

U.S. FISH AND WILDLIFE SERVICE

The Coastal Program

~ Strategic Plan ~

*Stewardship of Fish and Wildlife
Through Voluntary Conservation*



Regional Step-Down Plan Region 3 - “Great Lakes -Big Rivers”

Part 2 of 3

FY 2007-2011



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I. Introduction

The Nation's coastal areas and shorelines support myriad terrestrial and marine ecosystems, and as a result, are critical to human endeavors. Fish and wildlife resources and associated habitats serve as a bellwether for ecosystem health. As coastal and shoreline areas fall under increasing pressure, cumulative impacts mount and our natural resources become diminished.

The challenges and resulting opportunities are great. Comprising less than 25% of America's land area, coastal counties are home to more than 50% of our total population—a share projected to swell to 75% by 2010. Only 50% of the Nation's wetlands remain; more than 70% of the Nation's riparian habitats are lost or significantly degraded; and, coral reefs and submerged coastal vegetation continue to decline. Further, less than 2% of the Nation's rivers remain free flowing. Consequences of habitat loss include decreases in fish and wildlife populations and many other natural, social, and economic impacts that have the potential to decrease quality of life.

The Coastal Program seeks to address these challenges proactively by partnering with a wide range of stakeholders while holding true to the U.S. Fish and Wildlife Service (Service) mission: “working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.”

At the heart of the Service's mission are the conservation and management of federal trust resource species: migratory birds, threatened and endangered species, inter-jurisdictional fish, certain marine mammals, and species of international concern. As we work under an array of statutory authorities and resource management programs, the Coastal Program serves as a bridge to owners and managers of federal and non-federal lands where partnerships are developed to benefit fish and wildlife and associated habitats directly. With a focus on voluntary, cooperative conservation, the Coastal Program works under the premise that fish and wildlife conservation represents a shared responsibility across all lines of interest and society. To that end, we engage willing partners to conserve and protect valuable fish and wildlife habitat. We provide funding, technical assistance, and planning tools needed to make on-the-ground conservation affordable, feasible, and effective.

About this Document

The Regional Step-Down Plan represents part two of a three-part national strategic planning process for the Partners for Fish and Wildlife Program and the Coastal Program. Part One, “the Vision Document,” was completed in 2006 and provides an overview and outlines broad goals over the next five years for both programs. Parts Two and Three comprehensively address these goals, with Part Two stepping down the Vision Document to the regional level and Part Three providing a national summary document.

The Region 3 Step-Down Plan represents a living document. As we improve our ability to address trust resource issues in the Great Lakes, guidance documents and approaches will change.

Region 3, the “Great Lakes – Big Rivers” Region, has had great success with both the Partners for Fish and Wildlife Program and the Coastal Program, with the former having a long history of leadership and achievement and the latter continuing to grow as one of the Service's recent additions (FY 2001). This document focuses on the Coastal Program – Great Lakes and covers

the time period from fiscal year (FY) 2007 through FY 2011. (The step-down plan for Region 3's Partners for Fish and Wildlife Program will occur under a separate cover.)

Specifically, we address each of the five Coastal Program goals established in the Vision Document by describing objectives, specific five-year performance measures, and key strategic activities. As we pursue the Program's goals, our biologists will work under the backdrop of adaptive management, always seeking to reassess and improve our capability and expertise, and ultimately, our conservation product.

At the onset of the strategic planning process, stakeholders across the Great Lakes provided insight into what internal and external factors were impacting the Coastal Program's current performance or could impact future endeavors. That input provided valuable direction for the design and content of this document. Prevailing themes of Coastal Program strengths expressed by stakeholders included on-the-ground accomplishments, flexibility, technical expertise, and responsiveness to the needs and values of property owners and local communities. As we proceed over the next five years, stakeholders will continue to provide valuable input as we all seek a common Great Lakes conservation product.

Finally, the Great Lakes basin spans many jurisdictions, including one internal to the Service. We recognize that our success also depends on a full, comprehensive effort with Region 5, the Northeast Region, and the partnership base and opportunities that reside across Lake Ontario and the St. Lawrence River system. Implementation of the Region 3 step-down plan will seek to reconcile the two regions to a coordinated cross jurisdictional effort.

Coastal Program Goals

Conserve Habitat – Restore and protect priority habitats to maintain and increase federal trust resources.

Broaden and Strengthen Partnerships – Accomplish our work through voluntary partnerships.

Improve Information Sharing and Communication – Collaborate and share information and concerns with our current and future partners, stakeholders, decision-makers, and others to protect, restore, and enhance federal trust resources.

Enhance Our Workforce – The staff of the Coastal Program is our most important resource. Maintaining and supporting our staff is key to the success of the Coastal Program in achieving on-the-ground results for federal trust resources.

Increase Accountability – Measure, assess, and report on the effectiveness, efficiency and fiscal integrity of our habitat conservation programs and activities.

II. Regional Overview

The Great Lakes ecosystem features an extensive watershed (290,000 square miles) with 5,000 tributaries, more than 1,000 miles of shoreline, and some 35,000 islands. Representing the world's largest fresh water system and the nation's fourth largest coastline, the Great Lakes support the livelihood and activities of 10 % of the U.S. and 25 % of the Canadian

populations. As an example of the economic backdrop, the Great Lakes ecosystem supports water-related recreational activities valued at \$15 billion annually, of which sport fishing activities contribute \$4 billion.

An International/Interjurisdictional Basin

The Great Lakes represent a shared resource among the U.S., Canada and myriad tribal governments. All goals and accompanying step down planning recognize the full community of jurisdictions and interests.

Ecologically, the Great Lakes' sand dunes, coastal wetlands, islands, rocky shorelines, prairies, savannas, forests, fens, and other landscape features are globally unique, supporting a rich and diverse variety of species. Important migration corridors and critical breeding, feeding, and resting areas are present for numerous species of migratory and resident birds—especially waterfowl, colonial nesting birds, and neotropical migrants. The Great Lakes also support a freshwater fishery unrivaled around the world, and a recent survey of biological diversity identified 130 globally endangered or rare plant and animal species which inhabit the Great Lakes ecosystem.

Human population growth and the development and disturbance that are often a consequence of growth have impacted trust resource species and their habitats. The Great Lakes ecosystem has lost more than half of their original wetlands and 60 % of forest lands, and only small remnants of other habitat types, such as savannah or prairie, remain. Changes in habitat type and extent have contributed to numerous plant and animal extirpations throughout the Great Lakes basin. Because coastal areas have the highest population densities in the country and are expected to face continuing population pressures, there exists a strong need for action to protect and restore these critical areas.

The Coastal Program – Great Lakes works primarily in three habitat types: coastal wetlands, coastal uplands, and streams/riparian areas. The Program works under three ecological principles: 1) maintain natural coastal ecosystem diversity, functions, and productivity, 2) promote natural, self-sustaining populations of native species within their historic ranges, and 3) provide for ecologically sound levels of public use, economic benefits, and the enjoyment of natural resources.

Wetland Habitat Types

Areas within the Great Lakes shoreline zones are the most diverse and productive areas of the basin. Examples include relatively warm and shallow waters near the shore, coastal wetlands, and the land areas directly affected by lake processes.

There are an estimated 300,000 acres of Great Lakes basin coastal wetlands (GLNPO 2002) and these areas play a pivotal role in the aquatic ecosystem of the Great Lakes, storing and cycling nutrients and organic material from the land into the aquatic food web. Coastal wetlands have

many of the same functions that all wetlands have, but their unique position in the landscape makes them particularly important for intercepting, transforming, and accumulating chemical, nutrient, and sediment constituents that flow from upland areas to the open water areas of the lakes.

Coastal wetlands are composed of a variety of habitats, including marshes, wooded swamps, bogs and fens. The aquatic plant communities within Great Lakes coastal wetlands are among the most biologically diverse and productive systems of the world. Coastal wetlands provide food and habitat for a diversity of fish and wildlife, including several species that are not found outside of the basin. For many ducks, geese and other migratory birds, wetlands are the most important part of the migratory cycle, providing food, resting places and seasonal habitats. Further, amphibians and invertebrates depend on coastal wetlands for critical portions of their life cycle. Wetlands also play an essential role in sustaining a productive fishery, with many species of Great Lakes fish depending on coastal wetlands for successful reproduction.

Coastal Upland Habitat Types

The upland habitats that dominate the Great Lakes shoreline include sand dunes and beaches, lakeplain prairies, coastal upland forests, islands used as rookeries by colonial nesting birds, and a variety of other upland habitat types interspersed with coastal wetlands.

The Great Lakes contains one of the largest freshwater dune complexes in the world. These large sand dune and beach communities were formed by sand and sediment deposits left by the glaciers that once covered the entire basin. Today, these communities are heavily influenced by wind and water level fluctuations of the Great Lakes. The sand dunes of the Great Lakes support a unique plant species assemblage, represented by species such as marram grass (*Ammophila breviligulata*), beach pea (*Lathyrus japonica*), and sand cherry (*Prunus pumila*). These dunes also support a number of rare species, including the federally listed Pitcher's thistle (*Cirsium pitcherii*) and Houghton's goldenrod (*Solidago houghtonii*), and provide nesting habitat for the federally endangered Great Lakes piping plover (*Charadrius melodus*).

Another unique habitat includes lakeplain prairie, historically occurring in complex mosaics with other community types, such as oak openings and forested swamps. These unique areas typically experience seasonal flooding and include small pockets that remain wet throughout the year. Diverse plant communities occur here with some lakeplain prairie remnants supporting as many as 200 plant species in a single prairie remnant. Typical plant species include blue-joint grass (*Calamagrostis canadensis*), cordgrass (*Spartina pectinata*), and various sedges (*Carex* spp.) and rushes (*Juncus* spp.). These sites also support a number of amphibian and reptile species as well as several species of grassland songbirds.

Forested areas found within the coastal zone of the Great Lakes vary in structure and composition, with an accompanying variety of fish and wildlife communities. Forest community types range from northern forest types, such as northern hardwoods to southern types dominated by oaks. In northern portions of the basin, forest types include hemlock-hardwoods and pine dominated by species such as American beech (*Fagus grandifolia*), eastern hemlock (*Tsuga canadensis*), white pine (*Pinus strobus*) and red pine (*Pinus resinosa*). Southern forests range in composition from southern hardwoods to oak and oak savannah. Predominant species in southern communities include various oaks (*Quercus* spp.), maples (*Acer rubrum*, *A. saccharum*), and sweet pignut hickory (*Carya ovalis*).

Finally, the Great Lakes hold approximately 30,000 islands, which range in size from less than an acre to more than 140,000 acres (Isle Royale). The basin's islands contain virtually all the unique natural features associated with the Great Lakes shoreline, as well as some of the last intact ecological communities found in the Great Lakes. Islands also support a disproportionate number of rare, threatened and endangered species, due in part to their biological diversity, isolation from human disturbance, and absence of invasive species. A number of colonial waterbirds, such as common tern (*Sterna hirundo*) and black-crowned night-heron (*Nycticorax nycticorax*), nest on Great Lakes islands, at sites free from predators and other disturbance. Shoals surrounding the islands are of high value to Great Lakes fish. Many islands are also considered important stop-over sites for neotropical migratory songbirds that pass through the Great Lakes in vast numbers each year.

Stream/Riparian Habitat Types

Thousands of rivers and streams flow within the Great Lakes basin. These watercourses range from small, headwater streams to main tributary rivers to the large connecting channels—Detroit, St. Clair, and St. Mary's Rivers.

More than 300 species of fish inhabit the rivers, streams, and coastal areas of the Great Lakes Basin. Tributaries are the principal spawning and nursery habitats for a host of native species as well as introduced game fish, such as steelhead, brown trout, and Atlantic, Chinook and Coho salmon. In addition, these streams provide habitat for many other aquatic organisms throughout various stages of their life cycles.

Lake sturgeon and brook trout, two native fish species of special concern in the Great Lakes, rely on rivers and streams for reproduction. Considered a warm water species, the lake sturgeon represents the only sturgeon species endemic to the Great Lakes basin. Lake sturgeon spend most of their life cycle in open water and move up rivers to spawn on clean, gravel shoals and stream rapids. Brook trout are the only stream-dwelling trout native to the Great Lakes. Brook trout that spend at least part of their life in the Great Lakes are called "coasters." As they require clean, cool, well-oxygenated water, brook trout seek riffle areas in spring-fed streams with gravel substrate for spawning.

Native mussels, or clams, also inhabit riverine areas within the Great Lakes basin. Many mussel populations are now in severe decline due to habitat alteration, poor water quality, and invasive species, such as zebra and quagga mussels. Numerous mussel species are state-listed as threatened or endangered. Federally listed mussels within the Great Lakes watershed include the northern riffleshell, clubshell, and white cat's paw; the rayed bean, a federal candidate species, also occurs in the basin.

The term "riparian" refers to all habitats within a stream corridor or valley, particularly the vegetation on the stream bank. Healthy riparian habitats are critical to fish and aquatic organisms as trees, shrubs, and other tall vegetation provide shade that helps maintain water temperature. Riparian areas also regulate water flow during storm events and help maintain stream flow during dry periods. Vegetation near waterways anchor soil, help keep sediment and excess nutrients out of the water, and reduce stream bank erosion. Riparian vegetation also contributes large tree limbs and branches that fall into waterways as snags. Finally, riparian areas also afford corridors for wildlife movements and migrations and provide nesting habitat for bird species.

Issues and Risks

Approximately 50% of Great Lakes coastal wetlands have been lost since 1800 (USEPA 2006). Land use practices, channelization, agriculture, and urban/rural development all contribute to our changing landscape. Many of these same activities continue to degrade or permanently change wetland conditions today by altering hydrology, changing water chemistry, or reducing the biological diversity of plant communities. Coupled with the cumulative effect of habitat fragmentation, the persistence of contaminants and invasive species, and other threats, the Great Lakes basin, including shorelines and islands, are at risk. As our bellwether, fish and wildlife communities provide the first clue to ecosystem health and our foremost responsibility.

Cooperative Conservation

Addressing fish and wildlife resource issues in the Great Lakes requires a cooperative approach. The Coastal Program – Great Lakes works closely with Service programs and partners to achieve conservation success. There are myriad reference points and partnerships for the Coastal Program in the Great Lakes, including:

- North American Waterfowl Management Plan,
- North American Landbird Conservation Plan,
- U.S. Shorebird Conservation Plan,
- North American Waterbird Conservation Plan,
- National Fisheries Strategic Plan,
- National Wildlife Refuge System Strategic Plan,
- Refuge Comprehensive Conservation Plans,
- Endangered Species Habitat Conservation and Recovery plans,
- Environmental Contaminants Strategic Plan,
- Great Lakes Basin Ecosystem Team Committee plans,
- State Wildlife Action Plans, and
- Great Lakes Regional Collaboration.

A successful cooperative approach requires trust and credibility among partners. We achieve this goal by assisting others in a timely manner, by leveraging resources, and by implementing cost-shared projects. Region 3 biologists are experienced at helping forge and implement collaborative solutions that meet local and regional needs for fish and wildlife conservation.

There are many more. Joining with these efforts and the personnel behind their success means that our Program increasingly becomes active in integrated trust resource conservation planning. Likewise, in this era of cooperative conservation, we continue to provide biological and technical expertise to others so as to complement their habitat initiatives. Success occurs when we allocate our resources strategically and remain flexible and adapt quickly to change. Using the input from our partners and stakeholders, this plan describes performance measures developed to support our five strategic goals.

The following five goals are designed to lead to our ultimate Program outcome: *increasing and/or maintaining federal trust resource populations*. We will measure progress by an outcome indicator that represents a percentage of sustained or increasing target species populations. This indicator is derived from information assessed by the Program, by other Service species-oriented programs, or by our partners.

III. Goal One: Conserving Habitat

Regional Objectives

The Region 3 Coastal Program's objectives are to maintain or increase the abundance of federal trust resources through habitat restoration or enhancement activities. Partnership solicitation and project ranking decisions are guided by the following priorities:

- **Habitat restoration.** Projects that restore or provide coastal shore habitats and natural processes that sustain long-term diverse and abundant populations of native resident and migratory fish and wildlife species.
- **Research and evaluation.** Projects that further our understanding of natural coastal ecosystem diversity, functions and productivity through the acquisition, compilation, and dissemination of scientific information.
- **Education and outreach.** Projects that increase public awareness of coastal resources, issues and corrective actions.
- **Planning and technical assistance.** Projects that provide for ecologically sound levels of restoration, public use, economic benefits, and enjoyment of coastal resources.

Federal, State, Tribal and local governments, educational institutions, private organizations and individuals may apply. Fish and Wildlife Service offices may also apply; however, in an attempt to maximize project funding to partners, no more than 25% of the annual project allocation will be awarded to Service offices for Service-lead projects. Examples of other activities in the Great Lakes basin include coordinating with state, Federal or local or Tribal agencies to explore and help identify their needs and offer options for them to consider in meeting those needs, such as through Coastal Program Cooperative Agreements, and Intragovernmental Agreements. Onsite visits to projects to develop applications, visits and technical assistance offered during project execution, and monitoring of progress onsite during and after execution are all part of this cooperative process.

Key Strategic Activities

The accomplishment of the regional habitat conservation goal will be addressed through the implementation of the following key strategic activities:

- Development of Geographic Focus Areas
- Setting habitat acreage goals for each Geographic Focus Area
- Involve stakeholders in the development of the Geographic Focus Areas and associated habitat acreage goals

Performance Measures

The goal of conserving habitat will be measured by the following:

- acreage of upland habitats restored or enhanced
- acreage of wetland habitats restored or enhanced
- miles of riparian habitats restored or enhanced
- miles of stream habitats restored or enhanced
- number of aquatic access structures installed

Geographic Focus Areas

To meet our objectives, Region 3 has developed geographic focus areas based on the needs of federal trust resource species and input from our stakeholders. Each geographic focus area described below includes a detailed description of specific habitat restoration or enhancement needs. We will pursue accompanying objectives via collaborative habitat restoration or protection partnerships. Primary tools to accomplish this will include cost-sharing, expert technical assistance, and Program implemented projects. Program staff will measure performance by the amount of habitat provided for trust resource species through restoration or enhancement projects, as well as through efforts to ascertain the status of the trust resource species that these projects are designed to benefit.

In development of the focus areas numerous plans and efforts underway in the Great Lakes were researched. The knowledge, experience and expertise of our many partners and Service staff were used to identify areas where focusing our effort will have the greatest impact on coastal trust resources. Multiple factors were considered in creating the program's focus areas (Figure 1), including: 1) degree of existing or potential diversity or abundance of Service trust resources, 2) occurrence of existing focused efforts by partners, 3) uniqueness of the area, 4) restorability of ecosystem integrity and sustainability, 5) threats to the area and trust resources, 6) importance of the area to the larger ecosystem, 7) strength of existing partnerships or the potential for future partnerships, 8) education and outreach opportunities, and 9) other considerations and interests of stakeholders.

The focus area approach brings strengths and weaknesses, and as a result, an opportunity to improve. Although many natural resource management efforts exist in the Great Lakes, each has limited program resources. As a result, efforts to restore and maintain high functioning landscapes for trust resource species benefit from the delivery of multiple programs that focus on landscape-scale units where the greatest joint impacts can occur. This represents a strength. In many cases, however, the number and extent of our Great Lakes focus areas are large enough to potentially dilute our program's effort and conservation contribution.

Strategic Habitat Conservation (SHC)

The Service has recently considered and developed ideas of bringing adaptive management principles to our conservation work. A recently released report from the National Ecological Assessment Team describes a framework for setting and achieving conservation objectives at multiple scales, based on the best available information, data, and ecological models. Using the principles of adaptive management, the SHC elements help guide us away from opportunistic, program specific activities to one of a strategic focus. The Coastal Program – Great Lakes will seek to improve our focus areas via SHC.

As a result, and most importantly, we will work with others to revisit our focus areas so as to continue with our principle of adapting and improving. The below focus areas and their boundaries are not intended as permanent or inflexible, but do serve as a first edition rallying point for trust resource species conservation.

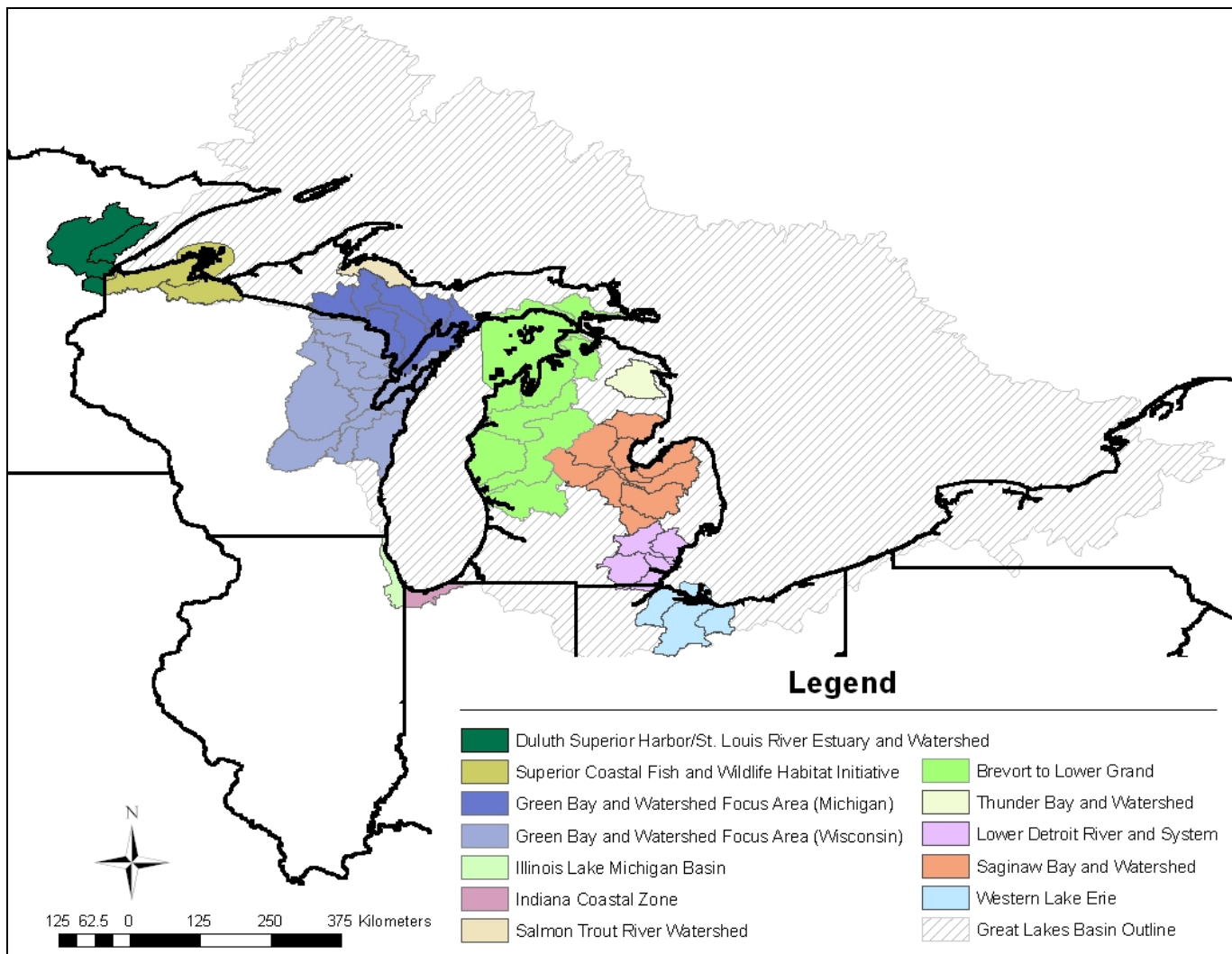


Figure 1. Location of Coastal Program Focus Areas in the Great Lakes.

Duluth-Superior Harbor/St. Louis River Estuary and Watershed Focus Area

Description

This focus area includes the following watersheds, as defined by the U.S. Geological Survey 8-digit hydrologic unit codes (HUCs): St. Louis (04010201), Beartrap – Nemadji (04010301), Cloquet (04010202) (Figure 2). The counties of Minnesota within this focus area are Itasca, St. Louis, Lake, Aitkin, Carlton and Pine. Portions of the St. Louis and Nemadji river watersheds are also part of the estuary and are located in far northwestern Douglas County, Wisconsin.

The Duluth-Superior Harbor/St. Louis River Estuary and Watershed Focus Area is approximately 3,906 square miles in size and encompasses the western-most watersheds of Lake Superior. The St. Louis River is the major U.S. tributary to Lake Superior, which is the largest and deepest of the Great Lakes and contains 10% of the world’s fresh water. The lower 21 miles of the river is a freshwater estuary, created when the level of Lake Superior rose following the

retreat of the glaciers. The rising waters gradually drowned the mouth of the river along with its lower tributaries. In this area, the river channel marks the boundary between Minnesota and Wisconsin and separates the Twin Ports of Duluth, Minnesota, and Superior, Wisconsin. Protected from the waves of Lake Superior by a baymouth sand bar, portions of the estuary also serve as the Duluth-Superior Harbor, which is the largest harbor on all the Great Lakes.

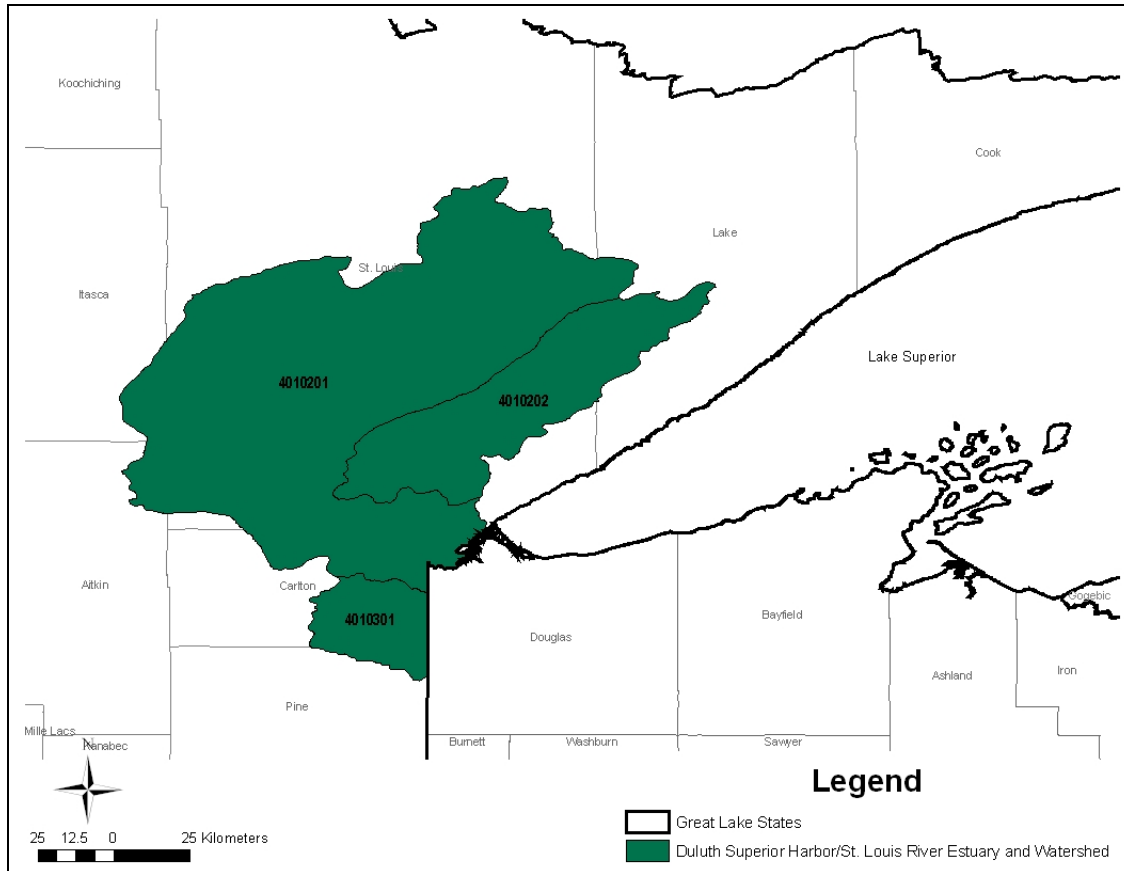


Figure 2. Duluth-Superior Harbor/St. Louis River Estuary and Watershed Focus Area.

After more than 150 years of commercial and industrial activity on and along the shore of the lower St. Louis River, ecological conditions vary greatly. The upper portion of the estuary still retains relatively undisturbed high-quality ecological areas, while sections of the lower portion of the estuary and harbor have been dredged and modified since the mid-1800s to accommodate shipping traffic, commerce and industrial needs. Despite this activity, the estuary as a whole provides habitat for a rich variety of fish, migratory birds, aquatic invertebrates, and other wildlife.

The St. Louis River’s diverse ecosystems are significant both regionally and globally. It has a unique combination of habitats found within the system, including estuarine wetlands, open water areas, baymouth sand bar complex, and surrounding upland forest. This concentration of diverse habitats, along with its location on the western end of Lake Superior, makes the estuary an important breeding area for many species as well as a critical stopover for numerous migratory bird species.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds and other migratory bird species
- Numerous interjurisdictional fish species, including brook trout, lake trout and lake sturgeon
- Three federally listed species including piping plover, bald eagle, and Canada lynx
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats

Threats, Needs, and Opportunities

The St. Louis estuary is the largest estuary in the Great Lakes, supporting a wide variety of fish and wildlife resources. The upper portions of the watershed are largely forested, with mining and some agricultural development. The middle portions include boggy wetlands associated with the river system. The estuary is lacustrine habitat behind two large sand bars that protect the estuary from Lake Superior. Priority conservation and enhancement needs include: 1) near-shore shallow water fish habitat, 2) nesting and rearing habitat, especially for common tern and piping plover, and 3) wetlands.

The development of the Duluth-Superior Harbor has significantly changed the lowermost reach of the estuary. This harbor is one of the most important components of the Great Lakes waterborne commerce system. Most of this portion of the estuary has been altered to support deep-draft navigation and related economic development, residential and commercial growth, hydroelectric power production, petroleum refining, gas and chemical production and storage, and other manufacturing. Many of these uses have significantly impacted the historic natural resources once supported by the estuary. Water quality concerns led the International Joint Commission to designate the lower St. Louis River as a Great Lakes Area of Concern. A Remedial Action Plan was developed in order to address impaired uses, such as degraded fish and wildlife populations and loss of habitat. Several recent land use improvements (e.g., wastewater discharge limitations, better management of degraded materials, reduced wetland filling) have helped curtail impacts, but additional effort is necessary to enhance and restore habitat historically impacted and to conserve remaining resources.

The Coastal Program – Great Lakes has the opportunity to supplement on-going international, federal, state and local conservation efforts, assist tribal interests in the watershed, and help influence land use and regulatory decisions to benefit trust resources in the estuary.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of fish and wildlife habitat in the estuary and watershed.
2. Restore a reproducing lake sturgeon population in the St. Louis River.
3. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals:

1. Support fish and wildlife habitat restoration projects in the St. Louis River watershed and estuary.
2. Assist with implementation of the Lower St. Louis River Habitat Plan.
3. Support recovery efforts for piping plover and other federally listed species in coastal habitat.
4. Facilitate lake sturgeon restoration efforts.
5. Assist with influence and remediation of Superfund sites within the focus area to restore and replace lost resources such as lake sturgeon and wetland habitat.
6. Assist tribal natural resource objectives.
7. Assist efforts to minimize establishment and spread of injurious exotic species.

Existing Conservation Plans for the Duluth-Superior Harbor/St. Louis River Estuary and Watershed Focus Area

- Tomorrow's habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife, Comprehensive Wildlife Conservation Strategy
- St. Louis River Citizens Action Committee. Lower St. Louis River Habitat Plan
- Lake Superior Lakewide Management Plan (LaMP)
- Wisconsin's Strategy for Wildlife Species of Greatest Conservation Need
- Fish Community Objectives for Lake Superior
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture

See Appendix B for citations of listed conservation plans.

Conservation Targets FY 2007 through FY 2011

Our habitat conservation goals for the Duluth-Superior Harbor/St. Louis River Estuary and Watershed Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	25 acres restoration	50 acres enhancement
Uplands:	25 acres restoration	50 acres enhancement
Riparian Corridor:	0.5 mile restoration	1 mile enhancement
Stream Channel:	0.5 mile restoration	1 mile enhancement
Aquatic Access Structures:	1 restoration	

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as the U.S. Environmental Protection Agency and U.S. Department of Agriculture's Natural Resources Conservation Service), State agencies (such as the Minnesota Department of Natural Resources), non-profit

organizations (such as Trout Unlimited, The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Superior Coastal Fish and Wildlife Habitat Initiative Focus Area

Description

This focus area is located in the following HUCs: St. Louis (04010201), Beartrap – Nemadji (04010301), Bad – Montreal (04010302) (Figure 3). The counties of Wisconsin within this focus area are Douglas, Bayfield, Ashland and Iron.

The Superior Coastal Fish and Wildlife Habitat Initiative Focus Area is approximately 3,230 square miles in size and encompasses Wisconsin's Lake Superior basin. It extends from the St. Louis River on the western border of Wisconsin to the Montreal River on the eastern border. All natural islands and some man-made islands, which are important to migratory and colonial waterbird nesting, are within the focus area, including the Apostle Islands, at the tip of the Bayfield Peninsula. Most of these are within the jurisdiction of the Apostle Islands National Lakeshore. Man-made islands, such as Tern Island off the city of Ashland, are also included. Tern Island is one of two places where common terns nest in Lake Superior and is vitally important to the sustainability of this State of Wisconsin threatened species.

The focus area includes many recently completed Coastal Program – Great Lakes projects, Whittlesey Creek National Wildlife Refuge, urban centers such as Superior, unique blue-ribbon trout streams containing, and with restoration potential for, migratory coaster brook trout, drowned river mouth wetlands and lakes, and numerous miles of remote Lake Superior shoreline. The area is also the ancestral home of the Red Cliff and Bad River Bands of Lake Superior Chippewa. The Bad River/Kakagon coastal wetland complex of the Bad River Reservation is the largest ecologically intact estuary system in the upper Great Lakes and has been designated as a National Natural Landmark by the U.S. Department of the Interior.

Affected Fish, Wildlife and Trust Resources

- Waterfowl, including trumpeter swans, greater/lesser scaup, and American black ducks
- Neotropical migratory songbirds and other migratory bird species
- Numerous interjurisdictional fish species, including coaster brook trout, lake trout, and lake sturgeon
- Three federally listed species and critical habitat, including Great Lakes piping plover, piping plover critical habitat, bald eagle, and Canada lynx
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats

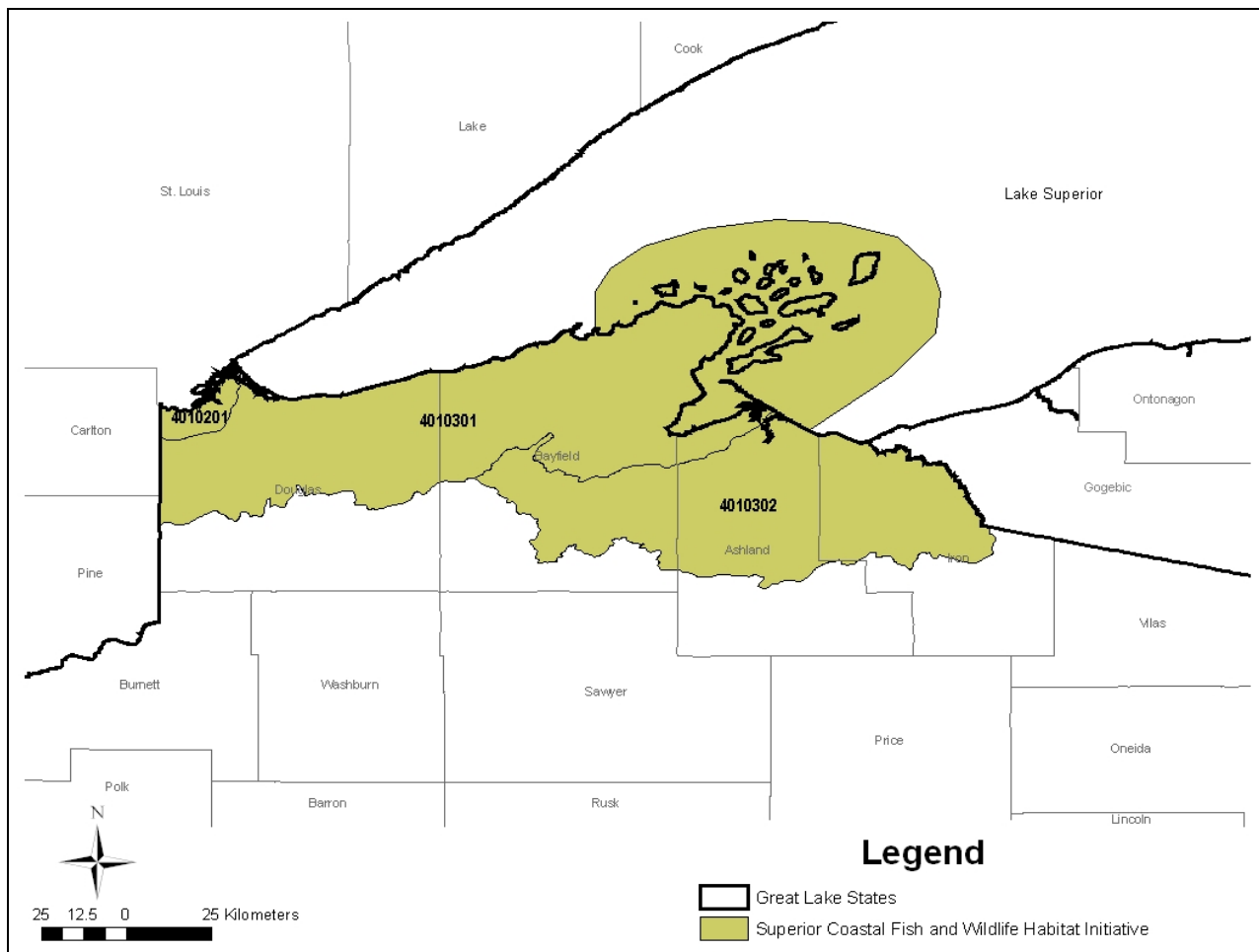


Figure 3. Superior Coastal Fish and Wildlife Habitat Initiative Focus Area.

Threats, Needs, and Opportunities

This focus area hosts a partnership-driven landscape scale Wisconsin Lake Superior basin fish and wildlife habitat preservation and restoration initiative. The governments, agencies, organizations and other partners emphasize land stewardship combined with the protection and restoration of thousands of acres of habitat in the Lake Superior watershed of Wisconsin. The most critical threats to coastal fish and wildlife habitat in the focus area are development and non-point source pollution, particularly sedimentation. The ongoing initiative has brought together all the major natural resource entities in the basin to merge technical, biological, and cultural expertise creating an efficient working group that addresses the resource needs of the basin. Unlike other places in the Great Lakes, much of the coastal habitat in this focus area remains relatively intact. However, numerous restoration opportunities exist in this focus area. Partners are striving to preserve many of the pristine areas through easement or fee title acquisition to protect these areas from future development. These protection efforts are focused on areas with the greatest concentration of coastal wetlands, streams, dunes and bottomland forests which in turn will protect migratory birds, fish, and other wildlife.

Much of the landscape in Wisconsin's Lake Superior basin has been altered due to past farming, logging and mining activities. Some locations are recovering on their own, but many still bear the scars and problems from these past practices. Historical accounts of Bayfield area streams

indicate that the tremendous density of log jams and large fallen wood made it nearly impossible to traverse upstream; however, watershed disturbances, such as stream channel clearing and repeated timber harvests, have removed the input of large woody debris. In addition, forested riparian corridors once provided shade and slowed runoff, but the loss of this protective cover in some parts of the watershed now allows snowmelt in the spring to surge off the land in a short period of time, eating away stream banks and increasing the stream's sediment load. It is essential to reduce the sediment load into tributary streams to benefit native species, such as brook trout and lake sturgeon.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of fish and wildlife habitat in Wisconsin's Lake Superior basin.
2. Protect and restore habitat within Whittlesey Creek National Wildlife Refuge and the Whittlesey Creek watershed
3. Restore fish and wildlife habitat on private and tribal land in Wisconsin's Lake Superior basin.
4. Restore coaster brook trout.
5. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Support fish and wildlife habitat restoration projects in the Lake Superior watershed of Wisconsin.
2. Support recovery efforts for piping plover and other federally listed species in coastal habitat.
3. Assist with acquisition, protection, and restoration in Wisconsin's Lake Superior basin.
4. Contribute to the restoration of coaster brook trout.
5. Support ongoing efforts at Whittlesey Creek National Wildlife Refuge.
6. Assist efforts to minimize establishment and spread of injurious exotic species.

Existing Conservation Plans for the Superior Coastal Fish and Wildlife Habitat Initiative Focus Area

- Bayfield Peninsula Stream Assessment
- Lower St. Louis River Habitat Plan.
- Wisconsin's Strategy for Wildlife Species of Greatest Conservation Need
- Lake Superior Lakewide Management Plan .
- Tomorrow's habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife, Comprehensive Wildlife Conservation Strategy
- Fish Community Objectives for Lake Superior
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture

See Appendix B for citations of listed conservation plans.

Conservation Targets FY 2007 through FY 2011

Our habitat conservation goals for the Superior Coastal Fish and Wildlife Habitat Initiative Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	50 acres restoration	100 acres enhancement
Uplands:	50 acres restoration	50 acres enhancement
Riparian Corridor:	1 mile restoration	1 mile enhancement
Stream Channel:	3 miles restoration	10 miles enhancement
Aquatic Access Structures:	3 restorations	

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as the National Park Service and U.S. Department of Agriculture's Natural Resources Conservation Service), State agencies (such as the Wisconsin Department of Natural Resources), non-profit organizations (such as Trout Unlimited and The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Wisconsin Green Bay and Watershed Focus Area

Description

This focus area is located in the following HUCs: Lake Michigan (04060200) [note only the Wisconsin waters in Green Bay of Lake Michigan are included in the focus area as shown in Figure 4], Manitowoc-Sheboygan (04030101), Door-Kewaunee (04030102), Duck-Pensaukee (04030103) Oconto (04030104), Peshtigo, (04030105), Brule (04030106), Menominee (04030108), Upper Fox (04030201), Wolf (04030202), Lake Winnebago (04030203) and Lower Fox (04030204). The counties of Wisconsin at least partially within the Green Bay basin include Brown, Door, Kewaunee, Calumet, Outagamie, Winnebago, Shawano, Menominee, Oconto and Marinette.

The Wisconsin Waters of Lake Michigan's Green Bay are included within this focus area. In its entirety, Lake Michigan's Green Bay has a surface area of more than 186 square miles, and is approximately 119 miles long with an average width of 23 miles and an average depth of about 65 feet. The Green Bay watershed encompasses approximately 15,625 square miles, which is about one third of the Lake Michigan basin. Within the focus area and nearby are lands boast numerous species of waterfowl, raptors, shorebirds, reptiles, amphibians, insects, fish and a varied landscape.

Historically, Green Bay supported an exceptionally productive fishery for whitefish, lake herring, lake trout, walleye, northern pike, and yellow perch. While still an important area for both commercial and recreational fisheries, the Bay has yet to regain its former standing

following historical changes. Green Bay also historically supported huge numbers of migratory waterfowl, and extensive market hunting for ducks and geese when it was still legal early in the 20th century. Waterfowl use of the area declined greatly due to loss of the submerged aquatic vegetation; waterfowl use has increased in recent years following invasion by zebra mussels, which now provide an alternate food source that is increasingly utilized.

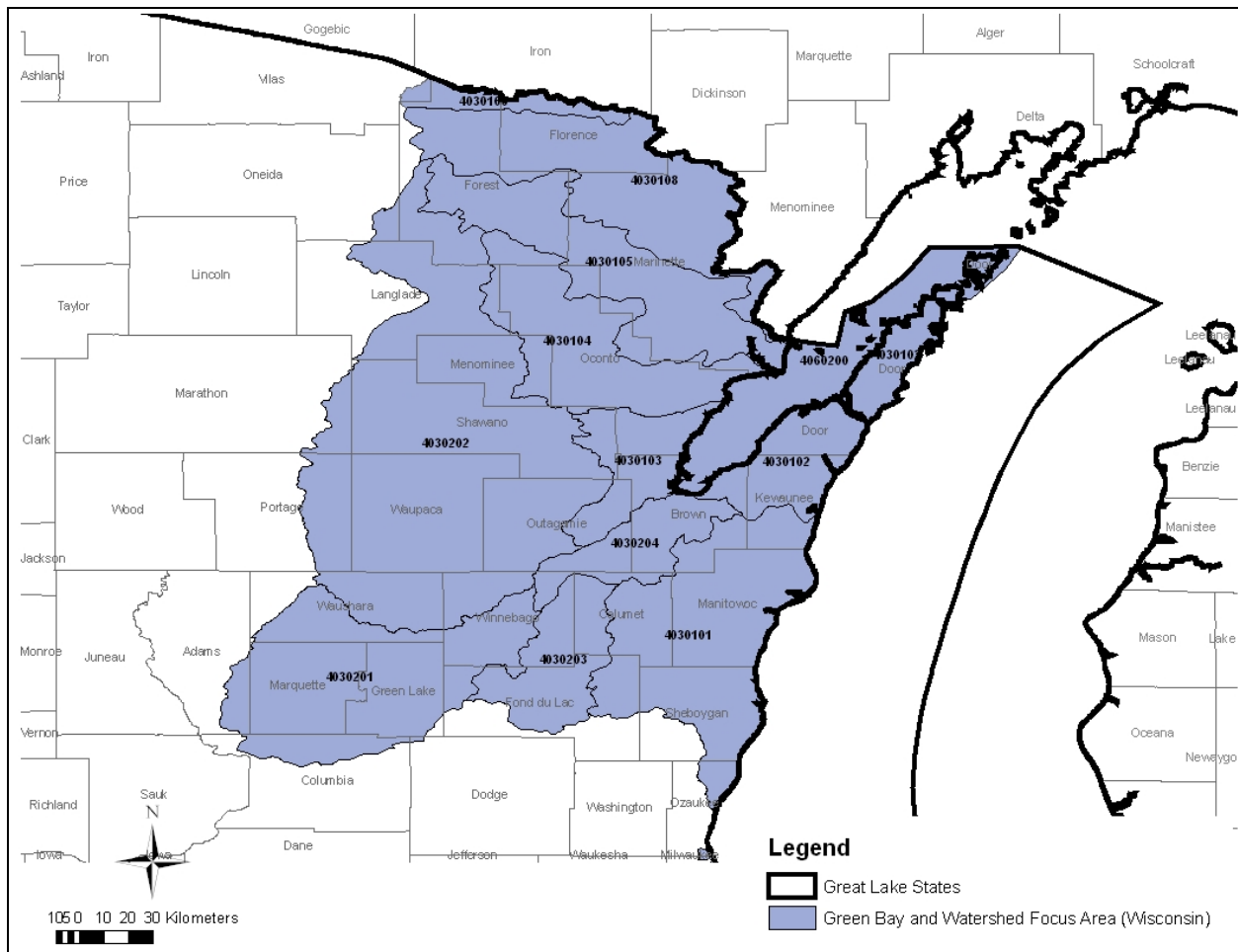


Figure 4. **Wisconsin Green Bay and Watershed Focus Area**

The northern and western portions of this Focus Area are characterized by extensive forested landscapes with a mix of upland and wetland forest types including northern hardwoods, cedar swamp, and jack pine barrens. It includes a significant portion of the Chequamegon-Nicolet National Forest and multiple Wisconsin State Parks and Forests. The Menominee, Oneida, Stockbridge Munsee, Sakaogon Chippewa, and Forest County Potawatomi are the Native American tribes found in this focus area.

The Door County peninsula is a major feature of this Focus Area, consisting of a rocky limestone peninsula which extends northward to form much of the boundary between Green Bay and Lake Michigan. The natural habitats present in this area are largely unique to the state, and contain

numerous globally rare plant communities and plant and animal species, including significant populations of the federally-listed dwarf lake iris and Hines' emerald dragonfly.

The Door Peninsula and the islands extending northward into the Garden Peninsula provide important migratory stopover habitat for raptors, passerines, and shorebirds. The shoreline forest (conifer and mixed conifer) and wetland areas along the Lake Michigan shoreline in both the Door and Garden peninsulas are relatively intact and provide important migratory bird breeding habitat.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migrant songbirds, waterbirds, shorebirds, and other migratory bird species
- Interjurisdictional fish species, including lake sturgeon, lake trout, walleye, and northern pike.
- federally listed and candidate species, including the Pitcher's thistle, dwarf lake iris, piping plover, bald eagle, and Hine's emerald dragonfly.
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats
- Extensive wetlands in public and private ownership
- Green Bay and Gravel Island National Wildlife Refuges

Threats, Needs, and Opportunities

Door County has more than 300 miles of shoreline on Green Bay and Lake Michigan proper, and is known for its numerous high quality natural areas and numerous threatened, endangered and otherwise rare plant and animal species. The best remaining populations of the federally-endangered Hine's emerald dragonfly occur in Door County, where the Service recently proposed 9 separate areas as Critical Habitat for the species. Door County is highly attractive as a recreation and retirement area, and rapid residential and commercial development is encroaching upon remnant ecosystems.

Door County is the focus of ongoing conservation efforts by groups such as the Nature Conservancy, Wisconsin Department of Natural Resources and Door County Land Trust, who have received multiple National Coastal Wetlands Conservation Grants in recent years to fund land preservation efforts. A grassroots group of conservation-minded citizens and resource professionals have identified priority areas to focus conservation efforts, and continue to work towards identifying and implementing strategies to protect these areas. These priority areas are identified in a publication entitled "A Guide to Significant Wildlife Habitat and Natural Areas of Door County, Wisconsin."

The Service has documented injuries to natural resources resulting from historical discharges of PCBs into the Lower Fox River and Green Bay through the natural resource damage assessment and restoration process (NRDAR). Using funds received from the industries responsible for these damages, the Fox River/Green Bay Natural Resource Trustee Council has allocated over \$35 million from the settlements to date, to conduct restoration activities in the Green Bay watershed.

Loss of once-extensive coastal marshes on southern Green Bay through drainage, filling, and erosion has resulted from residential, agricultural, industrial and transportation-related

development. Chronic water quality problems of suspended solids and nutrient loading related to human land use in the watershed currently inhibit the recovery of native plant and animal communities. The extensive system of wetlands present along the west shore of lower Green Bay consisted of Atkinson's Marsh, Duck Creek delta, and associated wetlands including a string of offshore islands known as the Cat Island Chain. Chronically high water levels and associated erosion exacerbated by severe storm events during the 1970's resulted in the loss of most of these wetlands and islands. A plan to restore the Cat Island chain and associated wetlands has been formulated and is in the early stages of implementation.

Numerous offshore islands of Green Bay off the Door Peninsula host many unique plant and animal communities. Some of these islands are important breeding sites for various colonial bird species such as herring and ring-billed gulls, double-crested cormorants, white pelicans, Forster's and Caspian terns, great blue herons, black-crowned night herons, and great egrets. Gravel Island and Spider islands comprise the Gravel Island National Wildlife Refuge, and Hog Island is the lone property contained within the Green Bay National Wildlife Refuge.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of lakeplains, islands, wetlands, and coastal habitats, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Assist efforts to minimize establishment and spread of Non-indigenous invasive species.
2. Assist with acquisition, protection maintenance, enhancement and restoration of the focus area's coastal fish and wildlife habitat.
3. Support recovery efforts for the six federally listed species named above.
4. Seek to form non-traditional partnerships and reach out to both urban and Native American communities within the watersheds.

Existing conservation plans for the Wisconsin Green Bay Watershed Focus Area

- Wisconsin Wildlife Action Plan
- Fish Community Objectives for Lake Michigan
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Hine's Emerald Dragonfly Recovery Plan
- Fox River Natural Resource Damage Assessment and Restoration
- A Guide to Significant Wildlife Habitat and Natural Areas of Door County, Wisconsin
- TNC - Green Bay Conservation Strategy? (in development)

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Wisconsin Green Bay Watershed Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	20 acres restoration	20 acres enhancement
Uplands:	10 acres restoration	10 acres enhancement
Stream Channel:	1 mile restoration	5 miles enhancement
Aquatic Access Structures:	2 restorations	

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as U.S. Department of Agriculture's Forest Service), State agencies such as the Wisconsin Department of Natural Resources, non-profit organizations, local municipalities, property owner's associations, private landowners, the Oneida Nation, the Menominee Nation, and the Door County Land Trust. See Appendix C for a list of recent partnerships.

Illinois Lake Michigan Basin Focus Area

Description

This focus area is located in the following HUCs: Pike - Root (04040002), Chicago (07120003) (Figure 5). The counties at least partially within this focus area are Lake and Cook.

The Illinois Lake Michigan Basin Focus Area is approximately 675 square miles in size and encompasses the Illinois Lake Michigan basin. Much of this focus area is under heavy development pressures, but outstanding resource opportunities still remain within the area. Rare plant and animal species inhabit the northern portion of this focus area in the remaining marsh, sedge meadow, forest, prairie and bog habitats. Illinois Beach State Park, located in the northern portion of the focus area, is managing, restoring and protecting many acres of high value fish and wildlife habitat.

This focus area distinguishes itself because this is the location of the waterway connection between the Great Lakes basin and the Mississippi River basin. The Chicago Sanitary and Ship Canal provides a connection between the Great Lakes and Mississippi River drainages and is a conduit for the exchange of aquatic invasive species. Efforts are underway to construct a permanent electrical barrier system to replace the existing demonstration barrier.

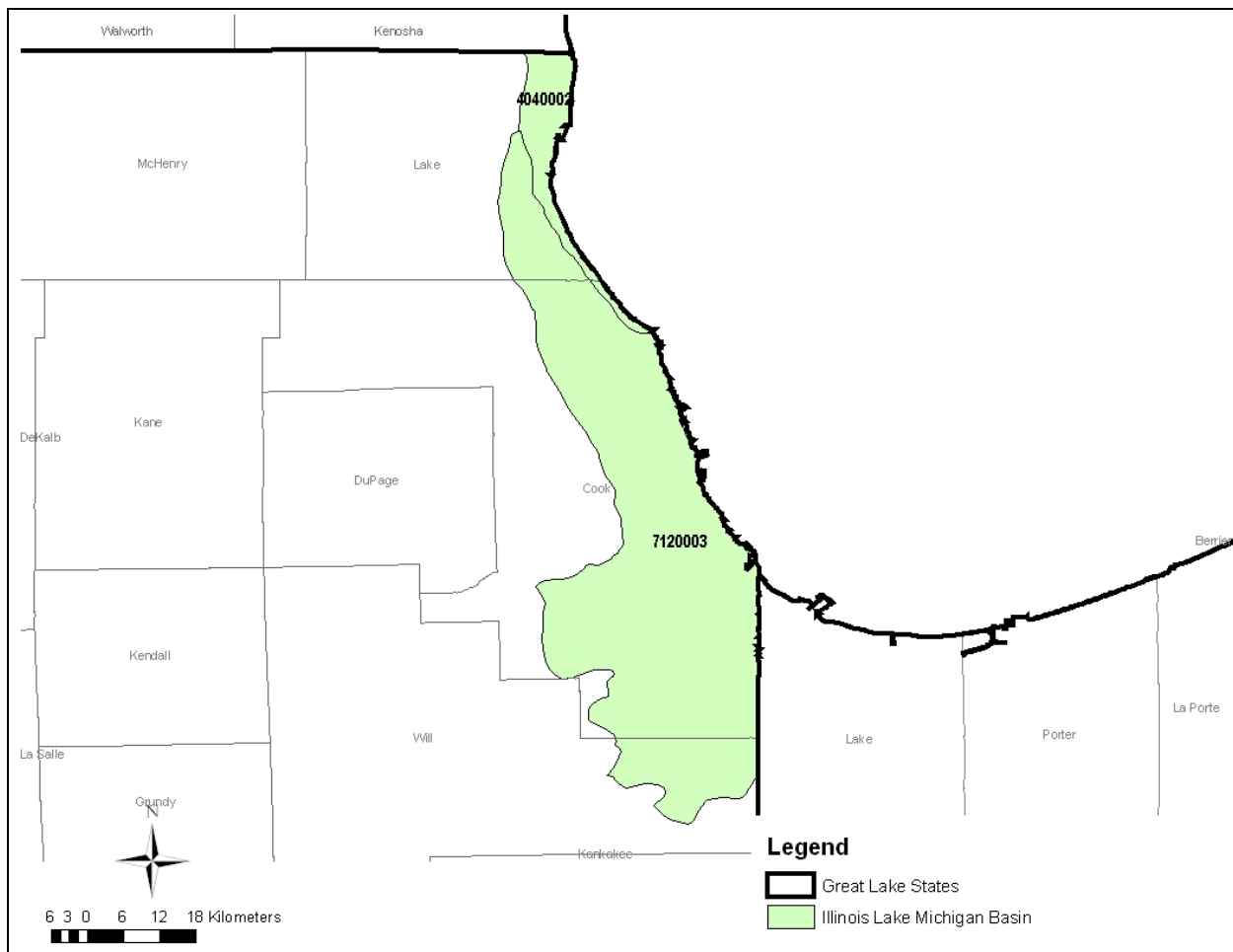


Figure 5. Illinois Lake Michigan Basin Focus Area.

Much of the southern portion of the focus area is located within the metropolitan area of Chicago. Even though much of this area is highly urbanized, opportunity remains to benefit trust fish and wildlife species and their habitats. The Lake Michigan shoreline in the greater Chicago area is an important part of the Mississippi Flyway for migratory birds. In March 2000, Chicago Mayor Richard Daley signed the Urban Conservation Treaty for Migratory Birds with the Service. This treaty makes providing and enhancing habitat for migratory birds a top priority of Chicago's land and shoreline managers. In addition, the city has endorsed the principles of the Chicago Wilderness Biodiversity Recovery Plan. Both measures represent the city's openness to recover shoreline habitat that includes native landscaping and a biologically productive shoreline. The Calumet region of southeast Chicago is also a resource-rich area of wetlands and remnant lake plain prairies that provide habitat for a variety of deep marsh-nesting birds

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds and other migratory bird species
- Interjurisdictional fish species, including lake trout
- Federally listed species and critical habitat, including piping plover, piping plover critical habitat, eastern prairie fringed orchid, Pitcher's thistle, and Karner blue butterfly

- Numerous state listed species
- Reptiles, amphibians and their supporting habitats

Threats, Needs, and Opportunities

Urbanization in the Illinois Lake Michigan Basin Focus Area is seriously impairing coastal fish and wildlife habitat. Development of the area has altered habitat within the focus area, and many opportunities for restoration, research and education exist. The area's natural communities—marsh, sedge meadow, oak savanna, prairie and bog—provide habitat for rare plant species in addition to many common animal species.

The need exists to restore degraded areas and species as well as protect remaining sites and species that are currently found within the focus area. Citizens, community organizations, government agencies, and non-governmental organizations are working in the Illinois Lake Michigan watershed to restore and protect fish and wildlife species and their habitats.

Illinois Beach State Park is the last remaining large tract of public coastal land along the Illinois' Lake Michigan coastline. The park totals over 4,000 acres, with 6.5 miles of shoreline. It boasts over 650 species of plants, a widely varied topography, and is a favored rest area for migrating birds.

The dunes and ridges that cut across the park, generally parallel to the lakeshore, are a result of lake levels receding over the past 8,000 years. The result today is long lines of sandy, oak savanna or prairie ridges interspersed with linear marshes. This patchwork reveals that not far beyond the dunes is the sand prairie. Little bluestem, Indian grass and even prickly pear cactus can be found in the prairie and savanna areas occupying the historic sand dunes. The oak savannas occupy much of the higher ground, while wetlands in the swales host Kalm's St. Johnswort, sundew, and a wide variety of orchids, including some that are endangered. Running through the park is the Dead River, a sluggish stream whose outlet is blocked by a sandbar for much of the year. But after heavy rains or snowmelt, the river rises and breaks through the sandbar, draining the surrounding wetlands and exposing mudflats which are beneficial to feeding waterfowl, shorebirds and other migratory birds. This periodic dewatering of the wetlands allows for regeneration of wetland plants, which are utilized by many species of wildlife.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of streams, wetland, coastal, and historic dune areas of the watershed.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Support piping plover habitat restoration efforts.
2. Support recovery efforts for eastern prairie fringed orchid, Pitcher's thistle, and Karner blue butterfly.
3. Assist with acquisition, protection and restoration of Illinois Coastal Watersheds fish and wildlife habitat.
4. Assist with efforts to minimize establishment and spread of injurious exotic species.

Existing Conservation Plans for the Illinois Lake Michigan Basin Focus Area

- The Illinois Comprehensive Wildlife Conservation Plan and Strategy
- Lake Michigan Lakewide Management Plan,
- Fish Community Objectives for Lake Michigan
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Chicago's Bird Agenda
- Calumet Ecological Management Strategy
- Chicago Nature and Wildlife Plan

See Appendix B for citations of listed conservation plans.

Conservation Targets FY 2007 through FY 2011

Our habitat conservation goals for the Illinois Lake Michigan Basin Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	20 acres restoration	20 acres enhancement
Uplands:	20 acres restoration	20 acres enhancement
Riparian Corridor:	0 miles restoration	0.5 mile enhancement

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as the U.S. Environmental Protection Agency and U.S. Department of Agriculture's Natural Resources Conservation Service), State agencies (such as the Illinois Department of Natural Resources), non-profit organizations (such as the Lake Michigan Federation and The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Indiana Coastal Zone Focus Area

Description

This focus area is located in the following HUCs: Little Calumet-Galien (04040001), Chicago (07120003) (Figure 6). The counties of Indiana within this focus area are St. Joseph, LaPorte, Porter and Lake.

The Indiana Coastal Zone Focus Area is approximately 700 square miles in size and encompasses the Indiana Lake Michigan basin plus the Indiana portion of HUC 07120003 which historically drained into Lake Michigan but was artificially diverted to the Illinois River system. Sand deposits are a distinguishing characteristic of northwestern Indiana's Lake Michigan border and lakeplain. The Calumet Lacustrine Plain is about 14 miles wide at the Illinois border with Lake County but narrows to eight miles at the Lake/Porter county line and is just over two miles wide at the Michigan line with LaPorte County. To the south, the geologically complex Valparaiso Moraine defines the watershed boundary. In Indiana, glacial moraines, large sand dunes, ancient beach ridges, and extensive wetlands mark the southern Lake Michigan watershed. The Indiana shoreline is 45 miles long, and the watershed is about 18 miles wide at its widest locations, but extreme diversity in landforms and habitats is found within this small area.

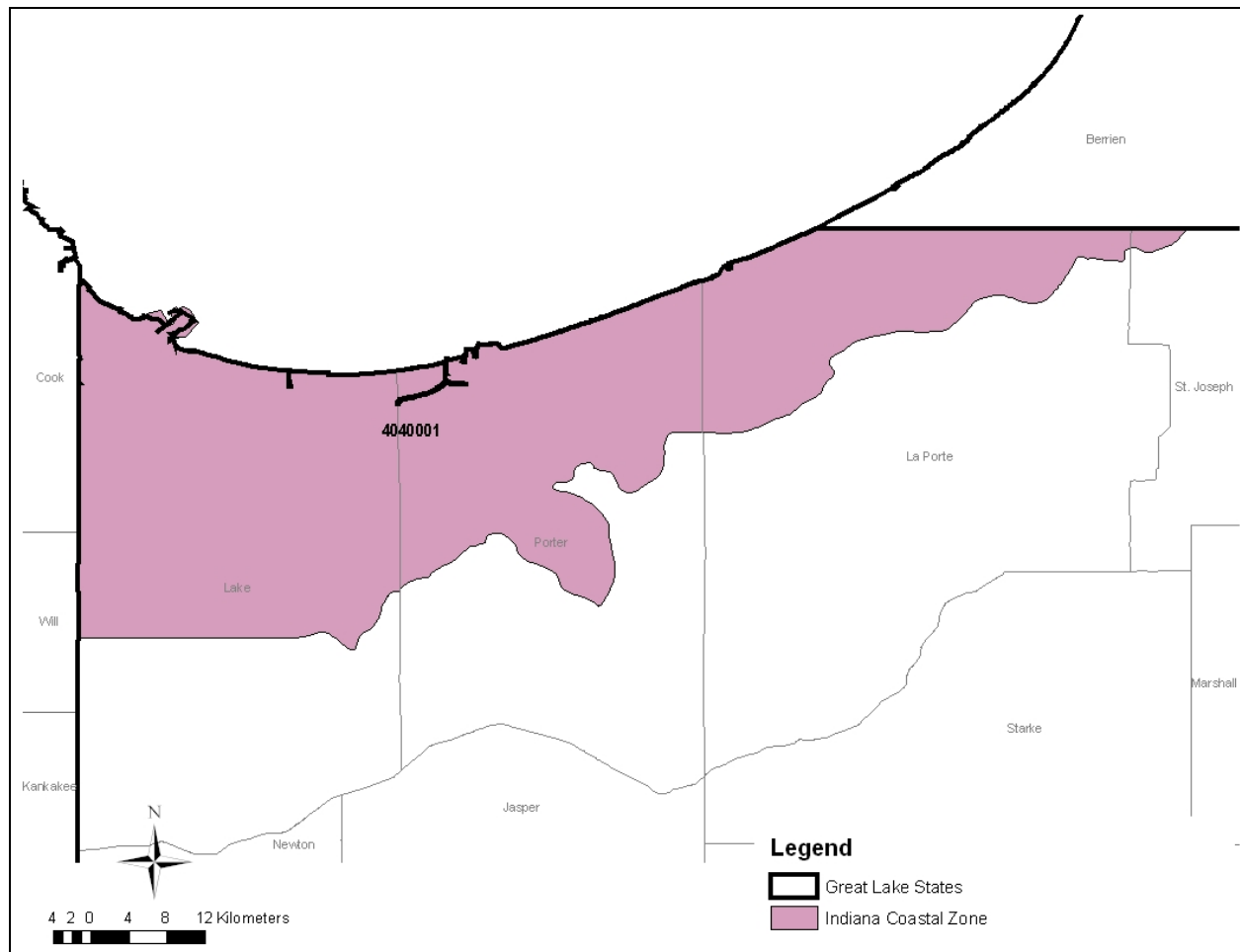


Figure 6. Indiana Coastal Zone Focus Area.

The shoreline in Porter and LaPorte Counties consists of large, high sand dunes, many towering 100 feet and some reaching 200 feet above Lake Michigan. Some, such as Mt. Baldy, are actively building and moving within the natural landscape of the Indiana Dunes National Lakeshore (INDU) and Indiana Dunes State Park (IDSP). Other high dunes, such as Hoosier Slide in Michigan City, have long since been removed by sand mining. The open dunes provide habitat for the federally threatened Pitcher's thistle while the lee side of the dunes support oak forests and a few remnant white pine forests, plus prairies, savannas, and wetlands.

Today, much of the dune and swale complex has been leveled and developed. In the current landscape, rare orchids and federally endangered Karner blue butterflies are present in nature preserves nestled among heavy industries, highways, railroads, and densely populated residential areas. The remnant natural areas of the lakeplain continue to support a complex mosaic of communities, including interdunal ponds, marshes, sedge meadows, and wet prairies between the dry black oak savannas that line the low dune ridges. Most such remnants are protected by state, county, The Nature Conservancy (TNC), and land trust ownerships, often as State Nature Preserves, and a large industrial-owned parcel is being managed under an agreement between the owner and TNC.

Due to its location on the southern tip of Lake Michigan, the remaining habitats in northwestern Indiana are an especially important feeding and resting area for migrating land and water birds. In recognition of this, four areas have been designated Important Bird Areas by ornithological organizations.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds and other migratory bird species
- Waterbirds
- Interjurisdictional fish species, including lake trout and lake sturgeon
- Federally listed and candidate species, including Pitcher's thistle, Karner blue butterfly, piping plover, piping plover critical habitat, Indiana bat, and eastern massasauga rattlesnake
- Numerous state listed species of flora and fauna
- Reptiles, amphibians, and their supporting habitats

Threats, Needs, and Opportunities

Much of the fish and wildlife habitat within this focus area has been degraded. Urbanization has had a serious affect on the coastal fish and wildlife habitat as much of the development occurs close to the lake shore.

Working with partners, many opportunities exist for restoration, research and education which will benefit coastal fish and wildlife resources. Both the federal and state governments have significant land holdings within the focus area, and The Nature Conservancy and four local land trusts are active in the watershed. In addition, all three counties have active park departments, as do most of the communities. Collectively, these agencies and groups are working in Indiana's Lake Michigan watershed to restore and protect fish and wildlife species and habitats. This focus area is also designated as the Lake Michigan Coastal Program Area under the National Oceanic and Atmospheric Administration's Coastal Zone Management Act.

Goal for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of streams, wetlands, coastal resources, and historic dune upland areas of the watershed.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential USFWS contributions to the identified focus area goals:

1. Support federally listed species habitat restoration efforts.
2. Support recovery efforts for Pitcher's thistle, piping plover, Karner blue butterfly, Indiana bat, and eastern massasauga rattlesnake.
3. Assist with acquisition, protection and restoration of fish and wildlife habitat in the Indiana Coastal Zone Focus Area.
4. Assist efforts to minimize establishment and spread of injurious exotic species.

Existing Conservation Plans for the Indiana Coastal Zone Focus Area

- Indiana Comprehensive Wildlife Strategy
- Lake Michigan Lakewide Management Plan
- Fish Community Objectives for Lake Michigan
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Lake Michigan Lakewide Management Plan,
- Final Restoration Alternatives Development and Evaluation Report, Grand Calumet River/Indiana Harbor Canal, Indiana, Dec 2000.

See Appendix B for citations of listed conservation plans.

Conservation Targets FY 2007 through FY 2011

Our habitat conservation goals for the Indiana Coastal Zone Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	20 acres restoration	20 acres enhancement
Uplands:	20 acres restoration	20 acres enhancement
Riparian Corridor:	0 miles restoration	0.5 mile enhancement

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as the National Park Service and U.S. Department of Agriculture's Natural Resources Conservation Service), State agencies (such as the Indiana Department of Natural Resources), non-profit organizations (such as The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Brevort to Lower Grand Focus Area

Description

This focus area is located in the following HUCs: Lake Michigan (04060200) [note only the Northeast 15-20% of Lake Michigan is included in the focus area as shown in Figure 7], Cheboygan (04070004), Boardman - Charlevoix (04060105), Betsie – Platte (04060104), Manistee (04060103) Pere Marquette –White (04060101) Muskegon (04060102) Lower Grand (04050006), Carp – Pine (04070002), and Brevort – Millecoquins (04060107). The counties of Michigan at least partially within this focus area are Schoolcraft, Manistee, Chippewa, Cheboygan, Otsego, Emmet, Charlevoix, Antrim, Crawford, Roscommon, Clare, Isabella, Montcalm, Ionia, Kent, Ottawa, Muskegon, Newaygo, Mecosta, Oceana, Mason, Lake, Oceola, Missaukee, Wexford, Manistee, Benzie, Grand Traverse, Kalkaska and Leelanau.

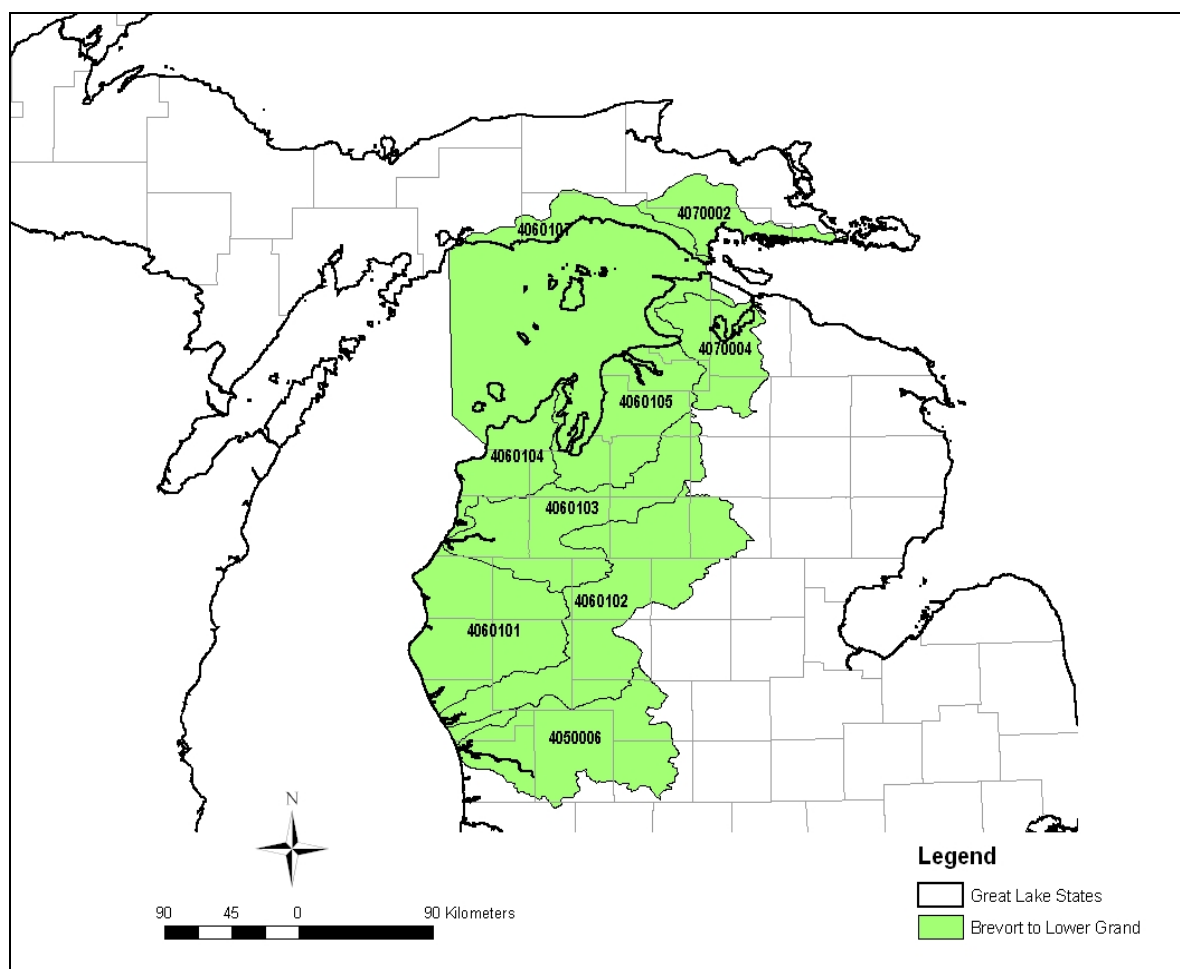


Figure 7. Brevort to Lower Grand Focus Area.

The Brevort to Lower Grand Focus Area is approximately 16,700 square miles in size and extends from Brevort to the Lower Grand River watershed. This area runs from the vicinity of Brevort in the Upper Peninsula towards the eastern tip of the Upper Peninsula and connects to the Lower Peninsula across the Straits of Mackinac, from there running south and west to the Lower Grand River. It includes the major island areas of Northern Lake Michigan, including the

Manitou and Beaver Island groups. The 10 HUCs that comprise the focus area include some of the most prominent Coastal Program-Great Lakes projects of recent years. Within the focus area and nearby are lands that boast numerous species of waterfowl, raptors, shorebirds, reptiles, amphibians, insects, fish and a widely varied topography that supports a great diversity of vegetation and rich forests. It includes portions of the 1836 Treaty Ceded Areas and is home to the Little Traverse Bay Bands of Ottawa Indians, Grand Traverse Band of Ottawa and Chippewa Indians and the Little River Band of Ottawa Indians. This landscape also includes a National Lakeshore, urban centers such as Grand Rapids and Traverse City, unique blue-ribbon trout streams and drowned river mouth wetlands and lakes, numerous miles of remote Lake Michigan shoreline, the world's largest assemblage of freshwater sand dunes, and National and State forests.

Affected Fish, Wildlife and Trust Resources:

- Waterfowl
- Neotropical migratory songbirds and other migratory bird species
- Interjurisdictional fish species, including lake sturgeon, brook trout, lake trout (and lake trout refuges), and lake whitefish
- Federally listed species, candidate species and critical habitat including American hart's-tongue fern, eastern prairie fringed orchid, Pitcher's thistle, Michigan monkey-flower, dwarf lake iris, Houghton's goldenrod, lakeside daisy, Karner blue butterfly, Hungerford's crawling water beetle, Hine's emerald dragonfly, eastern massasauga, bald eagle, piping plover, piping plover critical habitat, Indiana bat, Kirtland's warbler, Indiana bat, and Canada lynx.
- Numerous state listed species
- Reptiles, amphibians, and their supporting habitats

Threats, Needs, and Opportunities

Urbanization and other forms of development in this suite of Michigan counties is seriously impairing coastal watershed fish and wildlife habitat. Michigan Coastal and Northern Forested Wetlands served as one of the Study Areas for A Report to Congress by the Secretary of the Interior (U.S. Department of the Interior 1994). That study found continuing development of the area has altered habitat within the study areas. Thus, this focus area has many opportunities for restoration, research and education. The area's natural communities, marshes, islands, shoals, bottomlands, waterfront lands, sedge meadows, forests, prairies, fens and bogs, provide habitat for rare plants as well as many common animals. Sport fishing for salmonids, walleye, esocids and bass is nationally acclaimed in this area. Waterfowl hunting here is increasingly popular today.

The need exists to restore degraded areas and species as well as protect remaining sites and species that are currently found within the focus area. Citizens, community organizations, government agencies, and natural resource oriented non-government organizations are working in these watersheds to restore and protect fish and wildlife species and their habitats. Most notable among these organizations are those listed in the respective watershed facts sheets compiled in the Lake Michigan LaMP, Chapter 12. There, no fewer than 49 groups and agencies are listed which play a role in benefiting this focus area.

Goal for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may generally be categorized as:

1. Promote the conservation, enhancement, and restoration of Great Lakes bottomlands, islands, wetlands, coastal dunes, lakeplains, forests, streams, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Support recovery efforts for the 18 federally listed or candidate species named above.
2. Assist with acquisition, protection maintenance, enhancement, and restoration of the focus area's coastal watersheds fish and wildlife habitat.
3. Assist efforts to minimize establishment and spread of non-indigenous invasive species.
4. Seek to form non-traditional partnerships and focus on reaching out to Tribal partners.

Existing conservation plans for the Brevort to Lower Grand Focus Area

- The Lake Michigan Lakewide Management Plan (LaMP)
- Michigan Wildlife Action Plan
- Great Lakes Basin Ecosystem Team Plans
- Fish Community Objectives for Lake Michigan
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture

See Appendix B for citations of listed conservation plans.

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Brevort to Lower Grand Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources given FY 06 funding levels and knowledge of our past partnerships.

Wetlands: 50 acres restoration, 50 acres enhancement

Uplands: 50 acres restoration, 50 acres enhancement

Riparian Corridor: 3 miles restoration

Stream Channel: 3 miles restoration

Aquatic Access Structure: 1 restoration

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as National Park Service and U.S. Department of Agriculture's Forest Service), State agencies (such as Michigan Departments of Natural Resources and Environmental Quality), non-profit organizations (such as the Inland

Seas Education Association and The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Michigan Green Bay and Watershed Focus Area

Description

This focus area is located in the following HUCs: Lake Michigan (04060200) [note only the Michigan waters in Green Bay of Lake Michigan are included in the focus area as shown in Figure 8], Brule (04030106), Michigamme (04030107), Menominee (04030108), Cedar-Ford (04030109), Escanaba (04030110), Tacoosh-Whitefish (04030111), and Fishdam-Sturgeon (04030112). The counties of Michigan at least partially within the Focus Area include Iron, Baraga, Marquette, Menominee, Dickinson, Delta, and Schoolcraft.

Lake Michigan's Green Bay which is adjacent to this Focus Areas, has a surface area of more than 186 square miles, and is approximately 119 miles long with an average width of 23 miles and an average depth of about 65 feet. The Green Bay watershed encompasses approximately 15,625 square miles, which is about one third of the Lake Michigan basin. Within the focus area and nearby are lands that boast numerous species of waterfowl, raptors, shorebirds, reptiles, amphibians, insects, fish and a varied landscape.

The Michigan Green Bay Focus Area encompasses an area of Michigan's Upper Peninsula from the Menominee River watershed (on the Michigan/Wisconsin border) in the west to the Garden Peninsula on its eastern border. The communities within this focus area are primarily forested with a mix of upland and wetland forest types including northern hardwoods, cedar swamp, mesic conifer forest, and jack pine barrens. Portions of the Ottawa and Hiawatha National Forests and Copper Country and Escanaba River State Forests are within this focus area. Hannahville Indian Community and Lac Vieux Desert are two Native American tribes found in this focus area.

In Michigan, two peninsulas, the Stonington and Garden, extend into Green Bay and create Little and Big Bays de Noc. These bays provide important spawning areas for walleye and other interjurisdictional fish. The peninsulas also act as land funnels for migrating monarch butterflies and birds. Off of the Garden Peninsula stretching to Wisconsin's Door Peninsula are the Grand Traverse Islands. This chain of islands and the associated peninsulas are a key migration corridor for raptors, warblers, and shorebirds. The shoreline forest (conifer and mixed conifer) and wetland areas along the islands and peninsulas are relatively intact and provide important foraging and stopover habitat for migrating birds.

The Garden Peninsula, similar to the Door Peninsula in Wisconsin, is part of the Niagara Escarpment, where the limestone bedrock is above (cliffs) or near the surface of the landscape with shallow soils. This unique geology has set the stage for globally rare plant communities and associated plant and animal species. Such rare communities include Great Lakes alvars dominated by juniper, northern white cedar, and white spruce. Large populations of the federally threatened dwarf lake iris are found within alvars on the Garden peninsula.

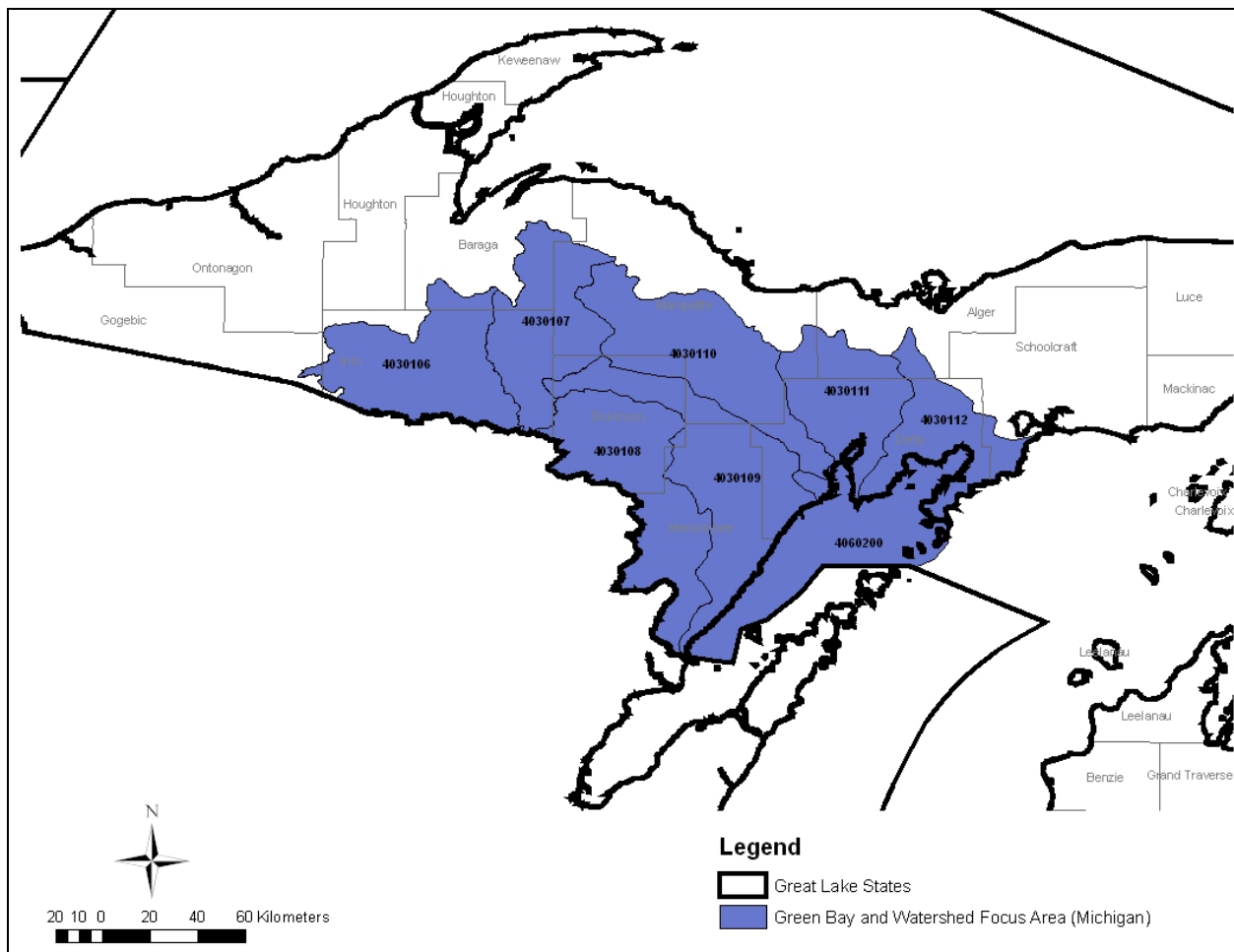


Figure 8. Michigan Green Bay and Watershed Focus Area

Several shoreline areas have historically or are currently used by breeding Great Lakes piping plover, a federally endangered species. Historically, piping plovers were observed nesting west of Escanaba along the Lake Michigan shoreline. Recently, piping plovers were observed foraging at the Michigan Department of Natural Resources’ Portage Marsh west of Escanaba, and breeding near downtown Escanaba and east of Escanaba between Stonington and Garden peninsulas.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migrant songbirds, waterbirds, shorebirds, and other migratory bird species
- Interjurisdictional fish species, including lake sturgeon, lake trout, walleye, and northern pike.
- Federally listed and candidate species, including the Pitcher’s thistle, dwarf lake iris, piping plover, bald eagle, and Hine’s emerald dragonfly.
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats
- Extensive wetlands in public and private ownership

Threats, Needs, and Opportunities

Invasive plant species threaten the integrity of natural communities throughout the area, including invasion by giant reed grass, buckthorn, garlic mustard, purple loosestrife, and numerous other species. Non-indigenous aquatic species such as carp, zebra and quagga mussels, white perch, etc., have also caused profound changes in aquatic ecosystems. Continued invasion into natural communities requires diligence to prevent new infestations, and to limit the damage at sites where invasive species currently occur.

Increases in water quality since the 1970's resulted in a resurgence in sport fishing, and Green Bay has become nationally known for its walleye fishery. Yellow perch populations historically supported important commercial and recreational fisheries, and are currently rebounding from recent declines. Ongoing reintroduction of the Great Lakes spotted musky is quickly earning Green Bay a reputation as a trophy musky fishery. Recent efforts to restore lake sturgeon populations in Green Bay tributaries have met with success as well. The States of Michigan and Wisconsin have been working jointly with the River Alliance, National Park Service, and the Service to restore lake sturgeon access to historic spawning habitat above dams and other barriers in tributaries to Green Bay. In particular, the agencies have been working with multiple hydropower companies to restore passage past a series of dams on the Menominee River, on the border between Michigan and Wisconsin.

Many of the stream systems in the focus area are impacted by improper installation of road culverts which can increase inputs of sediment and alter stream hydrology. Some streams and rivers are impacted by dams. Off road vehicle use in coastal wetlands and sensitive upland areas is also a threat to many of the communities within the Focus Area. In portions of the Focus Area, especially along the Lake Michigan shoreline and inland shoreline areas, second home development is fragmenting habitat.

Therefore many opportunities for restoration, research, improved management, and education exist. The area's natural communities, marshes, islands, shoals, waterfront lands, streams and lakeplain remnants, provide habitat for rare plant species as well as many common animal species. The need exists to restore degraded areas and species as well as protect remaining sites and species that are currently found within the focus area. Citizens, community organizations, government agencies and natural resource oriented non-governmental organizations are working in this watershed to restore and protect fish and wildlife species and their habitats.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of lakeplains, islands, wetlands, and coastal habitats, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Assist efforts to minimize establishment and spread of Non-indigenous invasive species

2. Assist with acquisition, protection maintenance, enhancement and restoration of the focus area's coastal fish and wildlife habitat.
3. Support recovery efforts for the six federally listed species named above.
4. Seek to form non-traditional partnerships and reach out to both urban and Native American communities within the watersheds.

Existing conservation plans for the Michigan Green Bay Watershed Focus Area

- Michigan Wildlife Action Plan
- Fish Community Objectives for Lake Michigan
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Fox River Natural Resource Damage Assessment and Restoration
- TNC's Garden Peninsula/Stonington Peninsula Rapid Conservation Plan
- TNC's Draft Upper Menominee Conservation Action Plan –final by June 2007
- TNC's Draft Upper Green Bay Rivers (Ford, Sixmile Creek, Bark, Escanaba, Sturgeon, and Whitefish) Conservation Action Plan –final by December 2007

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Green Bay Watershed Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources given FY 06 funding levels and knowledge of our past partnerships.

Wetlands: 20 acres restoration

Uplands: 10 acres restoration

Aquatic Access Structures: 1 restoration

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as U.S. Department of Agriculture's Forest Service), State agencies, non-profit organizations, local municipalities, property owner's associations, and private landowners, including the Michigan Department of Natural Resources, The Nature Conservancy, The River Alliance, Ducks Unlimited, Hiawatha and Ottawa National Forests. See Appendix C for a list of recent partnerships.

Salmon Trout River Watershed Focus Area

Description

This focus area is located in following HUC: Dead - Kelsey (04020105) (Figure 9). The counties of Michigan at least partially within this focus area are Houghton, Baraga and Marquette.

The Salmon Trout River Focus Area is approximately 946 square miles in size and encompasses an area of Michigan's Upper Peninsula from the Kelsey River watershed in the west to the Dead River watershed on its eastern border. The watershed of most concern within the focus area is

the Salmon Trout River. This river is occupied by the last known spawning population of migratory coaster brook trout in the U.S. portion of Lake Superior.

The Salmon Trout watershed consists of approximately 50 square miles, composed primarily of second growth hardwood forest, lowland hardwood swamp, and Lake Superior coastal wetlands. The soils are predominantly sandy, and the area is drained by the Salmon Trout River and its tributary streams, which are classified as Class A Trout Waters by the Michigan Department of Natural Resources. The river is fed by a number of cold water springs that maintain high water quality for salmonids. The length of the stream from headwaters to mouth is approximately 30 miles and the distance from the lower falls to the mouth is 9 miles. Stream flows in the lower river seldom fall below 35 cubic feet per second.

The focus area includes numerous miles of wild Lake Superior shoreline, cold water trout streams, outlet estuaries, wetlands, lakes, and northern forest--habitats that are vitally important to Service trust species in Michigan's portion of the Lake Superior basin. The area is also the ancestral home of the Keweenaw Bay Indian Community and is within the 1842 Treaty Ceded Area.

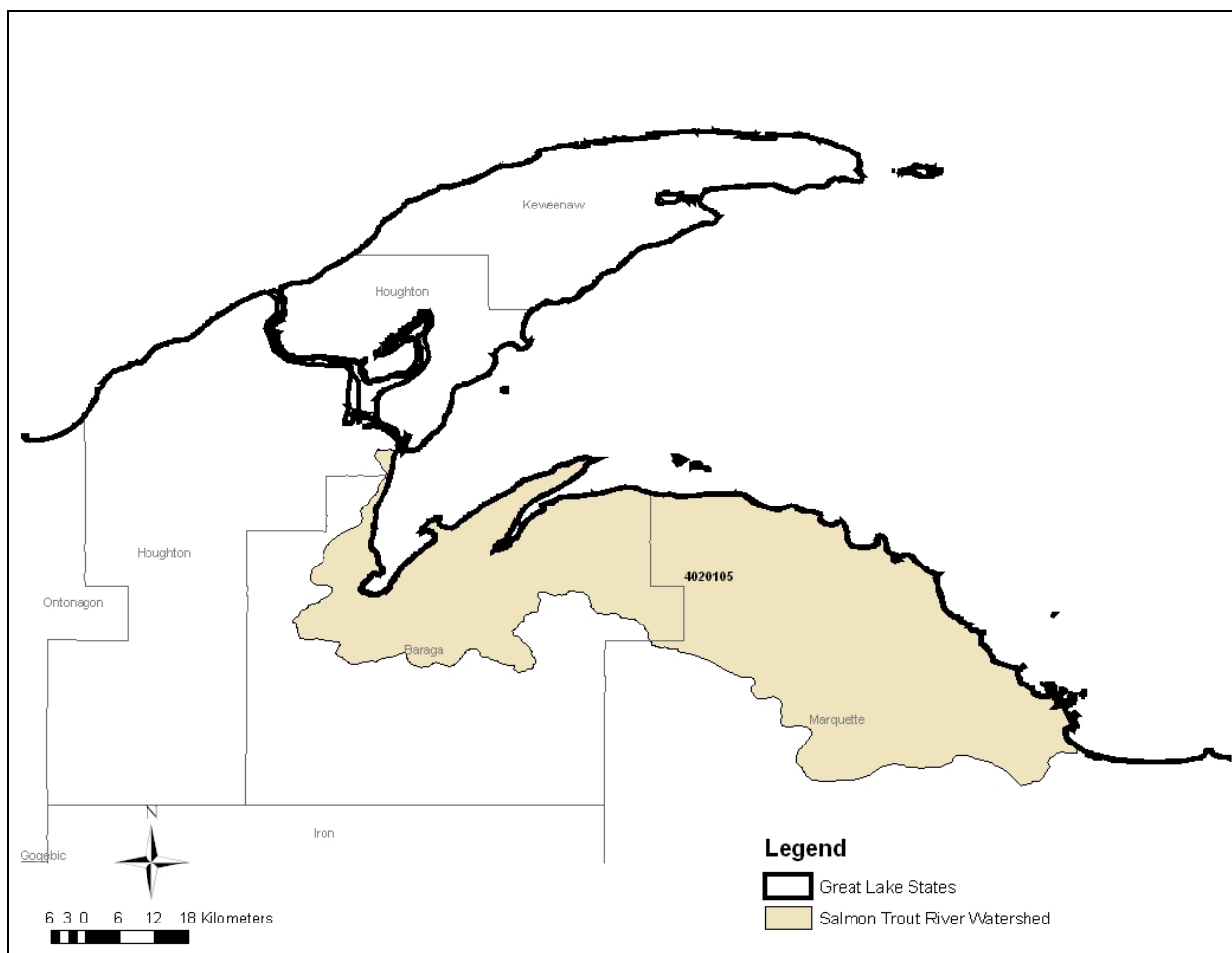


Figure 9. Salmon Trout River Watershed Focus Area.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds and other migratory bird species
- Numerous interjurisdictional fish species, including coaster brook trout
- Three federally listed species, including the piping plover, bald eagle, and Canada lynx
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats

Threats, Needs, and Opportunities

Stream habitat in the Salmon Trout has been severely degraded by land use practices in the watershed. The primary problem is sand deposition in the stream bed. Stream function and productivity as habitat for salmonids has been dramatically decreased by sand which has covered gravel spawning areas, filled pools and covered woody debris and rocky substrates that provide cover and living space for invertebrates and plants.

Degradation of the stream began with the logging of virgin forests covering the area around the turn of the century. Road building and skidding of felled timber exposed fragile soils to erosion. Clear cutting of large areas caused faster runoff of rain and snow melt and accelerated flow rates in the river. The forests that regenerated on the cutover lands consisted of fewer conifers and more deciduous trees, resulting in larger populations of beavers. Beaver activity caused more deposition of sand in the river channel. The cumulative effects of the watershed perturbations were a stream bed stifled with sand and fisheries productive capacity reduced to a fraction of its historic levels.

Today, most of the lands of the watershed are reforested. Primary use of the land in the watershed is timber production and recreation, such as hunting, fishing and hiking. Most of the private homes scattered throughout the watershed are constructed on larger parcels of land. Many of the historic land uses that caused the most severe sand loading of the river no longer occur, but sand deposition from eroding banks and road-side ditches still contribute to the problem.

The importance of the salmonid production capacity of the Salmon Trout River is particularly great because it is the last stream in the United States' portion of Lake Superior to support a reproducing population of coaster or anadromous brook trout. Coasters were once abundant in Lake Superior tributary streams. Most populations are extirpated, and only about six populations now exist lake-wide.

Threats to the watershed today are sale and development of land for recreational and residential use as well as timber harvest programs. Erosion associated with land clearing and road building for these uses is the main source of sand loading of the system today. Many of the landowners within the watershed are concerned about the Salmon Trout watershed and are motivated to rehabilitate the stream.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement, and restoration of fish and wildlife habitat in the estuary and watershed.
2. Restore the stream channel and salmonid production capacity of the Salmon Trout River.
3. Conduct experimental management and monitoring for coaster brook trout and other salmonids in the lower river.
4. Manage and rehabilitate the native resident brook trout population of the upper river.
5. Partner with landowner groups on the stewardship of the Salmon Trout River watershed.
6. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Support fish and wildlife habitat restoration projects in the Salmon Trout River watershed.
2. Implement projects to reduce sand loading in the Salmon Trout River.
3. Support recovery efforts for coaster brook trout.
4. Assist efforts to minimize establishment and spread of injurious exotic species.

Existing Conservation Plans for the Salmon Trout River Focus Area

- Michigan Wildlife Action Plan
- Lake Superior Lakewide Management Plan (LaMP), Lake Superior Binational Program, 2000
- Fish Community Objectives for Lake Superior
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture

See Appendix B for citations of listed conservation plans.

Conservation Targets FY 2007 through FY 2011

Our habitat conservation goals for the Salmon Trout River Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	10 acres restoration	20 acres enhancement
Uplands:	10 acres restoration	20 acres enhancement
Riparian Corridor:	0.5 mile restoration	1 mile enhancement
Stream Channel:	0.5 mile restoration	3 miles enhancement
Aquatic Access Structures:	1 restoration	

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as the U.S. Geological Survey and U.S. Department of Agriculture's Natural Resources Conservation Service), State agencies (such as the Michigan Department of Natural Resources), non-profit organizations (such as Trout Unlimited and The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Thunder Bay and Watershed Focus Area

Description

This focus area is located in the following HUC: ThunderBay (04070006) (Figure 10).

The Thunder Bay and Watershed Focus Area is more than 1,200 square miles in size and extends from the mouth of the Thunder Bay River in the east to Montmorency County in the west. It covers parts of Alpena, Alcona, Presque Isle, Montmorency and Oscoda Counties in Michigan.

Within the focus area and nearby are lands that boast numerous species of waterfowl, raptors, shorebirds, reptiles, amphibians, insects, fish and a widely varied topography that supports a great diversity of vegetation. The Thunder Bay River and its tributaries were known to support spawning populations of native species, such as lake sturgeon, walleye, and northern pike. Hydropower projects have blocked access to all but the lower one mile of the watershed and improperly installed culverts have created fish passage problems at road crossings. Erosion problems associated with agricultural development and road crossings have resulted in loss and degradation of valuable fish and wildlife habitat within the watershed.

Non-indigenous aquatic species, such as zebra mussels, Eurasian ruffe, and round goby, have become established and pose threats to the native fauna of Thunder Bay. In addition, zebra mussels have become established and pose threats to underwater resources, such as numerous shipwrecks protected through establishment of the first Freshwater National Marine Sanctuary by the National Oceanic and Atmospheric Administration.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds, colonial piscivorous birds, raptors, shorebirds and other migratory bird species
- Many species of native and naturalized interjurisdictional Great Lakes fish species, including lake sturgeon, salmonids, walleye, and smallmouth bass and their supporting habitat
- Federally listed and candidate species, including dwarf lake iris, Pitcher's thistle, Hines' emerald dragonfly, Hungerford's crawling water beetle, eastern massasauga, bald eagle, Kirtland's warbler, piping plover, and Indiana bat
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats
- Expansive marshlands in public and private ownership
- Thunder Bay Island and several other adjacent islands managed by the Shiawassee National Wildlife Refuge as part of the Michigan Islands National Wildlife Refuge.

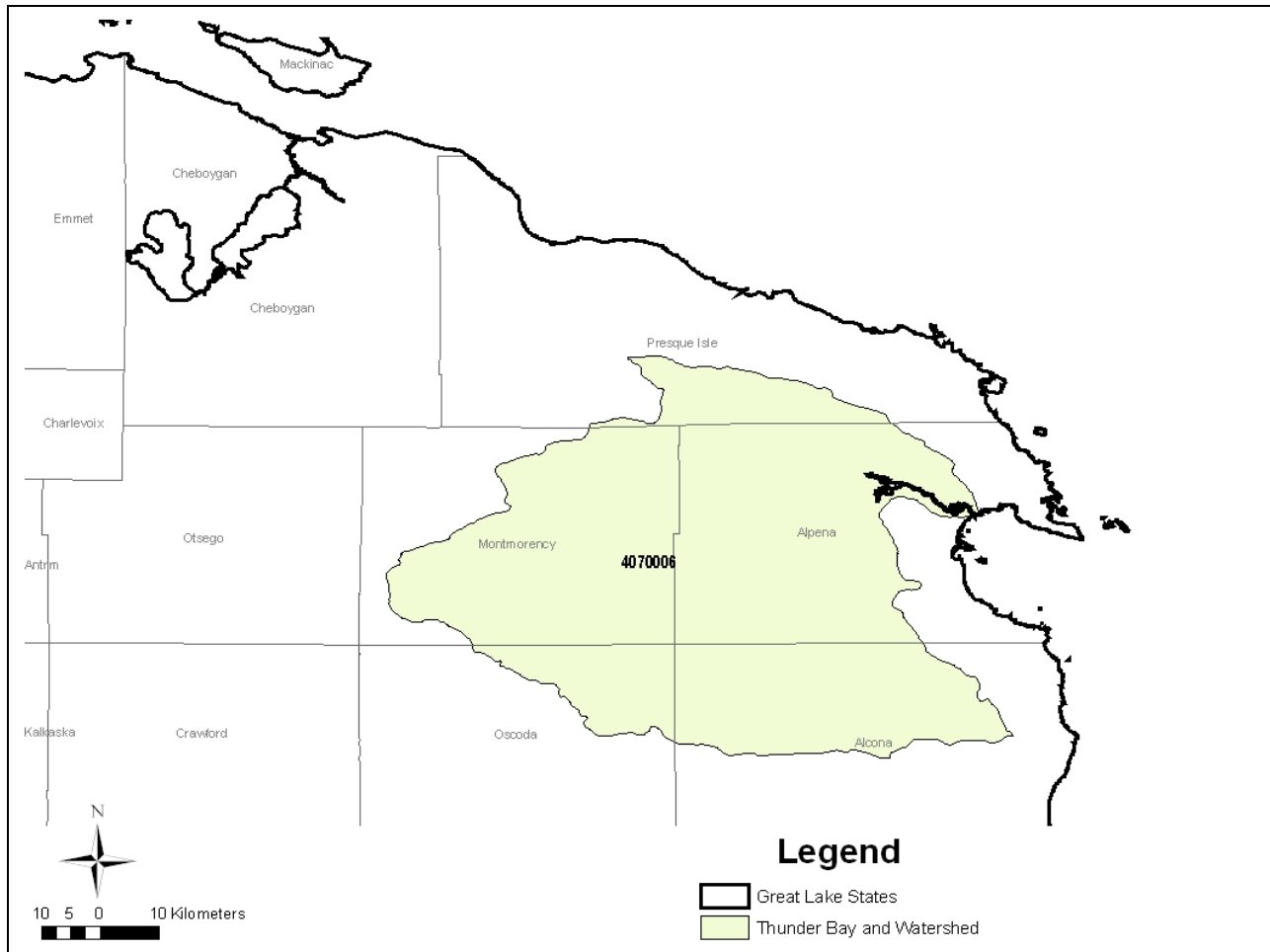


Figure 10. Thunder Bay and Watershed Focus Area.

Threats, Needs, and Opportunities

Urbanization in this suite of counties is seriously impairing coastal watershed fish and wildlife habitat. Development of the area, established populations of invasive plants and animals have altered habitat within the focus area. Therefore, many opportunities for restoration, research, improved management, and education exist. The area's natural communities-- forests, sandscapes, marshes, islands, shoals, waterfront lands, streams and riparian areas—provide habitat for rare plant species as well as many common animal species. Recreational fishing for salmonids, walleye and smallmouth bass in the area is nationally acclaimed.

The need exists to restore degraded areas and species as well as protect remaining sites and species within the focus area. Citizens, community organizations, government agencies and natural resource oriented non-government organizations are working in this watershed to restore and protect fish and wildlife species and habitats. Most notably among these are The Nature Conservancy, the Service's Alpena Fishery Resources Office, Michigan Department of Environmental Quality and Department of Natural Resources, several Native American tribes of Chippewa-Ottawa Indians, as well as the Shiawassee National Wildlife Refuge.

Goal for this Focus Area

The goal for the Thunder Bay Watershed Focus Area is to restore the natural functions and biological diversity to this important Great Lakes ecosystem within the Lake Huron basin. Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement, and restoration of islands, wetlands, coastal habitats, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical and protect unspoiled areas through non-regulatory means.
3. Protect intact and functional fish and wildlife habitat areas through non-regulatory means.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Assist efforts to minimize establishment and spread of non-indigenous invasive species
2. Assist with acquisition, protection, maintenance, enhancement, and restoration of the focus area's coastal fish and wildlife habitat.
3. Support recovery efforts for the ten federally listed species named above.
4. Seek to form non-traditional partnerships and reach out to Native American communities.

Existing conservation plans for the Thunder Bay Watershed Focus Area

- The Lake Binational Lake Huron Initiative (LHI)
- Michigan Wildlife Action Plan
- Great Lakes Basin Ecosystem Team Plans
- Fish Community Objectives for Lake Huron
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture

See Appendix B for citations of listed conservation plans.

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Thunder Bay and Watershed Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands:	10 acres restoration
Uplands:	10 acres enhancement
Riparian Corridor:	.5 miles restoration
Stream Channel:	.5 miles restoration
Aquatic Access Structure:	1 enhancement

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as U.S. Department of Agriculture's Forest Service), State agencies (such as Michigan Departments of Natural Resources and Environmental Quality), non-profit organizations (such as The Nature Conservancy), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Saginaw Bay and Watershed Focus Area

Description

This focus area is located in the following HUCs: Saginaw (04080206), Cass (04080205), Pigeon – Wiscoggin (04080103), Flint (04080204), Shiawassee (04080203), Kawkawlin – Pine (04080102), Tittabawassee (04080201), Au Gres – Rifle (04080101), Pine (04080202) (Figure 11). The counties of Michigan at least partially within the Bay basin include Iosco, Ogemaw, Roscommon, Osceola, Clare, Gladwin, Arenac, Bay, Isabella, Midland, Tuscola, Huron, Sanilac, Mecosta, Montcalm, Gratiot, Saginaw, Genesee, Lapeer, Oakland, Livingston, and Shiawassee.

With a surface area of more than 1,100 square miles, Lake Huron's Saginaw Bay is the second largest bay in the Great Lakes system and is divided equally into a shallow inner bay (15 feet average depth) and a deeper outer bay (51 feet average depth). Within the focus area and nearby are lands that boast numerous species of waterfowl, raptors, shorebirds, reptiles, amphibians, insects, fish and a varied landscape. Saginaw River and the associated watershed, as well as the inner Saginaw Bay, have been significantly impacted by contaminants, eutrophication, and habitat destruction and fragmentation. As a result, the International Joint Commission has listed the area as an Area of Concern. Resources for which the focus area goal is restoring natural functions and biological diversity include: 1) many species of native and naturalized interjurisdictional Great Lakes fish and their supporting habitats; 2) many species of migratory birds, including waterfowl, shorebirds, colonial piscivorous species, raptors and their supporting habitats; 3) aquatic plants, micro- and macroinvertebrates and their supporting habitats; 4) reptiles and amphibians and their supporting habitats; and 5) lands managed by federal trustees, tribal lands and lands held by the U.S. in trust for various tribes.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds, shorebirds, and other migratory bird species
- Interjurisdictional fish species, including lake sturgeon, salmonids, walleye, and smallmouth bass
- federally listed and candidate species, including the eastern prairie fringed orchid, Pitcher's thistle, eastern massasauga, Kirtland's warbler, piping plover, bald eagle, and Indiana bat
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats
- Expansive marshlands in public and private ownership
- Shiawassee National Wildlife Refuge and Michigan Islands National Wildlife Refuge

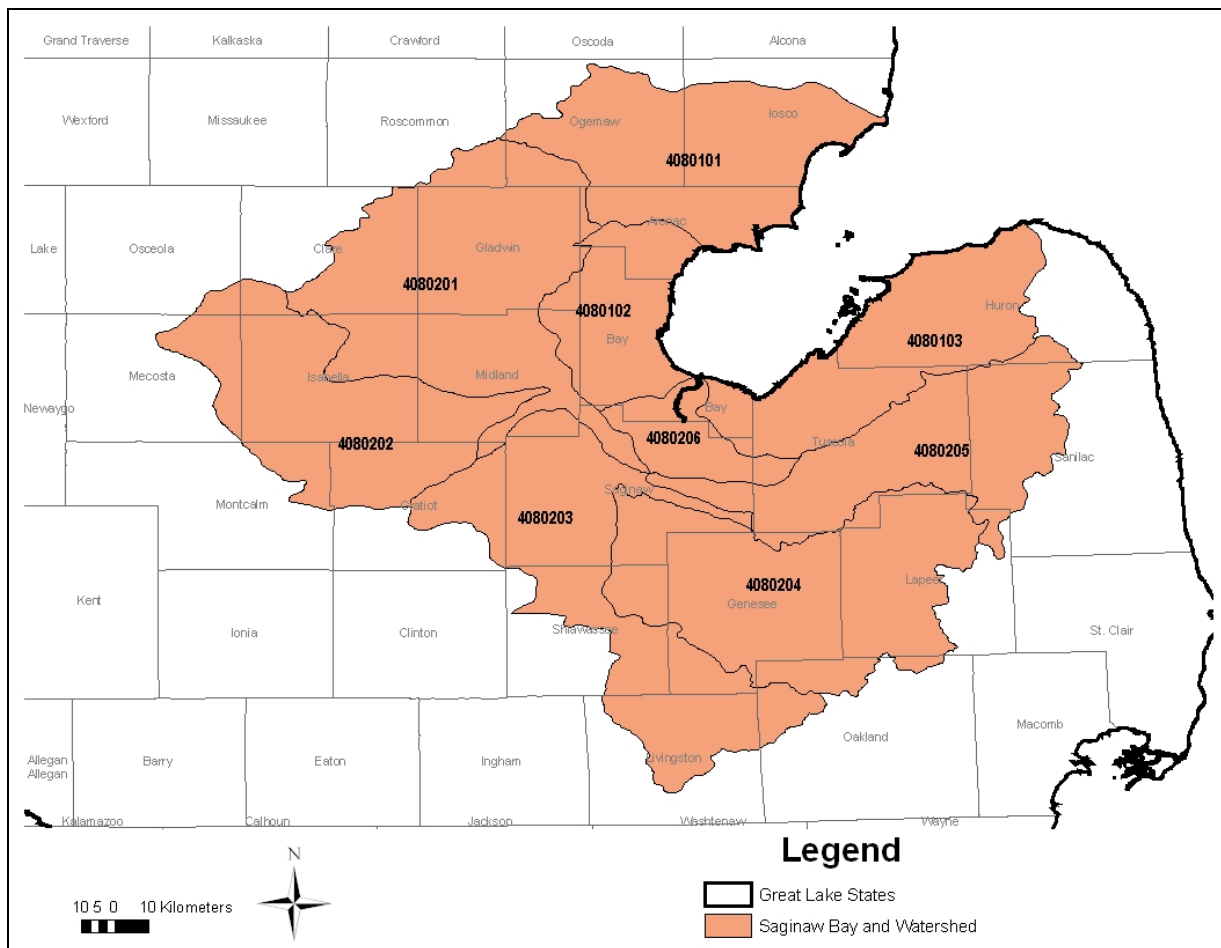


Figure 11. Saginaw Bay and Watershed Focus Area.

Threats, Needs, and Opportunities

Urbanization in this suite of Michigan counties is seriously impairing fish and wildlife habitat within the coastal areas and adjoining watersheds. Development of the area and establishment of invasive plants have altered habitat within the focus area. Therefore many opportunities for restoration, research, improved management, and education exist. The area's natural communities, marshes, islands, shoals, waterfront lands, streams and lakeplain remnants, provide habitat for rare plant species as well as many common animal species. The area is nationally acclaimed for its recreational fishing opportunities for walleye and smallmouth bass. Waterfowl hunting has had a long tradition in this focus area and is increasingly popular today.

The need exists to restore degraded areas and species as well as protect remaining sites and species that are currently found within the focus area. Citizens, community organizations, government agencies and natural resource oriented non-government organizations are working in this watershed to restore and protect fish and wildlife species and their habitats. Most notably among these groups are the Michigan Department of Natural Resources, Michigan Department of Environmental Quality Office of the Great Lakes, Huron County, Ducks Unlimited, Saginaw Bay Resource Conservation and Development Council, Watershed Initiative Network, private hunting clubs, and Shiawassee National Wildlife Refuge.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of lakeplains, islands, wetlands, and coastal habitats, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program contributions to the identified focus area goals.

1. Assist efforts to minimize establishment and spread of Non-indigenous invasive species
2. Assist with acquisition, protection maintenance, enhancement and restoration of the focus area's coastal fish and wildlife habitat.
3. Support recovery efforts for the seven federally listed species named above.
4. Seek to form non-traditional partnerships and reach out to both urban and Native American communities within the watersheds.

Existing conservation plans for the Saginaw Bay Watershed Focus Area

- The Lake Binational Lake Huron Initiative (LHI)
- Michigan Wildlife Action Plan
- Great Lakes Basin Ecosystem Team Plans
- Fish Community Objectives for Lake Huron
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Saginaw Bay Natural Resource Damage Assessment and Restoration
- Michigan Department of Natural Resources Saginaw Bay Walleye Recovery Plan

See Appendix B for citations of listed conservation plans.

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Saginaw Bay Watershed Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources given FY 06 funding levels and knowledge of our past partnerships.

Wetlands: 20 acres restoration

Uplands: 10 acres restoration

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as U.S. Department of Agriculture's Forest Service), State agencies (such as Michigan Departments of Natural Resources and Environmental Quality), non-profit organizations (such as The Nature Conservancy and Huron Pines), local municipalities, property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Lower Detroit River and System Focus Area

Description

This focus area is located in the following HUCs: Detroit (04090004), Raisin (04100002), Huron (04090005), Ottawa – Stony (04100001) (Figure 12). The Lower Detroit River and System Focus Area is 3,353 square miles in size and includes at least part of Wayne, Oakland, Washtenaw, Livingston, Jackson, Hillsdale, Lenawee and Monroe Counties.

The U.S. Environmental Protection Agency and Environment Canada have identified the Detroit River as a portion of the Great Lakes shoreline with significant concentrations of coastal wetlands and distinctive characteristics (U.S. Environmental Protection Agency and Environment Canada, 1999). In 1990, Region 3 designated the marshes associated with Lake Erie and the Detroit River as a wetland focus area within the Regional Wetlands Concept Plan.

The Detroit River consists of a 32-mile-long channel bordered by a poorly drained clay lake plain. The rapidly flowing river is underlain by limestone bedrock. Heavy industrial development dominates the shoreline. The river has 66 miles of Canadian shoreline, 79 miles of U.S. shoreline, five Canadian wetlands with 2,808 acres, and 16 U.S. wetlands with 3,415 acres. The wetlands are principally of two types: (1) channel-side (fringing) wetlands with mineral and organic soils and (2) submergent beds of vegetation with mineral soil, cobble, and limestone bedrock. The submergent beds, which once characterized large portions of the river, have been degraded, and the fringing emergent marsh has been almost completely destroyed. At one time extensive wild celery beds were important for diving ducks. After a decline in the beds from the 1950s to the 1970s, it appears that the beds are recovering and may be at the levels that existed in the 1950s.

The area's natural communities, marshes, islands, shoals, waterfront lands, sedge meadows, forest, prairie and bog remnants, provide habitat for rare plant species as well as many common animal species. Sport fishing for walleye and smallmouth bass in the area is acclaimed nationally. Waterfowl hunting is a tradition established over 150 years ago and is increasingly popular today.

Within the focus area, and nearby, are lands and waters that boast over 27 species of waterfowl, 17 species of raptors, 48 species of non-raptors, 35 species of dragonflies and butterflies, and 117 species of fish which reside in or migrating through the Detroit River area. Due to its location at the western end of Lake Erie, the Detroit River area serves as a funnel used by as an important stopover point for migrating birds.

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds and other migratory bird species
- Interjurisdictional fish species, including lake sturgeon, walleye, yellow perch, smallmouth bass, and lake whitefish
- Federally listed and candidate species, including eastern prairie fringed orchid, Karner blue butterfly, northern riffleshell, clubshell, rayed bean, eastern massasauga, bald eagle, and Indiana bat
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats

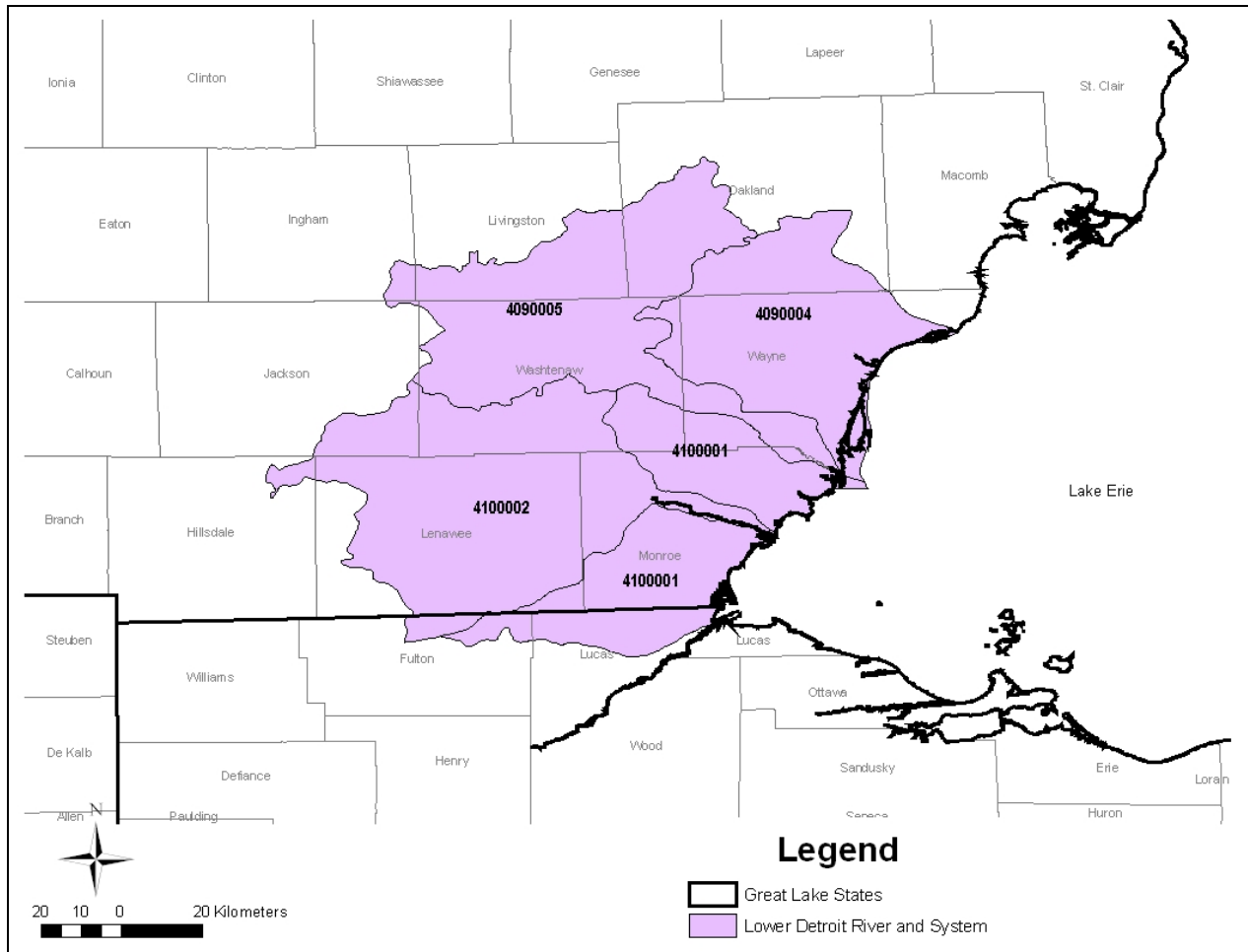


Figure 12. Lower Detroit River and System Focus Area.

Threats, Needs, and Opportunities

Urbanization in this suite of Michigan counties is seriously impairing fish and wildlife habitat within this focus area. Over 5 million people live within an hour's drive of the center of this area. Development of the area has altered habitat within the focus area and, therefore, many opportunities for restoration, research and education exist.

The need exists to restore degraded areas and species as well as protect remaining sites and species that are currently found within the focus area. Citizens, community organizations, government agencies, and natural resource oriented non-government organizations are working in this watershed to restore and protect fish and wildlife species and their habitats. Most notably among these groups are the Detroit River International Wildlife Refuge (North America's only Federal refuge to span an international border) and its friends group, International Wildlife Refuge Alliance (IWRA), and the Greater Detroit American Heritage River Initiative. The refuge location is unique as it is situated in a major metropolitan area and the authorized boundary covers 48 miles of shoreline.

Within the focus area, and nearby, are lands and waters that boast over 27 species of waterfowl, 17 species of raptors, 48 species of non-raptors, 35 species of dragonflies and butterflies, and 117

species of fish which reside in or migrating through the Detroit River area. Due to its location at the western end of Lake Erie, the Detroit River area serves as a funnel used by as an important stopover point for migrating birds.

Goal for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of islands, wetlands, coastal and lakeplain habitats, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area

The following activities have been identified to date and represent potential Coastal Program – Great Lakes contributions to the identified focus area goals.

1. Support recovery efforts for the eight federally listed species named above.
2. Assist with acquisition, protection maintenance, enhancement, and restoration of the focus area’s coastal watersheds fish and wildlife habitat.
3. Assist efforts to minimize establishment and spread of non-indigenous invasive species.
4. Seek to form non-traditional partnerships and reach out to urban communities.

Existing conservation plans for the Detroit River and System Focus Area

- The Detroit River/Western Lake Erie Indicator Project
- Michigan Wildlife Action Plan
- Great Lakes Basin Ecosystem Team Plans
- Fish Community Goals and Objectives for Lake Erie
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Ottawa National Wildlife Refuge Complex Expansion and Detroit River International Wildlife Refuge Expansion Act – Public Law 108-23 – May 19, 2003
- Great Lakes Strategy 2002—A Plan for the New Millennium

See Appendix B for citations of listed conservation plans.

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Detroit River Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands: 20 acres restoration

Uplands: 10 acres restoration

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as U.S. Geological Survey's Biological Resources Division), State agencies (such as Michigan Departments of Natural Resources and Environmental Quality), non-profit organizations (such as the Friends of the Detroit River and the Detroit River Alliance), local municipalities, property owner's associations, private landowners, and the Detroit River International Wildlife Refuge. See Appendix C for a list of recent partnerships.

Western Lake Erie Focus Area

Description

This focus area is located in the following HUCs: Cedar-Portage (04100010), Sandusky (04100011), Huron-Vermilion (04100012) (Figure 13).

The Western Lake Erie Focus Area is 3,562 square miles in size and includes at least part of Lucas, Wood, Hancock, Ottawa, Sandusky, Seneca, Wyandot, Marion, Crawford, Erie, Huron, Ashland and Richland Counties of Ohio. The focus area extends from approximately Niles Beach on the west eastward to Vermillion on the Lake Erie coast of Ohio.

The focus area lies in watersheds of the western basin of Lake Erie, stretching from just east of Toledo, Ohio, to about 50 miles west of Cleveland, Ohio. The area is generally flat with predominantly hydric, or wetland, soils. Agriculture is the predominant feature of the surrounding landscape with small towns and cities scattered throughout. An estimated eight million people live within a 2-hour drive of this area. The focus area and surrounding land are part of what was traditionally known as the Great Black Swamp, which once included 300,000 acres of wetlands along Lake Erie and extended inland. This vast area comprised coastal wetlands, riverine marshes, wet prairies, hardwood swamps and oak savanna. Only about 10 % of this original wetland habitat remains, and this resource supports a tremendous diversity of wildlife (Ottawa National Wildlife Refuge Comprehensive Conservation Plan).

Affected Fish, Wildlife and Trust Resources

- Waterfowl
- Neotropical migratory songbirds, shorebirds, and other migratory bird species
- Interjurisdictional fish species, including lake sturgeon, walleye, and smallmouth bass
- federally listed and candidate species, including eastern prairie fringed orchid, lakeside daisy, rayed bean, clubshell, Karner blue butterfly, Lake Erie water snake, eastern massasauga, copperbelly water snake, bald eagle, and Indiana bat
- Numerous state listed species
- Reptiles, amphibians and their supporting habitats
- Expansive marshlands in public and private ownership
- Ottawa National Wildlife Refuge complex

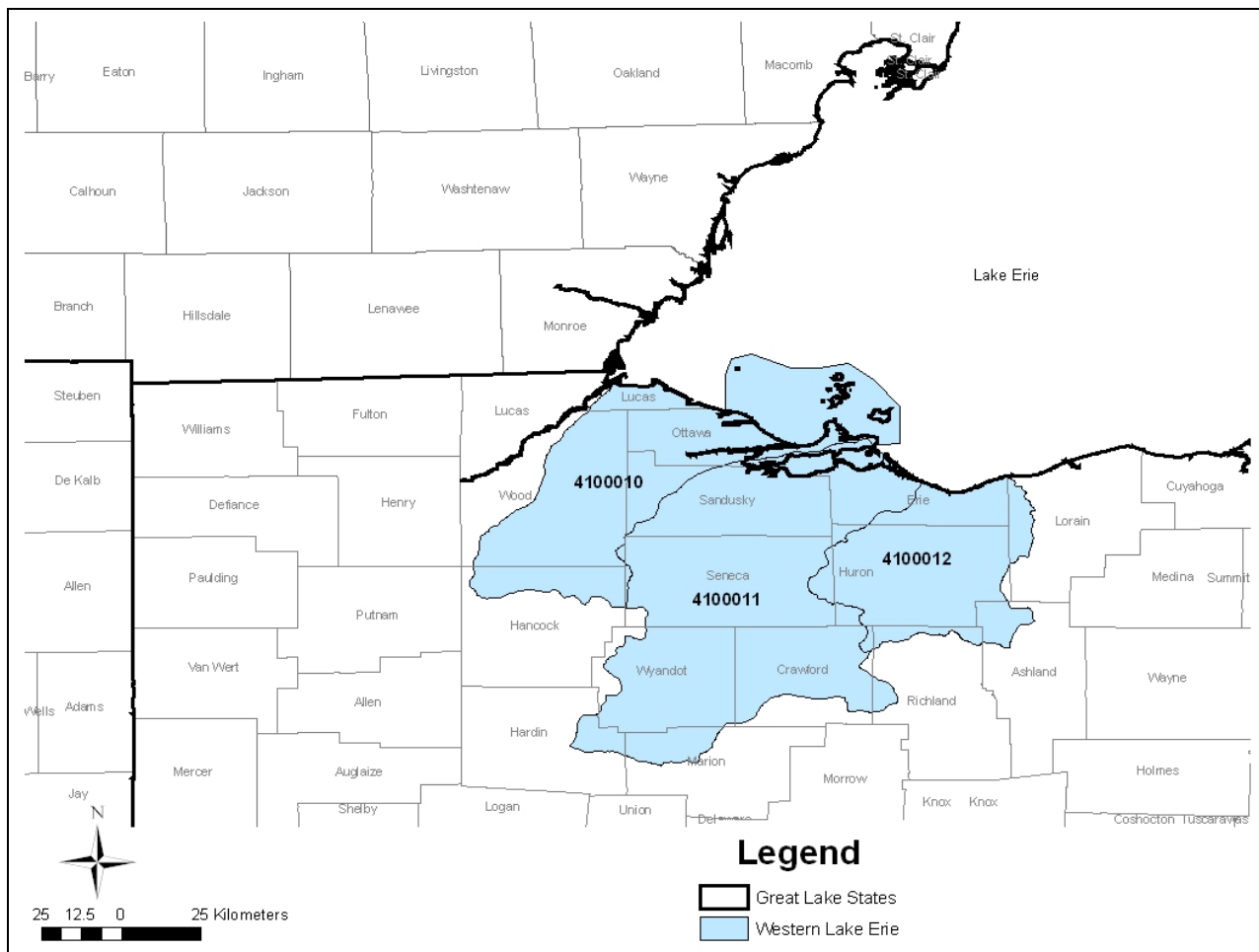


Figure 13. Western Lake Erie Focus Area.

Threats, Needs, and Opportunities

Urbanization in this suite of Ohio counties is seriously impairing fish and wildlife habitat in coastal areas and within the watershed. Development of the area and establishment of invasive plants have altered habitat within the focus area. Therefore, many opportunities for restoration, research, improved management, and education exist. The area's natural communities -- marshes, islands, shoals, waterfront lands, streams, sedge meadows and lakeplain remnants -- provide habitat for rare plant species as well as many common animal species. Within the focus area, and nearby, are lands that boast numerous species of waterfowl, raptors, shorebirds, reptiles, amphibians, insects, and fish. Sport fishing for walleye and smallmouth bass in the area is acclaimed nationally. Waterfowl hunting is increasingly popular today.

The need exists to restore degraded areas and species as well as protect remaining sites and species that are currently found within the focus area. Citizens, community organizations, government agencies, and non-governmental organizations are working in this watershed to restore and protect fish and wildlife species and habitats. Most notable among these groups are the Ohio Division of Wildlife, Ducks Unlimited, private hunting clubs, as well as the Ottawa National Wildlife Refuge complex and Reynoldsburg Ecological Services Field Office.

Goals for this Focus Area

Natural resource goals identified through many on-going conservation efforts in the area may be generally categorized as:

1. Promote the conservation, enhancement and restoration of islands, wetlands, coastal and lakeplain habitats, and unique areas of the watersheds.
2. Maintain and restore viable populations of those species of native fish, wildlife and plants to the extent practical.

Approach for Addressing the Needs of this Focus Area:

The following activities have been identified to date and represent potential Coastal Program contributions to the focus area goals.

1. Assist efforts to minimize establishment and spread of non-indigenous invasive species
2. Assist with acquisition, protection maintenance, enhancement and restoration of the focus area's coastal fish and wildlife habitat.
3. Support recovery efforts for the ten federally listed species named above.
4. Seek to form non-traditional partnerships and reach out to urban communities.

Existing conservation plans for the Western Lake Erie Focus Area:

- The Lake Erie Lakewide Management Plan (LaMP)
- Ottawa National Wildlife Refuge Comprehensive Conservation Plan
- Fish Community Goals and Objectives for Lake Erie
- Great Lakes Basin Ecosystem Team Plans
- Great Lakes Fish and Wildlife Restoration Act
- Upper Mississippi River and Great Lakes Region Joint Venture
- Ohio Wildlife Action Plan
- Eastern Prairie Fringed Orchid Recovery Plan
- Migratory Bird Stopover Site Attributes in the Western Lake Erie Basin
- Ottawa National Wildlife Refuge Complex Expansion and Detroit River International Wildlife Refuge Expansion Act – Public Law 108-23 – May 19, 2003
- Great Lakes Strategy 2002—A Plan for the New Millennium

See Appendix B for citations of listed conservation plans.

Conservation targets FY 2007 through FY 2011

Our habitat conservation goals for the Western Lake Erie Focus Area will be based on the needs identified by the conservation plans listed above. These goals are an estimate of what the Coastal Program might accomplish for federal trust resources, given FY 06 funding levels and knowledge of our past partnerships.

Wetlands: 200 acres restoration, 100 acres maintenance

Partnership Opportunities

We anticipate our partners will include other federal agencies (such as USGS' Biological Resources Division), State agencies (such as Ohio Departments of Natural Resources' Division of Wildlife), non-profit organizations (such as Ducks Unlimited, Ottawa NWR Association, Toledo Naturalists Association, and Black Swamp Bird Observatory), local municipalities,

property owner's associations, and private landowners. See Appendix C for a list of recent partnerships.

Coastal Program – Great Lakes Five-year Performance Targets

The following tables list the Region 3 Coastal Program – Great Lakes habitat conservation targets from FY 2007 through FY 2011 for all focus areas combined.

<i>Habitat Type</i>	<i>Target Acreage (Combined Restoration and Enhancement Totals) FY '07-'11</i>	<i>Percent of Acreage Target</i>
Wetlands	845	66
Uplands	445	34
Total	1290	100%

<i>Habitat Type</i>	<i>Target miles (Combined Restoration and Enhancement Totals) FY '07-'11</i>	<i>Percent of Miles Target</i>
Riparian	9	28
Stream Channel	23	72
Total	32	100%

<i>Habitat Type</i>	<i>Target Number of Structures FY '07-'11</i>	<i>Percent of Acreage Target</i>
Aquatic Access Structures	10	100%

IV. Goal Two: Broaden and Strengthen Partnerships

Complex coastal/shoreline restoration efforts succeed when we work alongside others with conservation objectives that benefit the Nation’s fish and wildlife trust resources and associated habitats. Collaboration with a varied and talented partnership base in the Great Lakes has resulted in a growing and results-oriented program. Our success is a shared success.

Collaborative partnerships exist with federal, state, and tribal agencies, local governments, non-governmental organizations, private corporations, foundations, land trusts and private landowners. Partners from each of these categories have voluntarily cooperated with the Coastal Program to accomplish our goals. Refer to Appendix C for a growing list of partners who have collaborated on coastal projects.

Regional Objectives

To address our goal of strengthening and broadening partnerships, the Coastal Program will work toward the following key objectives:

1. Maintain existing partnerships. Productive relationships are the key to success. As current relationships mature, we are better able to recognize how to bring different abilities and expertise to complex conservation issues.
2. Increase the partnership base. Every partner has limitations, including work load, capability, geographic interest, and funding. Increasing our partnership base expands our collective capability to plan, leverage funds, and work effectively.
3. Provide technical assistance. Some partners may not possess the time or skill necessary for all aspects of a conservation effort. Service personnel can assist with grant writing, coalition building, or project planning.
4. Leverage funds. Budget constraints occur across the conservation community. Through collaboration, the Coastal Program can help partners identify and use appropriate sources of funds and leverage secured funding towards additional grants to implement their conservation projects.

Our overall objective does not rely on raw numbers of “more” partners or a requirement of one or two new partners per focus area. Partnerships are maintained or are created via relationships born of common purpose and cooperation. Moreover, broadening and strengthening our partnership base means addressing high priority conservation needs and improving our collective ability to bring adaptive management to shoreline issues in the Great Lakes. As a result, we aim to contribute to a partnership base that increasingly becomes more efficient and effective.

In the first year of implementation, and thereafter on an annual basis, Coastal Program staff will meet with Service programs to cross reference species and habitat priorities.

Key Strategic Activities

We will progress with each regional objective by implementing key strategic activities as described below.

Maintain existing partnerships

- Maintain regular communication with partners by participating in project meetings, briefings and field visits.
- Have personal meetings (i.e., face-to-face) to discuss status and updates within the partner's organization and the Service.
- Promote partner recognition through awards programs, news releases and outreach documents.

Increase and Improve collective abilities of the partnership base

- Perform outreach activities through public presentations. These outreach efforts at public meetings, conferences and workshops will inform attendees about the Coastal Program and invite participation.
- Communicate with existing partners regarding the Program's objective of broadening the base of potential partners. Most existing partners represent a broader constituency. Communication at their councils, board meetings and other venues can reach new partner organizations. Additionally, the outreach and communications of existing partners about their successful projects and partnership with the Coastal Program provide an excellent way to encourage participation by new partners, especially with private landowners.
- Identify key stakeholders in focal areas and make direct contact with those which have not previously partnered with the Coastal Program.
- Improve the overall ability of the partnership base, including the Coastal Program, to deliver conservation success. We will utilize an adaptive management approach that includes improving technical and on-the-ground abilities through site monitoring and observations.

Provide technical assistance to achieve on-the-ground results

- Work with partners to identify technical assistance needs and provide assistance that meets a real need of the partner in the absence of Program funding. Often, partners benefit from specific technical assistance in order to implement and accomplish project goals. Our assistance will be tailored to the specific need such that it will move the partner's project forward.

Leverage funds

- Compile and maintain a list of potential funding sources including federal, state, and known private sources. The list should identify the fund source, eligibility of applicant and match, and application dates. This list can be used to solicit additional funds to support a project or to provide technical assistance.
- Capture and include all project related costs and funding in reports and proposals. Including all costs and sources of funds in project proposals, agreements, and reports will ensure accurate reporting of fund leveraging and show true project costs.

Performance Measures

The goal of broadening and strengthening partnerships will be measured by the following, which will be reported annually:

- The number of working partnerships
- The number of new partnerships established
- The number of partnership activities that reference State Wildlife Action Plans across the Great Lakes
- The number of activities undertaken to improve delivery and effectiveness (e.g., training)
- The number of partners adopting or implementing recommended technical assistance actions
- Funds and in-kind services leveraged per year

V. Goal Three: Improve Information Sharing and Communication

Communication and information sharing are critical to conservation success and serve to support all other Plan goals and activities. Here, we discuss our intention to learn from project success, failure, and strategies to improve coordination and implementation. This, in turn, directly affects on-the-ground results. In the end, we strengthen and broaden partnerships and improves accountability.

“It is not enough to be busy. So are the ants. The question is ‘What are we busy about?’”

Henry David Thoreau

Regional Objectives

1. Increase coordination with Service programs, agencies, and stakeholders. Working together results in shared approaches and common success.
2. Improve project results through information sharing. Sharing of project specific information with stakeholders will assist planning and reduce duplication of effort. Information sharing will also improve project results by helping to eliminate previously attempted and failed techniques.
3. Communicate results. Informed decision-makers and stakeholders are better prepared to support and work with the Coastal Program.

Key Strategic Activities

We will progress with each regional objective by implementing key strategic activities as described below.

Increase coordination with other agencies and stakeholders

- Regular project meetings will be conducted to maintain communication among cooperating partners. These meetings will consist of the primary agent implementing the project and the Service’s Coastal Program project officer at a minimum. Project meetings will occur on a regular schedule, at least semi-annually.
- Continue participation in regional councils and committees. In Region 3, councils and committees organized by National Estuary Programs or other watershed-based organizations have a membership that includes various federal and state agencies and other stakeholders. Participation in these events provides an open channel of communication between agencies and other stakeholders.
- Host a meeting, annually or semi-annually, that provides an avenue for stakeholders to communicate with the Service’s Coastal Program.

Improve project results through information sharing

- Share information on successes and failures of related projects at project meetings. This information sharing represents one form of technical assistance. Program biologists can assist a partner by providing information on lessons learned during project planning and development. Building from these lessons improves project results.
- Actively work with partners to improve our collective conservation approach by adopting the elements of strategic habitat conservation and adaptive management.
- Make oral and poster presentations at scientific and technical conferences. National or regional conferences and workshops provide an opportunity to reach a broad audience. Through these presentations, ideas and lessons can be exchanged with professionals from around the Nation and at regional levels.
- Collaborate with project partners to publicize accomplishments through newsletters and peer-reviewed journals. Written descriptions of project results are a useful tool to share information. Proper permissions should be received by all cooperating partners before publishing.

Communicate results

- Periodic stakeholder meetings, held annually or semi-annually, provide an opportunity to share updates on the Coastal Program. These meetings are also useful to improve project results and promote inter-agency coordination.
- Present Coastal program annual accomplishments and updates at local meetings and committees.
- Prepare annual accomplishments report and briefings. Present these materials during the annual “March Madness” briefings in Washington DC. Participate with and support partner efforts to communicate success.

Performance Measures

The goal to improve information sharing and communication will be measured by the:

- Numbers of projects implemented each year as reported through the HabITS database
- Written narratives of type and number of technical assistance projects and outreach activities provided in annual data call reports requested by the Washington Office

VI. Goal Four: Enhance Our Workforce

Region 3 staff represent our Program’s most critical resource. Enhancing our workforce allows us to improve our ability to deliver on-the-ground results for federal trust resource species. Providing personnel with the opportunity to increase knowledge and technical expertise through continued training, for example, helps ensure a proficient workforce and a quality product.

Through this goal, we will continue developing staff, maintain our reputation for excellent customer service, provide employees with opportunities to teach and lead in their communities, and continue to use an appropriate breadth of disciplines in delivering habitat conservation projects throughout the Great Lakes. These skills and abilities will ensure future success. Finally, with adaptive management in mind, Region 3 will assess our current organization and make appropriate adjustments as needed to best deliver the program.

Regional Objectives

1. Develop and retain skilled field staff with state-of-the-art restoration knowledge, skills and abilities. A skilled and motivated staff represent the front line of communication and program delivery with area partners and stakeholders.
2. Provide excellent customer service. Providing our customers with timely and quality assistance with their habitat needs will help maintain the integrity of the Coastal Program.
3. Increased use of our expertise for technical assistance. These skills will be shared with our partners and stakeholders to implement on-the-ground projects.

Key Strategic Activities

Develop and retain skilled local staff with state-of-the-art restoration knowledge, skills and abilities

- Assess current staff skills and capabilities and future skills and capabilities needed for effective and efficient operation of the two programs.
- Use skills assessment to develop employees Individual Development Plans (IDP) and Individual Action Plan (IAP).
- Continue providing training and educational opportunities to staff in conservation biology, restoration science, and landscape ecology, as well as in allied fields such as economics, conflict resolution, and community-based conservation techniques.
- Include a review of progress on an employee's IDP or IAP during mid-year and annual performance appraisals.
- Encourage staff to perform work details in other Service Programs and Regions.
- Promote a staff mentoring program, developed by the WO, to connect highly experienced staff to new hires or less experienced employees.

Provide excellent customer service

- Provide prompt responses to emails, phone messages, and other correspondence from both intra-Service and outside partners.
- Create an opportunity for partners to provide customer satisfaction evaluations through written surveys or open stakeholder meetings.
- Provide partnership and customer service training to front line clerical support, technicians and field biologists as available.

Increased use of our expertise for technical assistance

- Improve record keeping of the quantity and quality of technical assistance provided or otherwise facilitated without formal partnership agreements.
- Promote technical assistance capabilities to potential partners at meetings and workshops described in Goals Two and Three.

Performance Measures

Successful progress toward this Goal and the regional objectives above will be captured predominantly in performance measures under Goals One, Two, Three, and Five. Additional performance measures of this Goal include:

- Number of hours each FTE spends in training related to implementing the Strategic Plan Goals.
- Percentage of employees participating in a mentoring program developed by the WO.

VII. Goal Five: Increase Accountability

The primary goal of the Coastal Program is to implement habitat conservation projects. Goal 5 ensures to ourselves, our partners, and the American public that project impacts are known, accurate, and meet the standards we have set. Further, we will ensure that project operations are administratively efficient and fiscally transparent. Finally, accountability occurs by continuing to measure, assess, and report on the effectiveness, efficiency and fiscal integrity of our habitat conservation activities. Throughout, we understand that overall effectiveness relies on new and maintained relationships with other Service programs and partners. Our product must have the benefit of the best information, expertise, and know-how from others.

The objective, strategies and performance measures of this Goal are critically linked to the HabITS database. This system provides the primary input of accomplishment data, which includes restored and protected acres/miles, species benefits, project funding, focus areas and project locations. Through the HabITS database, reports can be generated to display accomplishment data in a variety of formats and sorted by various criteria. To report accomplishments effectively and increase accountability, the HabITS database must operate efficiently and be user-friendly. Strategic activities to increase the quantity and quality of project data entered into HabITS will assist the Coastal Program in achieving a higher level of accountability. Ultimately, these actions will continue to build respect among partners, stakeholders, and the general public.

Regional Objectives

Region 3 will pursue the following objectives in support of this important goal to increase our Program accountability:

1. Attain acreage goals outlined for Governmental Performance and Results Act (GPRA).
2. Increase management and control of program activities.
3. Increase control and quality of accomplishment data.
4. Increase visual resources in HabITS.
5. Develop relationships with other sources of expertise, both internal and external to Service.

Key Strategic Activities

The following strategies will be implemented to accomplish the regional objectives of this goal.

Attain acreage goals outlined for Governmental Performance and Results Act (GPRA). GPRA stands for the Government Performance and Results Act of 1993. This law was passed to reduce government waste and inefficiency and improve federal efforts to effectively address public needs. It holds federal agencies accountable for achieving program results and improving service, quality and customer satisfaction.

- Annually develop cooperative habitat conservation projects. Grant/Cooperative agreements are the primary mechanism we utilize to implement on-the-ground projects that result in acres restored, protected, or enhanced.

Increase management and control of program activities.

- Develop criteria for project selection based on Program goals and objectives. As Program goals and objectives change over time, this standardized set of criteria will guide project selection.
- Increase monitoring of projects. Our project agreements have varied deadlines, and each year additional projects and agreements are initiated, while a number of projects are completed. Continued monitoring of all projects, existing and new, is essential for successful habitat conservation and management and future project development.
- Increase accountability of cooperators. Ensure all requirements for reporting, invoicing, and monitoring are clearly stated in all new agreements and the cooperators are aware of and follow those requirements.

Increase control and quality of accomplishment data.

- Increase communication with cooperators to ensure that required documentation, monitoring, and most accurate funding and acreage data are provided to the Service's project officer.
- Standardize information recorded into HabITS database.
- Annually review projects entered in HabITS and update information and completion status.

Increase visual resources in HabITS.

- Include electronic formatted photos to projects entered into HabITS database. When appropriate, photos should include pre-existing conditions, construction activity, and project completion documentation.
- Include accurate GIS-based information for HabITS mapping tools.

Increase subactivity funding fidelity.

- Annually calculate percentage of Coastal Program dollars allocated for Program overhead versus projects.

Develop and maintain relationships with other sources of expertise, both internal and external to the Service.

- Annually meet with Service resource programs to cross reference priorities, share best management practices, and coordinate activities.
- Annually meet with components of partnership base to cross-reference priorities, share best management practices, and coordinate activities.

Performance Measures

- Annual account of acres/miles restored or protected within each geographic focus area reported through the HabITS database
- Timely submission of annual data call reports
- Management control reviews performed once every five years, starting in FY 2008
- Proportion of projects accurately entered into the HabITS database
- Annual certification that entered HabITS data are accurate
- Proportion of HabITS accomplishments linked to species

- Percent of HabITS project accomplishments with images
- Annual regional report on number of FTE's supported by the Coastal Program
- Annual ratio for project funds leveraged against Coastal Program funds

VIII. Stakeholder Involvement

Part I: Vision Document

Nineteen meetings were held throughout the Great Lakes basin in 2004 to gather input from our partners and stakeholders. A diverse representation of partners participated in the meetings, including representatives from local, state, and federal government agencies, Native American tribes, educational institutions, and non-profit organizations. Discussions not only centered around shared resource issues and measurements of success, but also how our partners and stakeholders view the Coastal Program, its strengths, weaknesses, threats, and potential opportunities. Stakeholder and partner comments were compiled and incorporated as the Vision Document was drafted.

List of stakeholders involved in Part I of Region 3's Strategic Planning Process

Antrim Conservation District, Antrim County, Michigan
 Bad River Band of Lake Superior Chippewa
 Conservation Resource Alliance
 Department of Interior, National Park Service, Apostle Islands National Lakeshore
 Detroit/Wayne County Port Authority
 Ducks Unlimited, Great Lakes Atlantic Region Office, Michigan
 Grand Portage Reservation
 Grand Traverse Regional Land Conservancy
 Keewenaw Bay Indian Community
 Michigan Department of Environmental Quality, Coastal Zone Management Program
 Michigan Department of Natural Resources, Fisheries Division
 Michigan Department of Natural Resources, Wildlife Division
 Michigan State University, Department of Fisheries and Wildlife
 The Nature Conservancy, Ashland Office
 The Nature Conservancy, Michigan Chapter
 The Nature Conservancy, South East Michigan Office
 The Nature Conservancy, Wisconsin Office
 Trout Unlimited
 Wisconsin Department of Natural Resources, Wildlife Management

Part II: Region 3 Step-Down Strategic Plan

Preliminary discussions pertaining to the addition of new Region 3 Focus Areas began in 2006. The Coastal Program – Great Lakes had previously been involved in the development and adoption of six focus areas created by the Great Lakes Basin Ecosystem Team. These six focus areas have been used by the Coastal Program – Great Lakes since its inception. Four additional focus areas were developed during the current strategic planning process in order to address trust resource species needs in areas of the Great Lakes basin which were previously not part of our original focus. The Coastal Program – Great Lakes expects this flexibility to continue into the future as resource and partner needs evolve.

Input was gathered from partners and four new additional focus areas were mapped. During this process, the new focus areas have been presented to stakeholders and partners in order to refine boundaries and address resource concerns. Multiple individual meetings were held with stakeholders and Service offices as well as one public meeting in Traverse City, Michigan, in December of 2006.

Stakeholder involvement will remain key as this plan continues to develop and is implemented.

List of stakeholders involved in Part II of Region 3's Strategic Planning Process

Antrim Conservation District
Ashland, Bayfield, Douglas and Iron Counties Land Conservation Department
Bad River Band of Lake Superior Chippewa
Boardman Rivers Dams Project
City of Traverse City
Conservation Resource Alliance
Ducks Unlimited
Elk Skegemog Lakes Association
Friends of Sleeping Bear Dunes
Friends of the Jordan River Watershed
Fruithaven Farmland Preservation Corporation
Grand Traverse Band of Ottawa and Chippewa Indians
Grand Traverse County
Grand Traverse Regional Land Conservancy
Great Lakes Children's Museum
Inland Seas Education Association
Leelanau Conservancy
Michigan Department of Environmental Quality
Michigan Department of Natural Resources, Wildlife Division
Michigan Sea Grant
Office of Senator Carl Levin
The Nature Conservancy, Ashland Office
The Nature Conservancy, Michigan Chapter
The Nature Conservancy, South East Michigan Office
Trout Unlimited
USDA Natural Resources Conservation Service
USFWS Alpena Fishery Resources Office
USFWS Bloomington Ecological Services Field Office
USFWS Chicago Ecological Services Field Office
USFWS Green Bay Fishery Resources Office
USFWS Ottawa National Wildlife Refuge
USFWS Reynoldsburg Ecological Services Field Office
USFWS Whittlesey Creek National Wildlife Refuge
Wisconsin Department of Natural Resources
Wisconsin Wetland Association

Appendix A: Preliminary List of Great Lakes Coastal Program Focal Species.

U.S. Fish & Wildlife Listed Species		Migratory Bird Focal Species	
<i>Endangered</i>	<i>Threatened</i>	<i>Waterfowl</i>	
Piping plover	Bald eagle	American wigeon	Mallard
Karner blue butterfly	Pitcher's thistle	Blue winged-teal	Green winged-teal
Hungerford's crawling water beetle	Eastern prairie fringed orchid	Canada goose	Trumpeter swan
Michigan monkey-flower	Dwarf lake iris	Canvasback	Northern pintail
Northern riffleshell	Canada lynx	Common goldeneye	Wood duck
Clubshell	Lake Erie water snake	American widgeon	Redhead
Indiana bat	Bog turtle	Tundra swan	Lesser scaup
Kirtland's warbler	Copperbelly watersnake	American black duck	Greater scaup
Mitchell's satyr	Houghton's goldenrod	<i>Wading birds</i>	
Hine's emerald dragonfly	Lakeside daisy	Piping Plover	Killdeer
<i>Special Interest</i>	<i>Candidates</i>	Yellow rail	Upland sandpiper
Gray Wolf	Eastern massasauga	Sora rail	Virginia rail
	Rayed bean	<i>Colonial Waterbirds</i>	
Interjurisdictional Fish Species		Common tern	Black tern
Lake sturgeon	American eel	King Rail	Great blue heron
Char/Brook trout	Short-jaw cisco	Black-crowned night-heron	
Lake trout	Yellow perch	<i>Grassland Birds</i>	
Lake whitefish	Walleye	Dickeissel	Short-eared owl
Muskellunge	Small mouth bass	Henslow's sparrow	Eastern meadowlark
Raptors		Upland sandpiper	Snow bunting
Peregrine falcon	Osprey	<i>Woodland Birds</i>	
Red-shouldered hawk		Whip-poor-will	Chimney swift
<p>Priority Species and Focal Areas Will Change</p> <p>There are a number of internal and external species lists, priority areas, focal areas, and prioritization methods. The preliminary list of priority species and focus areas presented here represent a start, not an end. Appendix A relies on existing lists, such as the Region 3 Regional Resource Conservation Priorities, and input from partners. Implementation will include distinct steps to collaborate with others to improve how we choose priorities and how we take action.</p>		Red-headed woodpecker	Willow flycatcher
		Veery	Wood thrush
		Blue-winged warbler	Golden-winged warbler
		Black-throated blue warbler	Cerulean warbler
		Worm-eating warbler	Canada warbler
		Louisiana waterthrush	Prothonotary warbler
		Kentucky warbler	Connecticut warbler
		American woodcock	

Appendix B: Relevant Conservation Plans and Other References

Eastern Prairie Fringed Orchid Recovery Plan.

<http://www.fws.gov/midwest/angered/plants/epfoplan.pdf>

Eshenroder, R.L., M. E. Holey, T. K. Gorenflo, and R. D. Clark, Jr. 1995. Fish-community objectives for Lake Michigan. Great Lakes Fish. Comm. Spec. Pub. 95-3. 56 p.

Ewert, D.N., G.J. Soulliere, R.D. Macleod, M.C. Shieldcastle, P.G. Rodewald, E. Fujimura, J. Shieldcastle and R.J. Gates. 2006. Migratory Bird Stopover Site Attributes in the Western Lake Erie Basin. Final Report to the George Gund Foundation

Final Restoration Alternatives Development and Evaluation Report, Grand Calumet River/Indiana Harbor Canal, Indiana, Dec 2000.

<http://www.fws.gov/midwest/GrandCalumetRiverNRDA/documents/FinRADR.pdf>

Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes, December 2005. <http://www.gllrc.us/strategy.html>

Great Lakes Basin Ecosystem Team Plans. Found at:

<http://www.fws.gov/midwest/greatlakes/index.html>

Great Lakes Fish and Wildlife Restoration Act. Goals of United States Fish and Wildlife Service Programs Related to Great Lakes Fish and Wildlife Resources (16 USC 941d)

Great Lakes Strategy 2002—A Plan for the New Millennium.

<http://www.epa.gov/glnpo/gls/gls2002.pdf>

Horns, W.H., CR. Bronte, T.R. Busiahn, M.P. Ebner, R.L. Eshenroder, T. Gorenflo, N. Kmiecik, W. Mattes, J.W. Peck, M. Petzold, D.R. Schreiner. 2003. Fish-community objectives for Lake Superior. Great Lakes Fish. Comm. Spec. Pub. 03-01. 78p.

Indiana Comprehensive Wildlife Strategy, Developed for the State of Indiana, Indiana Department of Natural Resources, Division of Fish and Wildlife, by D.J. Case and Associates, Mishawaka IN, Oct 2005

Inter-Fluve Inc. 2003. Bayfield peninsula stream assessment final report: fluvial geomorphology, hydrology and management recommendations. Report prepared for Trout Unlimited. Madison, WI. 99 pp.

Lake Michigan Lakewide Management Plan,

<http://www.epa.gov/grtlakes/lakemich/2006/Chapter12.pdf>

Lake Superior Lakewide Management Plan (LaMP), Lake Superior Binational Program, 2000

Michigan Wildlife Action Plan. Cited as: Eagle, A.C., E.M. Hay-Chmielewski, K.T. Cleveland, A.L. Derosier, M.E. Herbert, and R.A. Rustem, eds. 2005. Michigan's Wildlife Action Plan. Michigan Department of Natural Resources. Lansing, Michigan. 1592 pp.

<http://www.michigan.gov/dnrwildlifeactionplan>

Minnesota Department of Natural Resources, 2006. Tomorrow's habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife, Comprehensive Wildlife Conservation Strategy. Division of ES, MNDNR.

Ohio Wildlife Action Plan. http://www.iafwa.org/action_plan_ohio.html

Ottawa National Wildlife Refuge Complex Expansion and Detroit River International Wildlife Refuge Expansion Act – Public Law 108-23 – May 19, 2003

Ottawa National Wildlife Refuge Comprehensive Conservation Plan.
<http://www.fws.gov/midwest/planning/ottawa/index.html>

Ryan, P.A., R. Knight, R. MacGregor, G. Towns, R. Hoopes, Region 3 Environmental Contaminants Program Strategic Plan. 2006.
http://www.fws.gov/midwest/eco_serv/env_cont/Final%20with%20cover%20R3%20EC%20Strat%20Plan%20November%202006.pdf

Saginaw Bay Natural Resource Damage Assessment and W. Cullingham. 2003. Fish-community goals and objectives for Lake Erie. Great Lakes Fish. Comm. Spec. Publ. 03-02. 56 p. Restoration. <http://www.fws.gov/midwest/SaginawNRDA/>

St. Louis River Citizens Action Committee. Lower St. Louis River Habitat Plan. 2002

The Detroit River/Western Lake Erie Indicator Project.
http://www.epa.gov/med/grosseile_site/indicators/index.html

The Binational Lake Huron Initiative (LHI). <http://www.deq.state.mi.us/documents/deq-ogl-lhi2002update.pdf>

The Illinois Comprehensive Wildlife Conservation Plan and Strategy, Illinois Department of Natural Resources, July 2005

The Lake Erie Lakewide Management Plan (LaMP)
<http://www.epa.gov/glnpo/lakeerie/2006update/index.html>

Upper Mississippi River and Great Lakes Region Joint Venture.
<http://www.fws.gov/midwest/NAWMP/documents/WaterfowlManagementPlan.pdf>

U.S. Environmental Protection Agency and Environment Canada. 1999. Biodiversity Investment Areas: Coastal Wetland Ecosystems.
<http://www.epa.gov/grtlakes/solec/98/papers/coastabia/background.html> and associated pages accessed February 2, 2007.

Wisconsin Department of Natural Resources. 2005. Wisconsin's Strategy for Wildlife Species of Greatest Conservation Need. Madison, WI.

Appendix C: List of Coastal Program – Great Lakes Partners

Antrim Conservation District
Bad River Band of Lake Superior Chippewa
Bad River Watershed Association
Bay Mills Indian Community
Central Lake Superior Partnership
Central Lake Superior Watershed Partnership
Conservation Resource Alliance
Ducks Unlimited
Friends of Belle Isle
Friends of the Branch River
Friends of the Detroit River
Friends of the Northern Great Lakes Visitors Center
Grand Portage Band of Lake Superior Chippewa
Grand Traverse Regional Land Conservancy
Grand Valley State University – Annis Water Resources Institute
Great Lakes Indian Fish and Wildlife Commission
Greater Detroit American Heritage River Initiative
Grosse Ile Nature and Land Conservancy
Inland Sea Society
Inland Seas Education Association
Inland Seas Education Association
Kenosha Days of Discovery
Keweenaw Bay Indian Community
Meeting Ecological & Agricultural Needs within the Dowagiac River System
Michigan Natural Features Inventory
Minnesota Department of Natural Resources
Muskegon River Watershed Assembly
Northland College
Northland College - Sigrid Olson Environmental Institute
Ohio Department of Natural Resources
Red Cliff Band of Lake Superior Chippewa
Saginaw Bay RC&D
Sheboygan County Planning and Resource Department
St. Louis River Citizens Action Committee
Tall Ship Tours Green Bay, Inc.
The Nature Conservancy – Michigan
Timberland RC&D
Tip of the Mitt Watershed Council
Town of Dune Acres, Indiana
Trout Unlimited
University of Minnesota
University of Minnesota – Natural Resources Research Institute
University of Wisconsin
University of Wisconsin – Extension
USFS Hiawatha National Forest
USFS Manistee National Forest

USFS Ottawa National Forest
USFWS Alpena Fishery Resources Office
USFWS Chicago Ecological Services Field Office
USFWS Detroit River International Wildlife Refuge
USFWS Green Bay Ecological Services Field Office
USFWS Green Bay Fishery Resources Office
USFWS New York Ecological Services Field Office
USFWS Ottawa National Wildlife Refuge
USFWS Pendils Creek National Fish Hatchery
USFWS Reynoldsburg Ecological Services Field Office
USFWS Rock Island Fishery Resources Office
USFWS Twin Cities Ecological Services Field Office
USFWS Whittlesey Creek National Wildlife Refuge
USFWS Wisconsin Private Lands Office
USGS Wisconsin Water Science Center
USNPS Apostle Islands National Lakeshore
USNPS Pictured Rocks National Lakeshore
USNPS Sleeping Bear Dunes National Lakeshore
Wisconsin Department of Natural Resources

Appendix D: Coastal Program – Great Lakes Internal Policy and Guidance

DRAFT

April 06, 2007

Coastal Program - Great Lakes Internal Policy and Guidance

Introduction

The Coastal Program - Great Lakes (Program) is administered in Region 3 by the branch of Ecological Services, US Fish and Wildlife Service (Service). The Program features a field level effort, across several offices and personnel, for the delivery of Program funding, administration, technical assistance and on-the-ground restoration activities. Geographic coverage spans the Great Lakes across Regions 3 and 5.

The Program is currently jointly delivered from the East Lansing Field Office (ELFO) and the Ashland Fishery Resources Office. The ELFO Field Supervisor serves the function of Coastal Coordinator for the Great Lakes across Regions 3 and 5. The AFRO Project Leader serves as a co-coordinator.

The purposes for developing this policy and guidance are to:

1. Document Program administration, delivery and guiding principals.
2. Describe Program goal, priority activities and geographic focus areas.
3. Provide guidance to announce project proposals that address number 2 above.
4. Provide guidance to score and fund project proposals.

This policy and guidance will be followed to the greatest extent possible. Unforeseen circumstances and situations may require deviation; however, such occurrences have been rare.

Program coordinators

- Coastal Coordinator position located at ELFO, as occupied by Field Supervisor, reports to RO-ES and coordinates with ES Habitat Branch and other Programmatic ARDs.
 - Coastal Coordinator performs duties and responsibilities of the national Coastal Program Coordinator.
- Co-coordinator position located at AFRO, as occupied by Project Leader, reports to RO-Fisheries Great Lakes Supervisor and coordinates with Region 3 ARD - Fisheries.
 - Supports Coastal Coordinator.
- Both collaborate in:
 - setting priorities and guidance
 - proposing and attaining GPRA goals
 - Program delivery and administration
 - outreach
 - budget development and tracking.

Program biologists

- AFRO and ELFO staff positions, reporting to Project Leader or Field Supervisor.
- Collaborate in biological analysis and planning.

- Collaborate in project selection and implementation.
- Establish and maintain working partnerships.
- Undertake integrated trust resource management.
- Perform all reporting tasks.
- Assist with outreach.
- Offer technical assistance on a project by project basis and upon partner request.

Budget analyst

- Region 3 Regional Office position, reporting to ES-ARD.
- Lead budget development and allocation.
- Coordinate GPRA reporting and delivery with biologists and coordinators.
- Track and report on accomplishments.
- Assist/lead cross programmatic initiative development.

EPA liaison (temporary position)

- Co-located with EPA GLNPO, reporting to ES Habitat Branch Chief.
- Assist with Program outreach and funding opportunities.

Coastal Program – Great Lakes goal

Improve natural coastal ecosystem diversity, functions and productivity in the Great Lakes basin.

Program priorities

Annual requests for partnerships and project ranking decisions are guided by the following priorities:

- **Habitat restoration.** Projects that restore or provide coastal shore habitats and natural processes that sustain long-term diverse and abundant populations of native resident and migratory fish and wildlife species.
- **Research and evaluation.** Projects that further our understanding of natural coastal ecosystem diversity, functions and productivity through the acquisition, compilation, and dissemination of scientific information.
- **Education and outreach.** Projects that increase public awareness of coastal resources, issues and corrective actions.
- **Planning and technical assistance.** Projects that plan and provide for ecologically sound levels of restoration, public use, economic benefits, and enjoyment of coastal resources.

Geographic Focus areas

The Great lakes Basin Ecoteam identified ten locations (Focus Areas) in the Great Lakes Basin where threats, needs and opportunities for fish and wildlife, and Service trust resources should gain priority attention in collaboration with Federal agency partners and other stakeholders. The following factors (not in priority order) were used to narrow the list to six; 1) high degree of existing or potential diversity/abundance of Service trust resources; 2) uniqueness of the area; 3) restorability of ecosystem integrity and sustainability; 4) imminence of threats to the area and trust resources; 5) importance of the area to the larger ecosystem, e.g., will efforts in the area help to reconnect fragmented areas on a landscape level; 6) strength of existing or the potential for future partnerships; 7) education/outreach opportunities; 8) political climate and interest of stakeholders.

The Focus Areas are:

- **Duluth-Superior Harbor/St. Louis River Estuary and Watershed(MN/WI)**
- **Superior Coastal Fish and Wildlife Habitat Initiative (WI)**
- **Wisconsin Green Bay and Watershed (WI)**
- **Illinois Lake Michigan Basin (IL)**
- **Indiana Coastal Zone (IN)**
- **Brevort to Lower Grand (MI)**
- **Michigan Green Bay and Watershed (MI)**
- **Salmon Trout River Watershed (MI)**
- **Thunder Bay and Watershed (MI)**
- **Saginaw Bay and Watershed (MI)**
- **Lower Detroit River and System(MI)**
- **Western Lake Erie (OH)**

Who can receive project funding?

Federal, State, Tribal and local governments, educational institutions, private organizations and individuals can apply. Fish and Wildlife Service offices can also apply; however, in an attempt to maximize project funding to partners, no more than 25% of the annual project allocation will be awarded to Service offices for Service-lead projects. No less than 51% of project funding will be allocated within Coastal Program – Great Lakes focus areas. Partner/applicant contributions to project proposals is encouraged, but not required.

How will funds be awarded?

Program funding made available to the ELFO and ARFO will be allocated at 70% to projects and 30% to Program administration.

The level of funds, the scope of work, and the terms and conditions of a successful award will be determined in negotiations between the prospective recipient and Service representatives. Service partners will be asked to sign a Cooperative Agreement.

Funding recipients are not to initiate projects until they receive the final Agreement document signed by an authorized Service official. Recipients are advised they will be required to obtain a Dun and Bradstreet number and register with the Central Contractors Registration before any Agreement can be initiated.

What are the project funding limits and restrictions?

Project funding requests should not exceed \$25,000 per proposal or be less than \$2,500.

Project funding can be used for salary, travel, equipment, supplies, rent, restoration, construction, and short protection term easements applicable to projects on private or public lands. Project funding can not be used for environmental compliance activities.

How are requests for project proposals made?

Projects are solicited from around the Great Lakes through the Program web page, Great Lakes Information Network (GLIN), and through email announcements.

Prospective applicants will be directed to the Coastal Program – Great Lakes web page for application instructions, format and content.

<http://www.fws.gov/midwest/greatlakes/glcoastal.htm>

Award decisions, reporting and records management.

Applications for project funding are reviewed, scored and ranked jointly by AFRO and ELFO. Project selections will be made by April 1, or no later than 30 days after OFTs are made to the field, whichever comes earlier. Each year a spread sheet will be prepared that lists all project proposals received and those that are funded. A memo will be written by ELFO on even years and AFRO on odd years to announce award decisions to ARDs for Ecological Services and Fisheries.

AFRO and ELFO will negotiate each year to decide which projects are administered/lead out of which office. Decision will be made based on project location, office expertise, applicant relationships, etc. The lead office is responsible environmental compliance, monitoring and accomplishment reporting.

What is needed and who's responsible for environmental compliance?

The Service, in cooperation with the applicant, must fully comply with federal environmental compliance statutes and requirements. ELFO and AFRO will ensure environmental compliance is satisfied before funds are released to successful applicants outside the Service. Other Service offices receiving Program funds will conduct their own environmental compliance.

Partnership Application Content and Instructions

- *Cover letter* that transmits the project proposal and briefly states its main features.
- Descriptive *project title*.
- *Applicant* name, affiliation and contact information w/email address.
- *Project narrative*.
 - a. *Focus area* (from Guidance) where work will be performed.
 - b. *Program Priority* (from Guidance) being addressed.
 - c. Geographic *location* on a map. Also identify the Lake, State, nearest community as well as one GPS location (lat/long in minutes, degrees and seconds)
 - d. *Problem(s)/Issue(s)* that the proposal will correct or help solve as related to the Program Priorities and Geographic Focus Area (Why is this project important?)
 - e. Quantify miles and/or acres of *habitat restored and/or enhanced*.
 - f. Specific *actions* and *methodology* that will be taken to address the problem, with *milestone dates* identified.
 - g. List of *Partners*.
- *Budget narrative*
 - Justify all *proposed costs* such as salaries, equipment, consultant services, subcontracts and travel, as well as project matching or cost sharing information. If the proposed project is selected we will be requesting a more detailed budget per instructions provided.
 - Any *partners* providing funds or in-kind services (although encouraged and ranked higher, no match is required) must be named in the proposal.
 - *Duration* of the project and whether partial funding of the project is practicable, and, if so, what specific portion(s) of the project could be implemented with what level of funding.
- Application length should not exceed four pages.

Applications can be sent by email or regular mail to Bob Kavetsky East Lansing Field Office, Ted Koehler, Ashland Fishery Resources Office, or both.

U.S. Fish and Wildlife Service
East Lansing Field Office
651 Coolidge Road. Suite 101
East Lansing, MI 48823
bob_kavetsky@fws.gov
517-351-5293

U.S. Fish and Wildlife Service
Ashland Fishery Resources Office
2800 Lakeshore Drive
Ashland, WI 54806
ted_koehler@fws.gov
715-682-6185 x209

Partnership Project Ranking criteria

The Service has developed the following ranking criteria for proposals being considered for funding. The Service will use these criteria to evaluate and score each proposal on a scale of 0-100. A project proposal that is a part of a longer-term initiative will be considered; however, the proposed project's objectives, benefits, and tasks must stand on their own, as there are no assurances that additional funding would be awarded in subsequent years for associated or complementary projects.

U.S. Fish and Wildlife Service Coastal Program - Great Lakes Score sheet

Proposal #: _____ FY: _____ Reviewer: _____

Does the Project benefit coastal resource priorities in one or more of the Focus Areas? Yes or No. Which Focus area(s)? (Focus area points - 3) Score _____

Does the project proposal address one or more of the listed priorities? Yes or No. Which one(s)?

Habitat and Native Species: To what extent will the project restore or provide coastal shore habitats and natural processes that sustain long-term diverse and abundant populations of native resident and migratory fish and wildlife species, especially those that are Federally threatened and endangered, or at risk of becoming so? (Maximum points - 30) Score _____

Criteria Components

- a. Extent to which the project will benefit habitat for endangered and threatened species.
- b. Extent to the project will benefit fish spawning and rearing habitat.
- c. Extent to the project will benefit breeding habitat for migratory birds.
- d. Extent to which the project will benefit coastal fish and wildlife resources and associated habitats.
- e. Extent to which the project benefits federal trust species.
- f. Extent to which the project benefits biotic corridors.
- g. Other similar benefits.

Human Dimensions: How much will the project **provide for ecologically sound levels of public use, educational benefits, economic benefits, and the enjoyment of coastal natural resources?** (Maximum points - 20) Score _____

Criteria Components

- a. Extent to which the project will benefit public use through recreation.
- b. Extent to the project will combine economic benefits with resource benefits.
- c. Extent to which the project will enhance educational opportunities and awareness.
- d. Other similar benefits.

Performance Measures: To what extent will the project help achieve relevant Service performance goals. (Maximum points - 20) Score _____

Criteria Components

- a. The extent to which the project identifies current conditions (baseline) and provides measurable post-project accomplishments.
- b. The extent to which the project will produce measurable results for habitat and/or species.
- c. Duration for which the project provides a benefit.
- d. Other similar benefits.

Budget: Are all major budget items justified in relation to the Program objectives and clearly explained in the narrative description? (Maximum points - 10) Score _____

Criteria Components

- a. Extent to which all parts of the budget narrative are clear, concise, and complete.
- b. Extent to which the cost supports the benefit.
- c. Other similar benefits.

Contributions and Partnerships: To what extent does the applicant display commitment to the project through in-kind contributions or matching funds and to what extent does it involve other non-federal partners? (Maximum points - 20) Score _____

Criteria Components

- a. Extent to which the project clearly builds partnership alliances outside the U.S. Fish and Wildlife Service.
- b. Extent to which the project leverages technical support and/or financial resources provided through a partnership.
- c. Other similar benefits. 1 to 1 or greater = 5 points, at least 1/2 to 1 = 3 points, less than 1/2 to 1 = 1 point and no match = 0 points.

Total Score _____

“All acts of government...are of slight importance to conservation except as they affect the acts and thoughts of citizens.”

- Aldo Leopold

To learn more about our Program and how to find a local contact, go to our web sites:

Coastal Program – Great Lakes: <http://www.fws.gov/midwest/greatlakes/glcoastal.htm>

Coastal Program: <http://www.fws.gov/coastal/CoastalProgram>

Coastal Grants Program: <http://www.fws.gov/coastal/CoastalGrants>

U.S. Fish and Wildlife Service
Branch of Habitat Restoration
Division of Fish and Wildlife Management and Habitat Restoration
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