trust resources. Such reviews are conducted under the authority of several Federal statutes

including the Clean Water Act (CWA), National Environmental Policy Act (NEPA), Fish and Wildlife Coordination Act (FWCA), and the Federal Power Act (FPA). Project Planning also carries out responsibilities under the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. We also have the lead for participating in large-scale planning efforts such as watershed plans and other regional conservation efforts that are done to integrate population growth and development needs with conservation of natural resource functions and values.

Because our responsibilities position us as coordinators among many Service programs, land-use planners, and project proponents, we also have a significant role to play in two relatively new planning processes – the State Wildlife Action Plans and the Services' Strategic Habitat Conservation (SHC) effort.

*“The most cost-effective route to saving estuaries is to prevent habitat alteration in the first place.”*

*– Restore America’s Estuaries*

*“It is most efficient and effective to maintain biodiversity by protecting existing wildlife habitat, which already supports populations. Project planning should seek to ensure, above all else, that existing habitat is not lost”.*

*– Canadian Wildlife Service*

Integrating the State Wildlife Action Plans into other planning efforts presents opportunities to form new partnerships with State and local planning groups, and to define geographic focus areas in which to combine our conservation efforts. SHC emphasizes the strategic pursuit of sustainable landscapes by setting biological objectives, designing on-the-ground conservation strategies to achieve the stated objectives, and through monitoring and research. The skills and products of the Project Planning Program will play key a key role in implementing the goals of SHC.

Project Planning is a “wellness program” for Service trust resources. We work to prevent or minimize habitat loss before it occurs by maintaining ecosystem health through preventive care, whereas other Service programs are primarily involved with assessing the health of the patient (e.g., estimating population levels of migratory birds, fish, or marine mammals); the potential causes of the problem (e.g., introduction of pollutants, loss of wetland habitat, etc.); administering emergency treatment (e.g., listing species as threatened or endangered; defining critical habitat); and rehabilitating the ill or injured patient (e.g., restoring lost or degraded habitat). Our ultimate goal is to maintain baseline population levels of trust species and their habitats. However, given the current rate of species and habitats loss, our proximate goal is to decrease the rate of loss of trust resources. Conserving and enhancing existing habitats is far more certain, efficient, and cost-effective than trying to restore those that have been lost or degraded.

The 2008 Strategic Plan, *Our Lands, Our Waters, Our Future*, describes our four major goals: 1) conserve, restore and enhance fish and wildlife habitat; 2) develop effective partnerships; 3) develop targeted communication; and 4) foster employee excellence. The Plan consists of two major sections – the Path to Success and Program Goals. The first section describes the program’s activities that will be emphasized in the next 5 years, including shifting our program’s

focus towards working more at watershed or landscape levels to achieve large-scale conservation, as well as increasing the effectiveness and on-the-ground conservation results of our existing activities. The second section describes the four program goals and the strategies to achieve those goals. Also, several specific performance measures are described that will allow evaluation of our progress towards accomplishing our Program’s mission and goals.

This document provides a framework for each of the Service’s regions to use during development of their Regional Project Planning Strategic Plans. Regional step-down strategic plans will embody the concepts of the National Project Planning Strategic Plan, and also recognize the unique circumstances of each region and State. The strategies outlined here will be refined at the regional and field levels to describe local objectives and strategies; step-down performance measures and targets to the regional and field level; and outline geographic focus areas as described further below.



# THE PATH TO SUCCESS

*“The greatest threats to biodiversity are habitat loss and degradation, and invasive species, all of which are strongly correlated with sprawling growth... smart growth and “smart conservation” can provide for both more development and more habitat protection by charting out where growth should and should not occur. This work needs to happen quickly, however, as development pressures continue to mount, and once critical habitat and linkages between them are lost they cannot be regained.”*

*- Funders’ Network  
for Smart Growth and  
Livable Communities*

As demands for Project Planning’s services increase both internally and externally, the program must become more efficient. We must focus on activities that improve our efficiency, achieve the greatest conservation benefits, and recognize that some activities will have to be de-emphasized. As with all government agencies, we are also being called on to increase accountability, and to show our results in a way that demonstrates effective outcomes for the public. To accomplish this, several program changes will be implemented. Such changes include an emphasis on landscape-level planning and using geographic focus areas to more efficiently and effectively direct staff efforts. We will continue efforts to increase focus on projects that support the administration’s priorities, and continue to assess our effectiveness through the use of new or revised output and outcome measures. Critical elements of our program operations, such as prioritizing project involvement and using sound science, are not considered goals in and of themselves but they form the underpinnings of our path to success and are essential components of the strategies we will use to achieve each of our four goals.

## **A “Big Picture” focus – integrated landscape level planning**

A cornerstone of our strategy is to forego much of the smaller case-by-case project reviews requested of staff and instead focus on large-scale planning and project review. The current planning and permitting process for projects - hydropower, highway, or subdivision developments - focuses on individual projects. This process is an artifact of the various legal statutes that require developers to seek permits or licenses for their individual projects from appropriate Federal or State authorizing agencies, which is a project-by-project process and reflects our country’s focus on individualism as well as our limited



spatial view and short time frames. While some examination of broader, landscape-level issues can be accomplished when authorizing agencies consider a project’s potential cumulative impacts, in practice this has been rarely achieved.

Large scale, landscape-level approaches facilitate opportunities to achieve greater conservation benefits than by working on individual, project-specific plans or reviews because they broaden geographic and temporal perspectives. A landscape-level approach will help us:

- a. identify ecosystem components and processes that should be conserved;
- b. better link natural areas together to counter habitat fragmentation;
- c. examine the potential effects of multiple projects in a specified area and provide a context to better evaluate effects, especially the interactive effects, of several projects in an area;
- d. increase our ability to evaluate alternatives for development sites and conservation/mitigation features; and
- e. identify management plans that agencies and partners have developed individually and integrate them into a larger planning and development process.

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The foundation of landscape-level approaches is landscape ecology, i.e., the study of the land's structure, function, and change at the scale of entire landscapes, as well as the application of study results to the design and management of both natural and human-dominated areas (Forman and Godron 1986). In Landscape Ecology, Forman and Godron define landscape as a diverse land area composed of a cluster of interacting ecosystems that is repeated throughout a large area. Today, the term "landscape-level" is commonly used in the context of conservation planning, but its meaning frequently deviates from the definition provided by Forman

and Godron's.

This strategic plan uses the term landscape-level to describes a large-scale, holistic approach to conservation planning and project review that seeks to understand and predict changes not just on a single site or managed area, but after considering the biological and physical factors of multiple surrounding areas. This definition expands upon a more narrow definition of landscape in order to incorporate other large-scale conservation approaches (see box below for definitions of terms and approaches related to large-scale approaches).

In practice, the size of the "landscape" will vary, depending upon the types of projects or plans being proposed and the interest of stakeholders involved. For example, planning on the scale of a watershed is not as comprehensive as planning on the scale of a landscape, but it is a type of large-scale approach that is effective nonetheless. Another example is transportation planning. Transportation projects will not necessarily encompass an entire landscape but they often traverse several watersheds and major portions of a landscape. In many cases, extensive knowledge of the structure and function of the landscape in which we are working

### Concepts and Terms Associated with the "Big Picture" Approach

**Landscape-level planning** - planning that covers a large-sized planning area and incorporates biotic and abiotic functions, structure and changes. The following planning approaches are related to landscape-level planning approaches, but differ in scale and extent:

- Regional planning – planning/management that occurs at an appropriately large scale to ensure the design and efficient placement of activities and infrastructure across a significantly large area of land, as well as effective conservation of biological diversity and economic sustainability. A region generally contains a number of landscapes (e.g., Southeastern Wisconsin, New England).
- Watershed planning – planning/management that occurs based on topographic features or a topographically discrete unit or stream basin as defined by common drainage patterns, i.e., watershed, water basin, hydrologic region. Generally many watersheds are included in a landscape, and a landscape boundary may or may not correspond to watershed boundaries.
- Land Use Planning – the process of organizing the use of lands and their resources to best meet people's needs over time, according to the land's capabilities. In practice, this generally applies to planning at the scale of communities.

**Ecosystem** – term that describes all of the organisms in interaction with their nonliving environment. This concept can be applied at any scale, from a single pond to an entire forest. In practice, however, ecologists consider an ecosystem to be an area of relative similarity that can be characterized by a reasonable number of measurements.

**Green Infrastructure** – a planning methodology, described by Benedict and McMahon (2006), that promotes a systematic and strategic approach to land conservation. While it is a landscape-level planning approach, it can also be done at national, regional, and local scales, encouraging land-use planning and practices that benefit natural resources and people. The methodology provides a framework that can be used to guide future growth and development and land conservation decisions to accommodate population growth, and protect and preserve community assets and natural resources. The anticipated result is an interconnected green space network that links landscapes and communities.

**Program-level Approaches** - A program-level approach to planning and project review that groups programs or projects together based upon a common denominator, and examines them as a group rather than individually. The common denominator could be a physiographic feature, i.e., a watershed, habitat type, or other physical feature in the landscape; or a "program", i.e., timber program, transportation program. The outcome of a program-level approach is frequently a permit or regulatory framework for reviewing future activities. A program-level approach and a landscape-level approach are not mutually exclusive, although the program-level approach does not typically entail consideration of multiple types of projects, e.g., roads, housing, utilities, and local conservation plans, in a large land area. A program-level approach could include development of guidance, such as Best Management Practices that would apply to a physiographic area or to a suite of similar projects.

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is not yet available, but nevertheless the program's focus will be to work with partners and stakeholders to move towards more comprehensive approaches.

Landscape-level analyses are the basis of a relatively new approach to integrating land conservation and natural resource protection with land development and man-made infrastructure planning termed Green Infrastructure. In their recent book, Benedict and MacMahon (2006) define green infrastructure as “a scientific approach to determining the best use of the land to support both the natural processes that exist on the landscape and the infrastructure and recreational needs of the people who live there.” Benedict and MacMahon's premise is that green infrastructure - our forests, wetlands, streams, and rivers – must be carefully planned in the same way that we plan and invest in our gray (i.e., capital) infrastructure – our roads, bridges, and waterlines. The green infrastructure process promotes a systematic and strategic approach to land conservation at national, regional, and local scales, with the anticipated result being an interconnected green space network that links landscapes and communities.

Project Planning is uniquely suited to provide the Federal leadership necessary to shift direction towards landscape-level planning, and to establish the necessary partnerships with State, local, tribal, and other entities. Unlike other Service programs, our role is not limited to management of particular groups of organisms or discrete geographical boundaries, such as threatened and endangered species, migratory birds, interjurisdictional fishes, or refuges. Our job is to include all Service trust resources in our recommendations, which provides the opportunity to look at the big picture and foster conservation at larger scales.

Large-scale planning is not a new concept, but frequently our Nation's existing project development and conservation processes do not fit easily within such a framework. Nevertheless, Project Planning



Photo by USFWS

biologists have demonstrated successes at working with partners to integrate local, State, and regional land-use and resource plans with development projects. Also, existing Federal planning processes, as directed by statutes such as NEPA and FWCA, can serve as platforms for large-scale planning and permitting. Examples of projects using a variety of large-scale approaches are described in Appendix B.

### Addressing our Nation's Highest Priorities

Project Planning provides technical assistance to partners in support of the Department of the Interior's (DOI) Strategic Plan goals to Improve the Health of Watersheds, Landscapes, and Marine Resources; Sustain Biological Communities; and Provide for the Use of Resources in an Environmentally Responsible and Cost Efficient Manner. Project Planning has broadly supported these goals for decades, but in light of recent changes in resource uses, rates of development, customer needs, and the DOI's specific goals, we have identified a few key categories of priority projects/issues to focus our time and resources:

- Energy – collaborating with agency and industry partners to promote environmentally sound production and distribution of energy resources, including windpower, renewable resources,

oil, gas, and hydropower

- Transportation – linking transportation and conservation planning encourages the design of more energy-efficient transportation systems that reduce environmental impacts and guides development away from ecologically sensitive areas
- Water Supply/Delivery – facilitating a cooperative approach to water management that satisfies needs of growing populations and protects environmental needs
- Restoration – emphasizing ecosystem scale restoration rather than individual, site-specific restoration projects, e.g., the Everglades, Upper Mississippi River, Missouri River, Great Lakes, Coastal Louisiana, Pacific Northwest coastal and estuarine environments, and Pacific Islands and coral reef systems, among others.
- Climate Changes/Sea Level Rise – ameliorating adverse effects through an emphasis on large-scale planning efforts, such as the Green Infrastructure approach. Large-scale planning approaches provide a framework to guide future land development and conservation decisions related to population growth and its associated expansion

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in coastal communities, human health and safety, and preservation of community assets and natural resources.

These development project categories present some of the most important current and future resource challenges. Although project sponsors generally plan for, and propose, individual projects, these projects frequently have impacts across large areas on the scales of watersheds, landscapes, or regions. By working with our government, private sector, and nonprofit partners and by encouraging landscape-level approaches, we can substantially improve the outcome of such developments for all parties.

Helping communities cope with the potential adverse effects of global climate changes and sea level rise are also Program priorities. If projections for sea level rise and coastal erosion are realized, coastal communities may make mass inland migrations to escape the rising water levels. The accompanying infrastructure that is needed, as well as the infrastructure that would be abandoned, will place additional strain on remaining natural habitats. In conjunction with other partners and programs, especially those within the Service's Division of Habitat and Resource Conservation, Project Planning can assist in the identification, minimization and abatement of environmental challenges. Through traditional authorities such as FWCA, Project Planning will continue to lead the Services' participation in landscape-scale efforts to restore coastal wetlands or to construct protective structures. Project Planning also engages in more modern large-scale planning efforts, using approaches such as Green Infrastructure, to guide decisions about where to locate future growth, development, and land conservation. Consideration of multiple biological, physical, and sociological needs and constraints will help identify preferred locations for gray infrastructure (development) as well as for green infrastructure (habitat for fish and wildlife resources).

### Focus Areas / Strategic Habitat Conservation

Undeveloped land is being converted to subdivisions, shopping malls, and highways faster than ever before (Funders' Network 2001). Consequently, the workload associated with this growth is placing increased demands on all Service programs, especially Project Planning because of role to represent Service interests in conjunction with socio-economic development. The limitations of addressing development impacts on a project-by-project are discussed above, yet many land conservation programs also tend to work on a case-by-case basis by focusing on individual sites that contain important natural resources rather than examining the site(s) in the context of the larger landscape. Using an approach, such as Green Infrastructure or SHC, to identify important geographic areas on which to focus staff effort will help prioritize workload and maximize conservation results.

The Service's field and Regional Offices are best positioned to know which resources are at greatest risk in their geographic areas, and where the most conservation benefit will be achieved from Service involvement. Project Planning staff should facilitate and participate in defining focus areas, geographic or theme-based (e.g., salmon, riparian habitats, etc.) and should consider the following as a framework to help focus Service efforts and resources:

- Coordinate all Service efforts to enhance trust resources and habitats;
- Work to achieve cross-program success (e.g., Migratory Birds, Fisheries, Ecological Services, and other programs should jointly participate in the selection of the area(s), and all programs should focus efforts in those areas to achieve common performance goals)
- Develop multi-program performance goals;
- Maintain habitat value for all trust species;

- Improve habitat for declining species;
- Maximize partnerships;
- Implement effective recovery teams for listed species.

Multiple sources of information will help identify important geographic areas and provide opportunities for new partnerships, such as State Wildlife Action Plans; regional, county or municipal conservation plans; recovery plans; conservation strategies; resource management plans; forest management plans; Corps of Engineers' Special Area Management Plans (SAMPS); Integrated Natural Resource Management Plans for military lands; and community growth plans.

Tools to assist in selecting geographic focus areas include mapping technologies such as Geographic Information Systems (GIS), and digital maps produced by the Service's National Wetland Inventory (NWI) and Coastal Barrier Resources Act (CBRA) programs. These mapping tools depict biological information, and characterize the status of lands and land-use options visually and quantitatively over long-periods. GIS can also be used in predictive modeling to illustrate future conditions, which will help decision-makers analyze the implications of land-use decisions. Another tool to assist in selecting focus areas is the Service's Environmental Conservation Online System (ECOS) and its various subsets that contain information for individual programs.

### Measuring Conservation Results

The American public – taxpayers, communities, businesses, industry, and environmental groups – have invested in the Service's mission and they expect accountability. The President's Management Agenda, published by the Office of Management and Budget in 2002, set out several major goals for government-wide initiatives, including budget and performance integration, and financial performance. In support of this Agenda, the DOI Strategic Plan calls for linkage of budgets to

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clear performance measures and subsequent outputs and outcomes.

Measuring outcome-based results for our program is a relatively new emphasis for the Program. Beginning in 2004, we restructured our previous performance measures to focus on reporting more informative results of our activities, such as acreage of wetlands conserved instead of number of projects reviewed. In 2004, we also began developing a new, internet-based Tracking And Integrated Logging System (TAILS). TAILS provides a system for tracking performance that will improve consistency and accuracy among offices and regions. The specific performance measures used to assess progress and effectiveness on each of the 4 Strategic Goals are shown in Tables 1 – 4 in Appendix A. The performance measures also incorporate the output and outcome measures that were developed during the Habitat Conservation Division's program evaluation by the Office of Management and Budget's (OMB's) Performance Assessment Rating Tool (PART). As a follow-up to the PART review, we are working with the Service's other Habitat Conservation programs to develop and implement an independent evaluation of the program's effectiveness.

### Prioritizing our Involvement

Prioritizing our workload takes on new importance as demands for Project Planning's services increase and we shift to our focus towards landscape-level conservation and identification of geographic focus areas. Ecosystems and the threats to these systems vary across the Nation. Consequently a flexible and adaptive priority-setting process is needed at the regional and field levels to direct where and how program resources are invested. The prioritization process involves an assessment of the following:

- a). **Ecological significance/ Relative value of trust resources**– Maintenance of ecosystem health and conservation of high value habitats is a priority. Functioning ecosystems are

comprised of multiple habitats, and high value habitats within those ecosystems are those essential to the life histories of the greatest number of trust species, including, but not limited to, species listed as threatened or endangered.

b). **Vulnerability** –

Consideration of the magnitude of threats or potential impacts to trust resources are important elements of the priority-setting process.

c). **Potential for successful conservation results** –

Consideration of project size; location of the plan, project, or compensation site within the landscape; relationship of projects to surrounding land uses or anticipated future land uses; potential for successful avoidance, minimization, or compensation; the area's geology, hydrology, or other physical attributes; and numerous other factors are weighed when deciding whether to expend resources on a development project or planning effort.

d). **Opportunities to integrate Service responsibilities** –

Project Planning's broad roles and responsibilities for environmental review provide the conduit between other Service programs and proposed development projects. Consequently, when other Service divisions or programs have concerns about a particular project, we prioritize our activities to act on their behalf as appropriate.

### A Focus on Science and Service

The DOI Strategic Plan outlines the importance of sound science, and this emphasis supports the underlying tenets of the program. Project Planning will continue to base our comments and recommendations on the best available scientific information, whether it be derived from peer reviewed journals, reliable grey literature, or information shared at scientific symposia. In some instances, Project Planning

biologists conduct studies and establish investigative techniques to assess impacts and develop appropriate mitigative measures. These investigations result in on-the-ground science, providing partners with practical steps to integrate development and conservation. As part of our ongoing and future partnering efforts, we will also solicit feedback from our partners on the usability of the information and recommendations provided. Furthermore, implementation of Strategic Goal 4: Foster Employee Excellence, will help ensure that our employees stay as current as possible. Training and attendance at relevant scientific meetings shall be encouraged, subject to budgetary constraints. Employees will also be encouraged to develop their knowledge and skills to their full potential and to enhance their scientific credentials by presenting peer-reviewed scientific studies and reports at technical and professional meetings. Membership in professional societies will be encouraged.

### Supporting the Director's Priorities

The Service's Director and senior management have identified priorities for the Service in order to focus our collective efforts. Those priorities include: 1) the National Wildlife Refuge System; 2) Landscape Conservation: Working with Others; 3) Migratory Birds: Conservation and Management; 4) Threatened and Endangered Species: Showing Recovery Success and Preventing Extinction; 5) Aquatic Species: National Fish Habitat Initiative and Trust Species; 6) Connecting People with Nature: Ensuring the Future of Conservation. Because Project Planning's broad mandate includes protecting and conserving all resources that the Service holds in trust for the American people, we have a substantial role to play in supporting all of the Director's priorities.

# PROGRAM GOALS

*“The Nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.”*

*- former President Theodore Roosevelt*

Our goals and strategies to achieve them were developed to capitalize on the opportunities for fish and wildlife conservation afforded by the Project Planning Program. These goals are consistent with the DOI Strategic Plan, FY2008-2012.

## **Goal 1: Conserve, Restore and Enhance Fish and Wildlife Habitat**

### Goal Purpose:

Multiple and diverse habitats are essential to the functioning ecosystems upon which fish and wildlife depend; consequently, healthy habitats support healthy fish and wildlife populations. Achieving this goal has multiple components: preventing the further loss and degradation of natural landscapes and watersheds; minimizing unavoidable habitat impacts and compensating for such losses where possible; restoring degraded habitat to a healthy condition; and enhancing habitats that are performing below their full potential.

### Goal Achievement Strategies:

To achieve the goal for habitat conservation, restoration, and enhancement, the Project Planning program will:

### **Promote and participate in large-scale planning and project**

**review approaches.** A more holistic approach to integrating development and conservation is necessary to achieve sustainable economic growth and development and natural resource conservation. Although many agencies and partners may be involved in planning efforts, our multiple trust responsibilities and authorities provide a catalyst to foster landscape-level planning at the regional, landscape, and watershed levels. The Green Infrastructure approach (Benedict and McMahon 2006) is the type of approach which we believe captures the essence of “integrated, landscape-level planning.”

- **Emphasize planning partnerships at the local level:** Collaborating with partners involved in land-use planning at the local level is one of the most important aspects of our shift towards large-scale planning. Critical decisions that affect growth patterns, sprawl, open space, riparian buffer zones, etc. are frequently made and implemented at the local level by county governments, city planners, and drainage districts, among others. However, these entities frequently have difficulty making meaningful, long-term planning decisions



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because of an inability to influence what happens outside their jurisdictional boundaries, and the lack of one or more of the necessary components to successful land use planning - such as expertise, financial resources, political will, or public support. Our new focus on landscape-level planning will result in greater participation in local and regional planning efforts, which will be key to achieving Strategic Goal 1.

**Promote development of program-level approaches (e.g., programmatic approaches)** - This type of large-scale approach is highlighted as a strategy because of its important role in regulatory processes (e.g., regional permits, general permits, etc.). A program-level approach to planning and project review groups programs or projects together based upon a common denominator, and examines them as a group rather than individually. The common denominator could be a physiographic feature, i.e., a watershed, habitat type, or other physical feature in the landscape; or a “program”, i.e., timber program, transportation program. Although accepting and implementing the advice we provide is discretionary on the part of the authorizing agencies and others, compliance with the relevant laws and regulations is not. A programmatic approach provides benefits to both project proponents, the public, and fish and wildlife resources by streamlining the review and permitting process, and improving effectiveness of conservation measures.

**Continue focus on priority projects and emerging environmental issues:** Projects that involve energy, transportation, water supply/delivery, and large-scale restoration will continue to be a priority for the Program. In addition, the Program will also focus on helping communities cope with the potential adverse effects of climate change and sea level rise.

**Promote application of SHC:** Current conservation approaches generally rely more on opportunity and less on scientific strategies.

SHC emphasizes the strategic pursuit of sustainable landscapes by using a science-based approach to setting biological objectives, designing on-the-ground strategies to achieve those stated objectives, and through follow-up monitoring and research. We believe that our new focus on integrated landscape-level planning is a conservation mechanism to be strategic rather than opportunistic. By selection of geographic areas in which to concentrate and expend Service efforts, as well as through conservation planning using approaches such as Green Infrastructure (Benedict and McMahon 2006) and others, Project Planning can be a vehicle for delivering long-term, conservation results. The skills and products of the Project Planning Program will play a key role in implementing the goals of SHC.

**Continue working with partners early in the planning process.** Whether we are providing assistance on a plan or a project, by being involved early (at the conceptual stage where possible) we can be more influential in directing where and how growth and conservation should occur, and in reducing impacts and adding enhancement measures to projects. Development partners benefit because this up-front, collaborative approach provides more certainty about areas they can develop, and safeguards against regulatory surprises and court-ordered setback that can be caused by outside interests late in the planning process.

See Appendix A, Table 1, for specific performance measures for Strategic Goal 1.

### Goal 2: Develop Effective Partnerships

**Goal Purpose:** The Service interacts with action agencies, tribes, project proponents, and the interested public during project planning and throughout the review, permitting (if applicable), and development period. Partners can contribute planning information, funding, personnel support, expertise, knowledge, or other resources that may enhance

environmentally beneficial aspects of a project. Participation by Project Planning biologist in a variety of interagency groups also contributes to habitat protection and enhancement opportunities outside of the project review process.

**Goal Achievement Strategies:** To achieve the goal of developing effective partnerships, the Project Planning program will:

**Foster partnerships with groups associated with land-use, watershed, and habitat management.** These groups include community councils, watershed associations, multi-agency task forces, land trusts, tribes, industry associations, and other similar organizations. Because entities acting alone frequently lack expertise, financial resources, or the full public support that comes from involving multiple entities, involving numerous stakeholders in the decision-making process is critical to success. Successful partnerships take time to come to fruition, so in addition to simply documenting the number of groups we partner with, we also will assess effectiveness of these partnerships by measuring outcomes of those partnerships (see Table 2).

- **Emphasize partnerships with local entities:** As discussed above under Goal 1, working closely with local planning efforts will create a foundation upon which to build broader agreements and plans. We will encourage staff to make establishing partners at the local level their first step towards integrated, landscape-level planning efforts.



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**Continue providing technical assistance and improve partnerships with our ‘traditional’**

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**partners.** Partnerships require continuous care and attention. To continue partnerships with some of our more traditional colleagues - the Corps of Engineers, Federal Energy Regulatory Commission (FERC), Federal Highway Administration, applicants seeking permits or licenses, or the American public seeking information – we will provide them with technical assistance on individual requests when possible given time and budget constraints. We will, however, encourage our partners to work with us on planning at larger scales.

See Appendix A, Table 2, for specific performance measures for Strategic Goal 2.

### Goal 3: Develop Targeted Communication

#### Goal Purpose:

Effective communication among various individuals, groups and agencies is vital to achieving our Program's mission and goals. Research conducted within the last few years has provided insight into an alarming trend - adults, and more

importantly, their children - are becoming increasingly removed from the natural environment (Louv 2005). Targeted communication should strive to connect people with nature, educating them about conservation to ensure the future of conservation. In addition, we need to effectively communicate to external and internal audiences about how Project Planning can assist in conservation efforts.

#### Goal Achievement Strategies:

To achieve the goal of developing targeted communication strategies, the Project Planning Program will:

**Improve communication with others outside the Service.** The mission of the Service is to work with others to conserve natural resources for public benefit. First and foremost, we must strive to educate the public about their surrounding environment - connect them with nature. Cooperative approaches with external partners that enhance our collective abilities to conserve, restore, and enhance fish and wildlife habitat are only possible through mutual understanding of missions,

goals, needs, etc. Consequently, communication about our Program's priorities and skills, as well as education about the habitat needs of fish, wildlife, and plant species, is the key to educating our partners. Other Federal, State, and Tribal partners, some of whom are actively involved in managing their lands to benefit fish and wildlife, can provide a source of effective partnerships. Additional efforts need to be made to communicate with conservation groups, who have been a motivating factor in many conservation initiatives in recent years. These groups provide valuable publicity for conservation and can assist or implement significant habitat conservation projects. The public, including government representatives and Congress, need to know who we are and what we accomplish.

**Improve communication within the Service.** As we shift focus towards landscape-level planning efforts, effective cross program coordination is critical to success. The Service has expertise in



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numerous programs, such as Refuges, such as Refuges, Law Enforcement, Budget and Finance, Fisheries, Migratory Birds, International Affairs, and External Affairs that can be assist Project Planning achieve habitat conservation. Assistance could take the form of biological expertise, land-use planning, or budget formulation. Furthermore, those programs need to be made more aware that Project Planning frequently acts on their behalf as their “boots-on-the-ground”, applying their data, information, and expertise to avoid minimize the potential adverse effects of development projects.

See Appendix A, Table 3, for specific performance measures for Strategic Goal 3.

### Goal 4: Foster Employee Excellence

#### Goal Purpose:

The Service’s dedicated and professional workforce is its most valuable asset. The extensive conservation successes of Project Planning are directly attributable to the skill and dedication of these individuals. As the program evolves in response to changes in the country’s demographics, needs, and priorities, each individual must adapt as well. To be successful, we must have a diversified workforce that is technically qualified, technically trained, and able to communicate effectively with others. An example of program evolution which will require new training is the shift in focus away from permit-by-permit reviews to landscape-level planning. While Project Planning staff have tremendous biological knowledge and experience, there are tools associated with landscape-level planning that must be provided. Such tools include the new Green Infrastructure Course, developed in partnership with the Conservation Fund . This new training is in addition to the more traditional training that staff receives (Table 4).

#### Goal Achievement Strategies:

To achieve the goal of fostering employee excellence, Project Planning will:



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**Maintain employee skills through employee development and training programs.** Assemble a list of training courses that will help staff hone skills in communication, partnering, and landscape-level planning (e.g., Green Infrastructure), as well as other necessary focus areas.

**Effectively communicate the goals of the strategic plan to all employees.** The success of the plan relies upon individual staff members being aware of, and striving towards, the Plan’s goals.

**Periodically (e.g., every 3 years) hold a Nationwide meeting to provide staff training and information exchange.** Periodic, national meetings will serve to: improve program implementation and consistency; provide a format to share and benefit from applicable experiences in other offices; and periodically realign our unity of purpose.

**Encourage participation in professional societies and meetings.** Using sound science and innovative and technical advancements has always been critical to our success, however heavy workload and travel budget constraints can diminish the ability and opportunities to remain current. Nevertheless, membership in professional societies, as well as attendance and participation at relevant scientific meetings, will be

encouraged.

See Appendix A, Table 4, for specific performance measures for Strategic Goal 4.

# LIMITING FACTORS AND CHALLENGES

## Preparing for the Future

Despite our best efforts to anticipate and prepare for the future, a number of forces outside of our control could affect the Program's results over the next five years, including economic, demographic, social, environmental, governmental and institutional forces among others. For example, our annual accomplishments are substantially driven by external factors because they are highly dependent on the number of customers and the number and types of projects/plans that we have the opportunity to review. Because of this, year-to-year accomplishments can vary considerably (see Table 1, footnotes 6 and 7). Achievement of our strategic goals also depends on substantial involvement from partners, including governmental and non-governmental groups at local, State, and Federal levels; tribes; public and private citizens and companies. And finally, the technical assistance provided by Project Planning is non-regulatory, meaning that accepting and implementing the advice we provide is discretionary on the part of the action agencies and project proponents.

Regarding our Program's shift in focus towards landscape-level approaches, we need to recognize the many hurdles we will encounter. Most agencies we work with (e.g., Corps of Engineers, FERC) generally take a project-by-project, rather than a landscape-scale, approach. Substantial efforts on our part will be needed to encourage a change, likely resulting in both successes and failures. Also, landscape efforts will take time to develop and be incorporated into standard practices by agencies and private developers. However, the proponent of any individual project is not particularly interested in our long-term efforts, even if it will make their work easier and more efficient in the long run. Work on both landscape-scale and individual projects is necessary and

related, and we will need to provide individual projects with technical assistance while concurrently addressing landscape efforts. Because the majority of our current budget is used for personnel costs, flat or reduced funding will result in fewer staff and a reduction in our ability to achieve the goals of this plan.

New legislation has the potential to affect goal achievement by redirecting our priorities (e.g., the passage of the Energy Policy Act requires that the Project Planning Program maintain energy as a priority, but to a degree that may be at the expense of other issues). Similarly, projects addressing the certain Administration's priorities, such as rebuilding transportation infrastructure, developing alternative energy sources as oil prices rise, and FERC relicenses, can dominate staff time and energy, leaving other priorities unaddressed. Achievement of our goals could also be affected by biotic and abiotic changes as a result of natural and human-induced events, including: global climate change, wildfire, flooding, drought, hurricanes, tsunamis, and similar events.

## Trends and External Factors

The environment in which we deliver services and carry out our mission is changing, driven by the same forces that are reshaping our Nation as a whole. The DOI Strategic Plan, 2007-2011, briefly describes the population shifts, land development, and land fragmentation that is occurring and could affect the Department's goals. The DOI Plan states that factors affecting the ability to carry out its mission include soaring population pressures that increase demands for water and energy, as well as new houses, roads, schools, and shops. In addition, climate change has, and is projected to have, many impacts on the biological diversity of plant and animal species in the United States. Because

the Project Planning Program's habitat accomplishments contribute to the DOI Strategic Goals, our performance will be affected by similar pressures. The effects of climate changes and sea level rise will be superimposed over extensive and sprawling development, causing loss fragmentation and degradation of habitat and water resources, interrupt natural processes, and allow intrusion of non-native species. While it is impossible to predict the changes to come, the following statistics provide some insight into future challenges.

*Climate Change/Sea Level Rise* - Whether and how species adapt to climate change will depend upon how rapid the change(s) occur, and whether or not they can adapt. Many species could face a lack of food-base, or inadequate habitat important for their migration, breeding, and/or feeding. It is anticipated that human populations will make inland migrations to escape the rising water levels, thus placing additional strain on remaining natural habitats. If this occurs, it will be especially difficult for species to adjust because fragmented landscapes prevent migration to new habitats, in addition to the decreased amount of habitat available.

*Our Lands* - Open land is being converted to developed land at an escalating rate (Funders' Network 2001). In the 10-year period between 1992 and 2001, open land was converted at a rate of 2.2 million acres per year – which is more than 1.5 times the rate during the previous 10-years (EPA 2000, Funders' Network 2001, USDA 2001). In the last 50 years, the amount of urban land has quadrupled, converting almost a third of productive farmland and more than half of all wetlands (Dahl 2006). At the current rate, by 2025 the amount of land developed in the contiguous U.S. will almost equal the amount of land developed since this country was founded until the mid-1980s (Beach 2001).

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*Our Waters* - The health of our waters are linked to the health of our lands. Development of wetlands, riparian areas, and other native ecosystems reduces their capacity to control floods, trap sediment and remove pollutants. Developed watersheds result in increased water temperatures, and increased runoff primarily due to increased imperviousness and the subsequent transport of pollutants into the aquatic environment and decreased diversity of aquatic insects.

Development has already resulted in the loss of over 66% of riparian habitat (Swift 1984 as cited in NAS 2002), with some areas experiencing even greater losses (e.g., California: 90-95 percent lost; Arizona and New Mexico: 85 to 95 percent lost; Mac et al. 1998). Numerous studies have shown that when over 10 percent of a watershed is covered by impervious surfaces – like roads, rooftops, and parking lots – aquatic systems become degraded (see Table 2 in Watershed Technical Report 1994). Today, 40 to 50 percent or more of the land in urban areas is covered by impervious surfaces (Benedict and McMahon 2006), given the predicted conversion rate described above, aquatic habitat loss and degradation will likely increase.

Given this potential rate of growth and development, project proponents, planners, action agencies, and others will continue to need and to rely on the expertise and coordination skills of Project Planning biologists well into the future. We are poised to address the threats to habitat and species through an emphasis on integrated, landscape-level approaches. Tremendous challenges beget tremendous opportunity, and now more than ever we need to work with multiple stakeholders to strategically plan for both smart growth and smart conservation.



*Photo by USFWS*

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# APPENDIX A

**Table 1. Performance measures for Strategic Goal 1: Conserve, Restore and Enhance Fish and Wildlife Habitat**

<p><b>DOI Strategic Goal: Resource Protection:</b> Protect the Nation's natural, cultural, and heritage resources</p> <p><b>DOI End Outcome Goal 1:</b> Improve health of watersheds, landscapes, and marine resources;</p> <p><b>DOI End Outcome Goal 2:</b> Sustain biological communities.</p> <p><b>DOI Intermediate Strategies and Performance Measures:</b> Restore and maintain proper function to watersheds and landscapes; Improve information base, information management, and technical assistance; Create habitat conditions for biological communities to flourish</p> <p><b>DOI End outcome performance measures:</b></p> <p>Wetland, Riparian and Upland Areas: Acres or stream shoreline miles achieving desired condition.</p> <p>Marine and Coastal: Acres achieving desired marine/coastal conditions condition.</p> <p><b>Project Planning long-term performance goals:</b> see table below for planned long-term performance goals to be achieved by September 30, 2012. For many measures, 2004 is the year of baseline data collection, however baseline data is not available (N/A) for new measures and will need to be determined (TBD).</p> <p><b>Project Planning annual performance goals:</b> see table below for planned annual performance goals. Note that our program provides assistance in response to need of our partners / customers when development projects are proposed. Some projects are multi-year, and annual estimates can vary greatly depending upon region-specific knowledge of upcoming projects.</p>	2004 (baseline <sup>1</sup> )	2007 <sup>2</sup> Planned	2008 <sup>3</sup> Planned	2009 <sup>4</sup> Planned	2010 <sup>5</sup> Planned	2011 Planned	Long-term (by 2012) performance goal
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**Increasing Effectiveness and Streamlining**

<p>Program-level Approaches:</p> <p># program-level approaches: ..... in progress .....completed</p> <p># activities/projects/plans reviewed under existing program-level approaches.....</p>	est. baseline est. baseline	N/A N/A	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
<p>Large-scale Approaches:</p> <p># large-scale approaches: ..... in progress .....completed</p> <p># activities/projects/plans reviewed under existing large-scale approaches.....</p>	N/A N/A	N/A N/A	est. baseline est. baseline	TBD TBD	TBD TBD	TBD TBD	TBD TBD
<p>Work in priority watersheds:</p> <p># of large-scale or programmatic approaches occurring in priority areas.....</p> <p># activities/projects occurring in priority areas.....</p> <p># Acres conserved.....</p> <p># Miles conserved.....</p>	N/A N/A N/A N/A	N/A N/A N/A N/A	est. baseline est. baseline est. baseline est. baseline	TBD TBD TBD TBD	TBD TBD TBD TBD	TBD TBD TBD TBD	TBD TBD TBD TBD

**Table 1. Performance measures for Strategic Goal 1: Conserve, Restore and Enhance Fish and Wildlife Habitat (continued)**

Performance measures	2004 <sup>1</sup>	2007 <sup>2</sup> Planned	2008 <sup>3</sup> Planned	2009 <sup>3</sup> Planned	2010 <sup>3</sup> Planned	2011 Planned	Long-term (by 2012) performance goal
<b>Habitat Conserved<sup>4</sup></b>							
Wetland acres: ..... Note: this is a PART <sup>5</sup> output measure	3,032,0306	25,560	24,921	24,282	23,771	23,004	4,996,254 (cumulative since 2004)
Upland acres: ..... Note: this is a PART output measure	143,965	42,704	755,9977	40,569	39,715	38,434	1,334,579 (cumulative since 2004)
Riparian/Stream shoreline: .....acres .....miles Note: this is a PART output measure	6485 738	6485 1526	6323 1488	6161 1450	6031 1420	5837 1374	82,800 14,039 (cumulative since 2004)
Instream miles:	3250	1305	1272	1240	1214	1175	15041 (cumulative since 2004)
Marine/coastal wetland acres	Not determined	6586	6421	6257	6125	5927	37,773 (cumulative since 2006)
Stream miles reopened to fish passage	3998	880	809	788	771	747	9646 (cumulative since 2004)
<b>PART Outcome Measures</b>							
% of migratory bird species that are at healthy and sustainable levels	N/A	62.3%	TBD	TBD	TBD	TBD	N/A
% of populations of native aquatic non-threatened and endangered species that are self-sustaining in the wild.	N/A	TBD	TBD	TBD	TBD	TBD	N/A
% of threatened and endangered species habitat needs met (note that this measure is an interim measure; final has not been approved by OMB,T&E species	N/A	24%	TBD	TBD	TBD	TBD	N/A
<b>Supporting Measures</b>							
# of projects reviewed that provided recommendations to: .....benefit fish .....migratory birds .....threatened and endangered species .....control invasive species	2666 3293 4337 832	2467 5252 3304 577	2405 5121 3221 563	2344 4989 3139 548	12294 4884 3073 537	2220 4727 2974 519	N/A

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**Table 1. Performance measures for Strategic Goal 1: Conserve, Restore and Enhance Fish and Wildlife Habitat (continued)**

Performance measures	2004 <sup>1</sup>	2007 <sup>2</sup> Planned	2008 <sup>3</sup> Planned	2009 <sup>3</sup> Planned	2010 <sup>4</sup> Planned	2011 Planned	Long-term (by 2012) performance goal
<b>Customer Service</b>							
% of technical assistance requests completed							Response rate of 76%
..... # of requests received	70,219	58,089	56,637	55,185	54,023	52,280	
..... # of requests completed	61,946	44,616	43,501	42,385	41,493	40,154	
<b>Priority Projects - Provide advanced planning assistance for priority projects</b>							
Energy <sup>5</sup> ; # of projects reviewed early / # projects reviewed	1793 / 3708	1322/3362	1289/3278	1256/3194	1229/3127	1190/3026	N/A
Hydropower <sup>6</sup> ; # of projects reviewed early / # reviewed	371 / 656	477/595	465/580	453/565	444/553	429/536	N/A
Water Supply/Delivery <sup>10</sup> ; # of projects reviewed early / # reviewed	679 / 1292	761/1397	742/1362	723/1327	708/1299	685/1257	N/A
Transportation : # of projects reviewed early / # reviewed	3,656 / 5543	2963/4867	2889/4785	2815/4624	2756/4526	2667/4380	N/A
Restoration : # of projects reviewed early / # reviewed	1293 / 1756	1000/1558	975/1519	950/1480	930/1449	900/1402	N/A
% of all priority project reviewed early <sup>11</sup> viewed early	60%	55%	55%	55%	55%	55%	55% (maintain 2007 level)

<sup>1</sup> New performance measures were established in 2004, hence for most measures this is the baseline year. For new measures, it will be necessary to establish baseline (est. baseline) during the first year of data collection; out-year estimates for new measures will need to be determined (TBD).  
<sup>2</sup> Regional and Field Offices provided performance estimates for FY 07.  
<sup>3</sup> Estimates for out-years FY 08, 09, 10, and 11 were determined by using FY 07 as the baseline, and assuming 1) flat budgets with adjustment to cover some fixed costs; and 2) an inflation rate of 2.5% per year.  
<sup>4</sup> Habitat conserved refers to habitat that is protected, avoided, minimized, compensated, restored, or enhanced after Service coordination.  
<sup>5</sup> PART is the acronym for the Program Assessment Rating Tool, a process conducted by OMB to determine effectiveness of Federal agencies  
<sup>6</sup> Estimate of wetland acreage that was conserved in 2004 and 2006, is unusually high due to the completion of land management plans/decisions associated with oil and gas development on the North Slope of Alaska.  
<sup>7</sup> Estimate of upland acreage to be conserved in 2008 is unusually high due to the anticipated completion of land management plans/decisions associated with energy and transportation projects development in Region 6.  
<sup>8</sup> Energy as used above includes oil and gas, coal, wind power; and other energy projects such as powerlines. Hydropower is separated out due to its importance and large workload requirements.  
<sup>9</sup> Hydropower includes FERC licenses, relicenses, and post license proceedings, and other, non-FERC projects.  
<sup>10</sup> Water supply/delivery includes projects such as reservoirs, distribution lines, etc.  
<sup>11</sup> This number represents a surrogate for the percent of projects streamlined through our involvement. Also, for the last several years the Project Planning Program has experienced flat or reduced funding. Consequently, a 2012 target that maintains 2007 performance levels is ambitious.

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**Table 2. Performance measures for Strategic Goal 2: Develop Effective Partnerships**

Strategic Goal: Resource Protection: Protect the Nation's natural, cultural, and heritage resources  
 End Outcome Goal 1: Improve health of watersheds, landscapes, and marine resources  
 DOI End Outcome Goal 2: Sustain biological communities  
 DOI Intermediate Strategy: Protect and/or restore surface and groundwater systems by working with State and local resource managers to meet human and ecological needs; Improve information base, information management, and technical assistance; forge effective partnerships.  
 Project Planning Long-term performance goals: By September 30, 2012, annually participate in 16 (2 per region, including CNO) planning approaches that are at the landscape scale.  
 Project Planning annual performance goals: By September 30, 2008, annually participate in 8 (1 per region, including CNO) landscape-level planning approaches.

Performance measures	2004	2007 <sup>2</sup> Planned	2008 <sup>3</sup> Planned	2009 <sup>3</sup> Planned	2010 <sup>3</sup> Planned	2011 Planned	Long-term (by 2012) performance goal
# of projects/activities involving collaborative, large-scale planning	Not determined	est. baseline	TBD	TBD	TBD	TBD	16 – number of approaches annually (2 per region)
# of projects/activities for which inreach and cross-program coordination was conducted.....	Not determined	N/A	est. baseline	TBD	TBD	TBD	TBD
# of partnerships that resulted in collaborative development of significant products that advance Program mission, such as MOUs/MOAs <sup>1</sup> , conservation plan, land use/watershed plan, programmatic agreement or permit, tools to achieve conservation goals	Not determined	est. baseline	TBD	TBD	TBD	TBD	TBD
% of technical assistance requests completed ..... # of requests received <sup>2</sup> .....# of requests completed	88% 70,219 61,946	77% 58,089 44,616	56,637 43,501	55,185 42,385	54,023 41,493	52,280 40,154	Response rate of 77% <sup>3</sup> (maintain 2007 level)

<sup>1</sup>MOUs are memoranda of understanding; MOAs are memoranda of agreement  
<sup>2</sup>This measure is also used to evaluate progress towards in Goal 1 (see Table 1.). It is used here because it is a measure of our responsiveness to requests for assistance from our customers and partners, as described above.  
<sup>3</sup>For the last several years, the Project Planning Program has experienced flat or reduced funding. Consequently, a 2012 target that maintains 2007 performance levels is ambitious.

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**Table 3. Proposed performance measures for Goal 3: Develop Targeted Communication**

Performance measures	2004 (Baseline)	2007 <sup>2</sup> Planned	2008 <sup>3</sup> Planned	2009 <sup>8</sup> Planned	2010 <sup>8</sup> Planned	2011 Planned	Long- term (by 2012) performance goal
Develop and implement: .....inreach plan .....outreach plan	N/A N/A	N/A N/A	Completed by 12/07 Completed by 12/07	On-going On-going	On-going On-going	On-going On-going	On-going On-going
Outreach : # presentations, meetings, or other types of events or formats (i.e., articles, interviews, news stories, etc.) where outreach materials provided to external customers.....	Not determined	est. baseline	TBD	TBD	TBD	TBD	Outreach goal - 75% of staff annually participate in 2 or more outreach activities.
Inreach: Develop and maintain list serve..... # presentations, meetings, or other types of events or formats where outreach materials provided to internal customers..... # of teleconferences/meetings held to discuss national (or regional) issues pertinent to internal customers .....	Not determined Not determined Not determined Not determined	Completed by 9/07 est. baseline est. baseline est. baseline	On-going TBD TBD TBD	On-going TBD TBD TBD	On-going TBD TBD TBD	On-going TBD TBD TBD	Inreach goal - 75% of staff annually participate in 2 or more outreach activities.

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**Table 4. Proposed performance measures for Goal 4: Develop Employee Excellence**

DOI Strategic Goal: Management Excellence; Manage the Department to be highly skilled, accountable, modern, functionally integrated, citizen-centered and results-oriented  
 DOI End Outcome Goal: Workforce has job-related knowledge skills necessary to accomplish organizational goals; accountability; modernization, customer value  
 DOI Intermediate Strategy: managers indicate workforces have job-relevant knowledge and skills; customers are satisfied with services provided; activity-based cost accounting is in compliance;  
 Project Planning long-term performance goals: see table below for planned long-term performance goals to be achieved by September 30, 2010. Baseline data is not available for some measure and will need to be determined (TBD).  
 Project Planning annual performance goals: see table below for planned annual performance goals for 2007-2011.

Performance measures	2004 (Baseline)	2007 <sup>2</sup> Planned	2008 <sup>3</sup> Planned	2009 <sup>3</sup> Planned	2010 <sup>3</sup> Planned	2011 Planned	Long-term (by 2012) performance goal
Maintain and provide current list of pertinent courses to staff	Not determined	N/A	On-going	On-going	On-going	On-going	On-going
Employee training/skill development: .....% that received pertinent training .....% membership in professional societies .....% that attended, or presented data at, professional workshops or meetings in FY	Not determined	Not determined	est. baseline for all	TBD	TBD	TBD	75% field staff receive training landscape-level planning
Nationwide meetings held	Not determined	Completed 2/07	N/A	N/A	N/A	N/A	1 national meeting every 3 years

# APPENDIX B

## Examples of large-scale approaches to habitat conservation

### Regional and Landscape Level Approaches

- Arizona – Regional Planning in the Sonoran Desert –In 1998, Pima County, in partnership with 5 cities, Federal agencies including the U.S. Fish and Wildlife Service, the Bureau of Land Management, National Park Service, U.S. Forest Service, a citizen advisory committee (over 80 members and over 400 public meetings) and a science technical advisory team of 150 scientists developed a Sonoran Desert Multi-species Conservation plan. This plan addresses the conservation of 55 priority species within two eco-regions composed of 24 different vegetation types across 5.9 million acres. The effort is best described by Pima County:

*“Great communities are no accident. They are born out of natural strength and beauty and have a deep respect for ecology, history, culture and diversity. They are inspired by the vision of residents drawn to them. They are brought to maturity through hard work and investment. And they survive because of compromise and consensus. In a sense they achieve balance. Such balance is at the heart of the Sonoran Desert Conservation Plan.”*

Pima County has now achieved the integration of all natural resource protection and land use planning activities into one plan. Pima County citizens are proud of their accomplishments and passed a local bond measure raising 174.3 million dollars to acquire and permanently protect open space, including \$112 million which is designated specifically to protect key habitat identified in the plan.

- Texas – Comprehensive Planning to Reduce Flooding and Restore Ecosystems - The U.S. Fish and Wildlife Service Arlington Ecological Services Field Office’s project planning staff is currently working with the Fort Worth District of the U.S. Army Corps of Engineers in the planning of the Central City Interim Feasibility Study located in Fort Worth, Tarrant County, Texas. This project is the second of several feasibility studies in Tarrant County to be conducted over the next few years as part of the comprehensive Clear Fork and West Fork of the Trinity River Interim Feasibility Study. The purpose is to reduce flood damage and restore ecosystems, and provide additional and improved recreational opportunities along the West and Clear Forks of the Trinity River and its tributaries. Throughout the process, the project planning staff has been coordinating with other Service staff in the Endangered Species, Contaminants, and Fisheries programs in collecting field data, completing the existing conditions planning aid report, and assessing the possible impacts of current preliminary project alternatives. The project planning staff has a positive, working relationship with numerous Federal, State, and local agencies while revising the draft locally preferred plan to significantly reduce the overall cost of the project and determining Federal involvement in implementation of the master plan. The City of Fort Worth and the Tarrant Regional Water District are the sponsors of this highly controversial project. Fort Worth voters overwhelmingly passed a bond proposal to provide \$5.9 million to fund certain aspects of the master plan. The project has the strong support of U.S. Representative Kay Granger of Fort Worth and the Republican

Majority Whip Roy Blunt of Missouri. On November 20, 2004, Congress authorized \$110 million towards completion of the study. The sponsor’s proposal includes an urban lake located north of the downtown area and a bypass channel that would divert the river around the newly created lake, eliminating the levees in that area. The project would make more than 800 acres available for new urban waterfront development and create 60 miles of new paved trails and interpretive areas. The locally preferred plan currently proposes restoration of five terrestrial wildlife habitats across 296.2 acres [(aquatic (5.27 acres), riparian woodlands (133.11 acres), grasslands (65.84 acres), upland woodlands (76.92 acres), and emergent wetlands (15.02 acres)] to improve habitat diversity and quality, benefiting a variety of resident and migratory wildlife species.

- Illinois – Early Planning Agreement in the Chicago Landscape - The Service’s Chicago, Illinois, Ecological Services Field Office staff have entered into an informal early-coordination agreement with the city of Elgin, an outer Chicago suburb that is undergoing rapid growth. Their participation enables them to identify significant issues early, often at the annexation agreement stage, and allows them to work with a variety of project developers to identify solutions before development plans have been formalized. This early involvement allows them to participate in initial planning of multiple types of projects and resolve many issues prior to commitment of development funding, resulting in more win-win outcomes.
- New Jersey – Regional Effort to Restore and Protect New Jersey Meadowlands – The Hackensack

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Meadowlands Initiative is a collaborative effort to remediate, restore, and protect the Hackensack Meadowlands in Hudson and Bergen Counties, New Jersey. In support of the Initiative, the New Jersey Field Office (NJFO) is developing a document titled "Preliminary Conservation Planning" to provide a foundation for restoration of the Meadowlands ecosystem, including its fish and wildlife resources. The Meadowlands is one of the largest estuarine complexes in the northeastern United States and supports over 700 species of plants, fish and shellfish, amphibians, reptiles, birds, and mammals. Birds migrating along the Atlantic Flyway feed and rest throughout the Meadowlands. Partners in this initiative include Congressional leaders (Congressman Steven Rothman), Federal agencies (Corps of Engineers, National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency), State agencies (New Jersey Meadowlands Commission, New Jersey Division of Fish and Wildlife), academic institutions (Rutgers University Environmental Law Clinic), and non-governmental organizations (National Fish and Wildlife Foundation, New York-New Jersey Baykeeper, Hackensack Riverkeeper, Environmental Defense).

- Texas – Regional Transportation Planning in Texas - Interstate I-69 is a 1,600-mile long highway intended to facilitate the shipment of goods from Mexico to the Great Lakes area. Trans-Texas Corridor (TCC) is a multi-modal project that includes highway, rail, and utility components. The Texas portion of I-69/TTC is about 1,000 miles and includes Texarkana, Houston, Laredo, McAllen and Brownsville, Texas. The Service, through Project Planning, participated in the Policy Steering Committee and the Technical Advisory Committee since February, 2001 to develop a consensus-based,

collaborative NEPA procedure called the 'Process Manual'. The collaborators defined a 2-tier level of assessment with the first being at the corridor level and the second at the specific highway location level. For Tier 1 corridor assessments, the Service assisted in identifying high priority landscapes by providing data on listed Species, suggestions for habitat restoration projects on private lands, and identification of wetlands and National Wildlife Refuge boundaries. The Service also provided comments related to advanced mitigation/compensation of East Texas riparian habitats crossed by the proposed corridors. The resulting natural resource benefits from the Tier 1 study include identification of the least damaging environmental alternatives for the entire length of the project. A Record of Decision was completed in the Fall of 2006, and Tier 2 assessments will begin in 2007.

- Illinois - Upper Mississippi River System Navigation and Ecosystem Sustainability Program - The Service's Rock Island Ecological Services Field Office and 12 other offices of the Service's Midwest Region worked in FY 2006 with the U.S. Army Corps of Engineers, the States of Minnesota, Wisconsin, Iowa, Illinois, and Missouri, the Nature Conservancy and the National Audubon Society on the next phase of cooperative conservation on the Upper Mississippi River System (UMRS). The key component of this next phase of cooperative conservation is the Corps' Upper Mississippi River System Navigation and Environmental Sustainability Program, or NESP, which was recently authorized by Congress. The significant input and leadership of the Service over a 12-year period was instrumental in completion of the Integrated Feasibility Report and Programmatic EIS for the UMRS Navigation Feasibility Study, which is now known as NESP. The program

consists of a dual-purpose, 50-year project authority for 9-foot channel commercial navigation and ecosystem restoration at a total cost of \$8B. The Service has been a leader in the development of the program because the effects of the current navigation project on UMRS Service trust interests, including 11 National Wildlife Refuges, an international flyway for migratory birds, federally listed endangered species, and interjurisdictional fish. The Service and partners worked together in FY 2006 on the planning, design, and engineering of a large variety of ecosystem restoration projects for 1300 miles of the river system. Construction of projects will likely begin in FY 2008. The Rock Island Field Office is the point of contact for the Service for this mega-, landscape-scale project.

- Ohio - Streamlining Consultation and Coordination Efforts for Transportation Projects - The Service, Federal Highway Administration (FHWA), and Ohio Department of Transportation (ODOT) signed a Cooperative Agreement in April 2004. This streamlining agreement and subsequent programmatic consultation completed in January 2007 is the first of its kind in Region 3. The streamlined consultation process developed as part of this agreement helps transportation planners in Ohio design projects that promote specific regionally based conservation measures for the Indiana bat while building avoidance and minimization measures into their projects at an early stage. The benefits in terms of time and money saved along with real conservation on the ground for the species are significant. Until this programmatic consultation was developed, ODOT was consulting with the Service on a less-efficient project-by-project basis. As a result of implementation of this programmatic consultation, the Service has reduced response time by more than 50 percent



Photo by USFWS

and ODOT has facilitated Service early involvement in the planning process. For the first time, at the landscape-scale, specific regional conservation measures have been identified that will lead to achievement of goals set forth by the revised recovery plan for the Indiana bat. In addition, ODOT was instrumental in organizing two national Indiana bat workshops sponsored by AASHTO's Center for Environmental Excellence and the Center for North America Bat Research and Conservation in partnership with FHWA and Service. ODOT and FHWA developed these workshops in order to promote the use of programmatic approaches by other State transportation agencies in the range of the Indiana bat. In addition, ODOT and FHWA have committed to funding a transportation liaison position within USFWS to concentrate on expediting transportation related projects. These achievements demonstrate a commitment to a landscape level, streamlined approach to help improve transportation projects and to assist in the conservation and recovery of the Indiana bat.

- Alaska - Regional Tool

Development for Migratory Bird Assistance - Project Planning biologists developed a tool to assist with Migratory Bird Treaty Act (MBTA) compliance during project development called the "Alaska-wide Timing Window Recommendations and Timing Matrix." Matrix development resulted from a request for assistance from the Alaska Department of Transportation (ADOT), and ADOT and numerous other resource agencies, businesses, and non-governmental organizations assisted in the development of the matrix. The matrix provides recommended dates for avoiding land clearing activities. The timing recommendations incorporate the best available scientific data on the nesting season. Partners included Boreal Partners in Flight (including Canadian Wildlife Service), Alaska Bird Observatory, State of Alaska, USGS, U.S. Forest Service, British Petroleum (BP) Exploration, Oasis Environmental, Inc., and Service Divisions of Refuges, Law Enforcement, Subsistence, and Migratory Birds. The following was received in a letter from BP: "This matrix and accompanying fact sheet will help answer many

of the questions that the BP Studies Group receives several times a year. BP appreciates the Fish and Wildlife's efforts to provide the public with this valuable information." By using this tool, developers will be able to do advanced planning so they can meet their construction deadlines while avoiding vegetation clearing during the spring and summer breeding season. This will greatly diminish adverse impacts on migratory bird species productivity and survivorship rates from nest and nest site destruction.

Program-level Approaches:

- Oregon – Oregon Bridges Programmatic Review - The 10-year, \$1.3 billion Oregon Transportation Investment Act State Bridge Delivery Program will repair or replace several hundred bridges throughout Oregon that are nearing the end of their design life. This effort is anticipated to save taxpayers 15 percent of the initial design costs and shave a year or two off the program schedule.

In partnership with the U.S. Fish and Wildlife Service's Oregon State Office and other stakeholders, the Oregon Department of Transportation developed an important approach to repairing or replacing bridges which stresses environmental stewardship, active stakeholder involvement, and the participation of local communities in the planning, design, and construction of bridges. A single set of performance standards for the entire State's bridge program is the first Statewide streamlined permitting effort of its kind in the Nation.

Site-specific environmental data and performance standards are provided to bridge designers before they begin designing. By designing the bridge into the ecological context of the planning area, environmental impacts will not only be avoided or minimized, but hydrologic

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function and other ecological processes are expected to be restored. This batched programmatic effort provides the framework for addressing all future bridge projects in Oregon.

- Montana - Coal Bed Methane Program Review - Early involvement in project planning and a programmatic approach that allowed simultaneous review of projects in 16 counties in Montana reduced negative resource impacts from coal bed methane development. Service biologists in the Montana Field Office's Billings Sub Office collaborated with partners from the Bureau of Land Management, State agencies and industry to develop the Coal Bed Methane Programmatic Wildlife Monitoring and Protection Plan. Streamlined consultation and a programmatic approach increased the efficiency and shortened the time of the consultation process. Both the Wildlife Monitoring and Protection Plan and the conservation commitments in the Programmatic Coal Bed Methane Biological Opinion were incorporated into the Record of Decision for the Montana Statewide Oil and Gas Environmental Impact Statement (EIS) and Amendment of the Powder River and Billings Resource Management Plans (RMPs).
- Missouri – Cell Tower Program Review - The Columbia office annually receives an average of 300-500 cellular communication tower projects for review. The projects include co-locating a new tower on an existing tower, monopoles with no guy wires, or more than 400 foot-tall tower with guy wires. To effectively process the large volume of requests, the office developed a form called "Design Specifications Questionnaire for Proposed Communications Towers in Missouri." The form addresses project impacts to both federally listed species and migratory birds. The consulting firm is required to fill out the

form providing information on the project site, tower height, proposed number of guy wires, type of safety lighting used on the towers, and site impacts (access roads, site of work area). Once the form is submitted, a biologist evaluates project impacts and submits an evaluation back to the consulting firm or communication company. To help limit design problems, the form also has information on the type of tower design that avoids or minimizes impacts to migratory birds (e.g., co-location, less than 200 feet, no guy wires). Besides significantly reducing our workload in reviewing these actions, the form and "concurrence" process has provided an effective outreach and education tool that is resulting in a noticeable reduction in the number of cell towers posing threats to migratory birds. Consulting firms have informed us that their clients are building more migratory bird friendly cell towers in Missouri as a direct result of our office's streamlined review and concurrence process.

- Utah – Oil and Gas Program Review - The Utah Field Office (UFO) worked with BLM to develop and incorporate fish and wildlife avoidance and minimization measures into lease offerings to alert bidding lessees about the responsibilities that may accompany lease acquisition and development; continues to work with BLM to ensure that fish and wildlife avoidance and minimization measures are incorporated into all phases of project development from exploration to full-field development; continues to work with BLM to ensure that potential impacts to fish and wildlife resources are evaluated on a landscape or watershed level and cumulative impacts are adequately assessed and mitigated. The UFO also worked with BLM and the State of Utah stream alteration program to develop best management practices for pipeline crossings of ephemeral and intermittent streams; coordinated with

Washington Office BLM in their efforts to develop best management practices for oil and gas development; assisted FWS Regional and Washington Offices in review of Raptor Radii proposal for oil and gas disturbances; and worked with BLM Colorado Plateau Biologist to develop Wildlife Training for Oil and Gas Operators.

- Great Lakes – Big Rivers Region - MOU with Federal Aviation Administration for 6 States - On September 19, 2005, the Service's Great Lakes-Big Rivers Region entered into a memorandum of understanding (MOU) with the Great Lakes Region, Airports Division, of the Federal Aviation Administration. The MOU establishes a framework to streamline interagency coordination of FWS and FAA responsibilities under each agency's requirements. The MOU is intended to encourage structured and timely collaboration at the staff level between the two agencies in order to reduce the environmental processing and review times for airport-related development projects, which enhance the safety and capacity of the National Airspace System, while ensuring that each agency carries out its statutory responsibilities to protect the environment. The MOU covers actions in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

#### Watershed-Level Approaches

- Georgia - Spring Creek Watershed Partnership –The Partnership was created due to growing concerns of long time residents in Miller County about the ever increasing degradation of Spring Creek. Miller County officials began talking with Federal agencies on ways to enhance and restore Spring Creek and from this the partnership was created. The Spring Creek watershed passes through five other counties as well, so invitations were extended to all counties

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contained in the Spring Creek watershed to participate in the partnership. All six counties, along with the Service, Natural Resources Conservation Service, Golden Triangle Resource Conservation and Development Council, Flint River Soil and Water Conservation District, and the Georgia Department of Natural Resources, signed the agreement forming the partnership in October 2003. The purpose of the partnership is to provide leadership and promote wise stewardship through community development, educational outreach, and the active participation of private landowners, for enhancing, restoring, and protecting the Spring Creek Watershed.

- Alabama Clean Water Partnership – Project Planning and other Service programs have been active throughout the State of Alabama in an organization called the Alabama Clean Water Partnership (ACWP). The ACWP consists of State and Federal agencies, non-profit organizations, private industries, as well as interested individuals working towards the common goal of protecting the water resources and aquatic ecosystems of Alabama. The ACWP is divided into sub-basins, of which the Service has been an active participant in several - offering technical advice and participating on steering committees. In particular, the Service has been working with the Middle Coosa, Wolf Bay, Conecuh-Sepulga, and Tallapoosa sub-basins on a variety of projects from coastal clean-ups, to water quality and bio-monitoring projects, to stream channel restoration projects.
- Georgia - A Vision for the Savannah River Basin - Project Planning is actively involved in the Savannah River Basin Project, along with multiple States, Federal and non-profit organizations, including The Nature Conservancy, Georgia and South Carolina



Photo by USFWS

Departments of Natural Resources, the Corps of Engineers, Ducks Unlimited, and the Coastal Georgia Land Trust among others. The vision for this project is a protected corridor of habitat on both sides of the river starting from Augusta, Georgia and extending to the coast. Highlights have included: 1) participation in the Earth Resources Monitoring Initiative, a collaborative group of public and private entities whose goal is to produce a commercially viable product to use in making policy decisions to ensure the sustainability of water resources. The group will incorporate all existing data on the Savannah River including GIS, mathematical models, hydrological data, etc. into a user friendly software model; 2) partnership with a private landowner on the Savannah River who owns 7 miles of riverfront property, much of which is old growth bottomland hardwood; and 3) initiated development of a flow regime study for the Savannah River.

#### Individual Projects Involving Landscape Approaches

The 4 projects described below are all hydropower projects. Working with the sponsors and regulators of the Nation's hydropower projects is inherently a Project Planning function. These projects are large in

scope, and have myriad landscape-level (and larger) effects on fish and wildlife species, watersheds, and communities. The Project Planning Program negotiates the settlement agreements that authorize the projects, and that also contain measures to protect and restore fish and wildlife habitat. The completed settlement agreements frequently provide opportunities for other Service programs to get involved, such as the Partners, Coastal, and Fisheries programs.

- Maine Penobscot River - Project Planning staff worked with others to successfully complete a comprehensive settlement agreement involving relicensing of a multi-dam hydropower storage project in the headwaters of the Penobscot River in Maine. The Penobscot River, New England's second largest river system, drains over 8500 square miles. The project involved examination of several dams on the Penobscot which had drastically reduced sea-run fisheries, and resulted in review of power generation capacity and needs, and natural resource needs. The result was that 2 dams will be removed; 1 dam will be decommissioned with construction of a fish bypass, power generation will be increased at 6 existing dams, and fish passage will be improved at 4 dams. Multiple conservation benefits will accrue across

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several tributaries and habitat types.

- Washington – Lewis River Hydroelectric Relicensing projects - A comprehensive settlement agreement was reached in November 2005 for the relicensing of the four Lewis River Hydroelectric Projects, located in Clark, Cowlitz, and Skamania Counties. The license is expected to be issued in 2007 for a term of 50 years. Partners involved in negotiating the settlement agreement include PacifiCorp, the Cowlitz County Public Utilities District, and representatives from 5 Federal agencies, 4 State agencies, 2 Tribes, 5 local governments and 5 non-governmental organizations representing more than 25 other groups negotiated the settlement agreement. The Service's Western Washington Field Office worked collaboratively with all parties to ensure that protection, mitigation, and enhancement of fish and wildlife resources were considered in the relicensing process. Expected benefits to natural resources include, but are not limited to: providing fish passage, including re-opening of over 174 miles of stream habitat for native fish, including bull trout and Pacific salmon; ensuring adequate downstream flows; providing connectivity through and past four dams for native fish; acquiring 8,800 acres of land to be managed for wildlife; which is in addition to 6200 acres of land already managed for wildlife as mitigation of impacts due to another dam; providing habitat benefits for bull trout, bald eagles and other raptors, neotropical migrants Pacific salmon, elk and other large and small game, as well as a diversity of other native wildlife.
- Washington - Baker River Hydroelectric Project Relicensing - A comprehensive settlement agreement for the relicensing of the two Baker River Hydroelectric Projects located in Whatcom and Skagit Counties was reached in

November 2005. The license is expected to be issued in 2007 for a term of 45 years. Puget Sound Energy and representatives from 4 Federal agencies, 4 State agencies, 3 Tribes, 3 local governments and 6 non-governmental organizations, representing more than 15 other groups, collaborated on the settlement negotiations. The Western Washington Field Office worked collaboratively with all parties to ensure that protection, mitigation, and enhancement of fish and wildlife resources were considered in the relicensing process. Expected benefits to natural resources include, but are not limited to: habitat protection for birds, elk, grizzly bear, mountain goats and amphibians; habitat enhancement for spotted owls and marbled murrelets; noxious weed control; opening 90 miles of stream habitat for native fish, including bull trout and Pacific salmon; ensuring minimum instream flows and protective ramping rates; protection and restoration of aquatic habitat; acquisition of 5,400 acres of land for wildlife; and development of a wildlife management plan for lands within project boundaries.

- Alaska – Cooper Lake Hydroelectric Project Relicensing - A comprehensive settlement agreement for relicensing of the Cooper Lake Hydroelectric Project, located near Cooper Landing on the Kenai Peninsula, was reached in August 2005. The Agreement is a win-win because Cooper Creek fish habitat will be restored and power generation will be increased by approximately 10 percent. Relicensing this project was controversial because it is located in the Kenai River watershed, the most heavily utilized recreational river in Alaska. The Kenai River, world-renowned for trophy salmon and trout, supports significant commercial, sport, and personal-use fisheries. The Service, in cooperation with partners Chugach Electric Association, Forest Service, National Marine Fisheries Service (NMFS),

Alaska Departments of Fish and Game (ADF&G) and Natural Resources (DNR), Alaska Fly Fishers, Cooper Creek Coalition, Kenaitze Native Tribe, Alaska Center for the Environment, and American Rivers, agreed to a plan to divert Stetson Creek into Cooper Lake, where water can be naturally warmed, and then released to Cooper Creek. One-half of the diverted water will be available for stream restoration and one-half will be available for additional power generation. The settlement is expected to restore 4.5 miles of Cooper Creek by making habitat conditions suitable for spawning and rearing of Chinook, coho, sockeye, and pink salmon, and rainbow trout. In addition, Chugach Electric will fund recreational and cultural enhancements, and has agreed to maintain the transmission line in a manner that protects nesting migratory birds and wetlands.

# APPENDIX C

The Project Planning Program engages on behalf of other Service programs when there is potential for proposed development projects to adversely effect the Service's trust resources. The program serves in a "boots-on-the-ground" capacity for other programs with minimal field presence (e.g., Migratory Birds).

The Project Planning Program has an outcome measure that is linked to the PART outcome goal for the Division of Migratory Bird Management to increase the percent of migratory bird species at healthy and sustainable levels (see table 1). To assist in this endeavor, the following sources of information on migratory birds, their habitats, and status are provided.

Western Hemisphere Shorebird Reserve Network - site map for areas in the United States  
[http://www.whsrn.org/google\\_map.php](http://www.whsrn.org/google_map.php)

RAMSAR<sup>1</sup> sites in the United States - [www.ramsar.org/sitelist.doc](http://www.ramsar.org/sitelist.doc)

UNITED STATES OF AMERICA / ETATS-UNIS D'AMÉRIQUE / ESTADOS UNIDOS DE AMÉRICA (21 Ramsar sites, 1,306,265 hectares)

Ash Meadows National Wildlife Refuge	18/12/86	Nevada	
Bolinas Lagoon	01/09/98	California	
Cache-Lower White Rivers	21/11/89	Arkansas	
Cache River-Cypress Creek Wetlands	01/11/94	Illinois	
Caddo Lake	23/10/93	Texas	
Catahoula Lake	18/06/91	Louisiana	
Chesapeake Bay Estuarine Complex	04/06/87	Virginia	
Cheyenne Bottoms	19/10/88	Kansas	
Connecticut River Estuary & Tidal Wetlands Complex	14/10/94	Connecticut	
Delaware Bay Estuary	20/05/92	Delaware, New Jersey	
Edwin B Forsythe National Wildlife Refuge	18/12/86	New Jersey	
Everglades National Park	04/06/87	Florida	
Grassland Ecological Area	02/02/05	California	
Horicon Marsh	04/12/90	Wisconsin	12,912
Izembek Lagoon National Wildlife Refuge	18/12/86	Alaska	
Kawainui and Hamakua Marsh Complex	02/02/05	Hawaii	
Okefenokee National Wildlife Refuge	18/12/86	Georgia, Florida	
Pelican Island National Wildlife Refuge	14/03/93	Florida	
Quivira National Wildlife Refuge	12/02/02	Kansas	
Sand Lake National Wildlife Refuge	03/08/98	South Dakota	
Tijuana River National Estuarine Research Reserve	02/02/05	California	
Tomales Bay	30/09/02	California	

Important Bird Area (IBA) maps for each State

<http://www.audubon.org/bird/iba/index.html>

List of permit offices for migratory birds

<http://www.fws.gov/permits/mbpermits/addresses.html>

List of Birds of Management Concern (BMC)

This is a subset of the species protected by the MBTA that pose special management challenges. The Service will place special management emphasis on these birds during the next ten years. The BMC list consists of 412 species, subspecies, or populations out of a total of over 900 birds species found in North America.

<http://migratorybirds.fws.gov/mbstratplan/GPRAMBSpecies.pdf>

<sup>1</sup>The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are presently 154 Contracting Parties to the Convention, with 1669 wetland sites, totaling 151 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance.



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<http://www.fws.gov>

