

**U.S. FISH AND WILDLIFE SERVICE**

**STRATEGIC PLAN**

**The Coastal Program**

*Stewardship of Fish and Wildlife  
Through Voluntary Conservation*

**Regional Step-Down Plan  
Region 2 (Texas)**

*Part 2 of 3*

FY 2006-2010



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## I. Introduction

The Nation's coastal areas are under acute pressure from population growth. 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 the end of this decade.

More than 50% of the Nation's wetlands have been destroyed; more than 70% of the Nation's riparian habitats have been 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. These are just a few examples of habitat types impacted by human activities, as we live, work, and build our economy. Consequences of habitat loss include decreases in wildlife populations; many other natural, social, and economic impacts; and, ultimately, a decreased quality of life.

In light of these serious issues, and the economic and ecological importance of coastal areas, the U.S. Fish and Wildlife Service (Service) created the Coastal Program (Program). The vision statement of the Coastal Program is “Stewardship of fish and wildlife through voluntary conservation.” The key points of the Program's vision, stewardship and voluntary conservation, are also integral components of the Service's vision, recently presented the Director Dale Hall:

*“We will continue to be a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals, and commitment to public service.”*

This vision will guide our actions as we work to address the Service's highest priorities, which are:

- \* **National Wildlife Refuge System:** Conserving our Lands and Resources
- \* **Landscape Conservation:** Working with Others
- \* **Migratory Birds:** Conservation and Management
- \* **Threatened and Endangered Species:** Achieving Recovery and Preventing Extinction
- \* **Aquatic Species:** National Fish Habitat Initiative and Trust Species
- \* **Connecting People with Nature:** Ensuring the Future of Conservation

The Coastal Program can positively address many of these Service priorities. At the heart of the Service's vision and priorities are the conservation and management of the Federal Trust Species: migratory birds; threatened and endangered species; inter-jurisdictional fish; certain marine mammals; and, species of international concern. In turn, this is the ultimate objective of the work done by the Coastal Program. While the Service works under an array of statutory authorities and resource management programs to meet its mandates, our Program can serve as a bridge to the owners and managers of Federal and non-Federal lands to develop landscape conservation partnerships that directly benefit fish and wildlife with a particular focus on Federal Trust Species. Our voluntary, cooperative conservation Program is based on the premise that fish and wildlife conservation is a responsibility shared by citizens and their government. Our approach is to engage willing partners, through non-regulatory incentives, to conserve and protect valuable fish and wildlife habitat on their property and in their communities. We do this by providing funding, technical support and planning tools needed to make on-the-ground conservation affordable, feasible, and effective.

Five major goals have been identified as core components of our vision:

**Conserving Habitat:** Restore and protect priority habitats to increase and maintain Federal Trust Species populations.

**Broaden and Strengthen Partnerships:** Accomplish our work through voluntary partnerships.

**Improve Information Sharing and Communication:** Collaborate and share information and concerns with our partners, stakeholders, future partners, decision-makers, and others to protect, restore, and enhance habitats for Federal Trust Species.

**Enhance Our Workforce:** The staff of our Program is our most important resource. Maintaining and supporting the staff are the keys to the success of the Program in achieving on the ground results for Federal Trust Species.

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

To help achieve these goals, our stakeholders have and will continue to provide valuable guidance. At the onset of the strategic planning process, stakeholders along the Texas coast were given an opportunity to reflect on the internal and external factors impacting the Programs' current performance and future accomplishments. That input provided valuable direction for the design and content of this document. Prevailing themes of 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.

This external guidance has been coupled with the experience, knowledge, and foresight of the dedicated staff of the Coastal Program to produce this Regional Step-Down Plan, which articulates our philosophy, goals, and desired operational outcomes. This Plan is a living document, which will be amended and refined to address conservation needs along the Texas Coast. As ecological and economic changes occur, our strategic habitat conservation plan will need to change to reflect the latest science and regional priorities. One of the major strengths of Region 2's Coastal Program and our partners is the ability to remain flexible when addressing the conservation needs for fish, wildlife, and their habitats.

## II. Regional Overview

The Coastal Program in Region 2 is dedicated to working with others to protect and restore nationally important coastal habitats in Texas to benefit fish, wildlife, and people. Texas' natural coastal habitats, including wetlands, prairies, and forests, provide many economic, recreational, educational, ecological, and aesthetic values. For example, areas along the Texas coast play an important role in providing high value habitat for fish and wildlife, preventing erosion, reducing turbidity and maintaining biological productivity, and enhancing water quality. Coastal areas also benefit Texans by supporting commercial and recreational fishing, hunting, eco-tourism and nature-based travel opportunities, as well as providing educational and research opportunities.

The Texas coast is comprised of rich and diverse habitat assemblages that hold biological and economic value. Often wetland and upland habitats are intricately woven along the coast. As a result of this unique geography, the Texas coast supports a diverse and important bounty of natural fish and wildlife resources. Descriptions of those habitats where we have and intend to continue to focus Program efforts are below.

### **Aquatic and Wetland Habitat Types**

A variety of wetlands exist in the coastal region of Texas. They include expansive salt marshes and seagrass meadows, tidal flats, freshwater marshes and swamp or bottomland forests. These wetland resources are often found in very close proximity on the landscape. The location and extent of these wetland types are strongly correlated with the average annual precipitation gradient observed along the Texas coast. The upper Texas coast is classified as humid, receiving approximately 55 inches of precipitation annually, while the lower Texas coast is considered subtropical and semiarid receiving only about 25 inches of annual rainfall (Briton and Morton, 1989).

The salt marsh community along the Texas coast changes from north to south corresponding to differences in precipitation and temperature. The upper Texas coast is characterized by wide lush coastal marshes that are dominated by species including smooth cordgrass (*Spartina alterniflora*), marshhay cordgrass (*Spartina patens*), saltgrass (*Distichlis spicata*), sturdy bulrush (*Schoenoplectus robustus*), and Gulf cordgrass (*Spartina spartinae*). The brackish marsh (a transitional zone between salt and freshwater marshes) is extensive along the upper Texas coast and may also include species such as chairmaker's bulrush (*Schoenoplectus americanus*), black needlerush (*Juncus roemerianus*), seashore paspalum (*Paspalum vaginatum*), California bulrush (*Schoenoplectus californicus*), and spikerush (*Eleocharis* sp). The salt marsh habitat narrows from north to south with the dominate species becoming more saline adapted in response to reduced rainfall amounts and decreased freshwater inflows to the estuaries. Common salt marsh plant species along the middle and lower Texas coast include: smooth cordgrass, black mangroves (*Avicennia germinans*), saltwort (*Batis maritima*), sea ox-eye daisy (*Borrchia frutescens*), keygrass (*Monanthochloa littoralis*), and Carolina wolfberry (*Lycium carolinianum*).

Five species of seagrass occur in Texas coastal waters: shoalgrass (*Halodule wrightii*), turtlegrass (*Thalassia testudinum*), eelgrass (*Syringodium filiforme*), stargrass (*Halophila engelmannii*), and widgeongrass (*Ruppia maritima*). The distribution of these seagrasses, to a large extent, parallels the precipitation gradients along the Texas Coast. Seagrasses are dominant along the lower coast where rainfall and inflows to bays are low and average salinities are above 20 ppt. In 1994, the total coast wide seagrass acreage was approximately 235,000 acres with the vast majority occurring in the Laguna Madre (79.1%). Redfish Bay located between the cities of Aransas Pass and Port Aransas contains the most extensive area of seagrass beds outside the Laguna Madre (approximately 14,000 acres) (Texas Parks and Wildlife Department, 1999). Because Redfish Bay is located near large population centers and has numerous local boat ramps, it is used heavily by recreational boaters making these seagrass beds particularly vulnerable to motor boat propeller scarring. Recently, Texas Parks and Wildlife Department (TPWD) began measures to protect seagrass within Redfish Bay. Seagrass meadows have a limited distribution on the upper Texas coast with only 1.7% occurring north of Pass Cavallo in Matagorda Bay. In the Galveston Bay system nearly all seagrass was lost by the late 1970's with the exception of approximately 275 acres in Christmas Bay. Recent efforts at restoration have been successful and areas near Galveston Island State Park are being re-colonized.

Tidal flats are common features of the Texas coast. Though sometimes containing algal mats, the flats are usually void of any vegetation due to high salt concentrations from repeated saltwater flooding and evaporation. Along the lower Texas coast in the Laguna Madre area, tidal flats are referred to as wind-tidal flats. These are tidal flats that wind and storm tides, rather than astronomical tides, are primarily responsible for the flooding and exposure regime. Due to the

lack of freshwater inflow and precipitation in the Laguna Madre wind-tidal flats occupy areas that would be saltmarsh habitat on the upper Texas coast. Worldwide, extensive wind-tidal flats occur only adjacent to hypersaline lagoons making this habitat type unique to the lower Texas coast (Tunnell and Judd, 2002). Some high salinity tolerant plant species that can be found in these areas include glassworts (*Salicornia virginica* and *S. bigelovii*), keygrass, and saltwort. These irregularly flooded flats provide important foraging areas numerous species of shorebirds and wading birds.

Many bird species rely on fresh-marsh communities along the Texas coast. Freshwater marsh communities typically include inland waters and ponds, freshwater swales on barrier islands, and a wide range of hydrologic regimes in and around riverine systems. Most common plant species found within this local community include: spikerushes, flatsedges (*Cyperus* sp.), smartweeds (*Polygonum* sp.), rattle-bush (*Sesebania drummondi*), freshwater paspalums (*Paspalum* sp.), and southern wildrice (*Zizaniopsis miliacea*). These fresh-marsh communities are much more extensive on the upper and middle Texas coast. On the lower Texas coast the fresh-marsh communities become more ephemeral, isolated and occur in visible depression on the landscape. Although these freshwater wetlands are less abundant on the south Texas coast, they are critically important to wintering waterfowl.

Forested wetland communities, including swamps and less frequently inundated bottomland forest, primarily occur along the upper Texas coast. Bald cypress (*Taxodium distichum*) dominates the upper coast swamps. There are several plant species which are commonly found in bottomland hardwood forests and include: planertree (*Planera aquatica*), willow oak (*Quercus phellos*), water oak (*Quercus nigra*), green ash (*Fraxinus pennsylvanica*), black willow (*Salix nigra*), elms (*Ulmus* sp.), sugar-berry (*Celtis laevagata*), dwarf palmetto (*Sabal minor*), and buttonbush (*Cephalathus occidentalis*). These bottomland forests harbor huge live oaks and other trees, underneath which grows a rich understory of shrubs, vines, and herbaceous plants, and provide temporary or permanent residence for over 237 species of birds, including neotropical migratory songbirds. This group, or guild, of songbirds is declining in number, due in large part to habitat loss. One important songbird habitat type that is being lost very quickly is coastal stopover habitat. The Columbia Bottomlands is the largest and best stopover site along the Texas Gulf Coast. Tens of thousands of Neotropical migrants stop, winter, or breed in the Bottomlands because there is an abundance of food, shelter, and water. The protection of critical bottomland habitats has become a conservation priority throughout the southeastern United States.

### **Upland Habitat Types**

The upland habitats that dominate the Texas coast include the gulf coast prairies, riparian forests (often considered wetlands and described above), live oak – redbay woodlands, islands used as rookeries by colonial nesting birds and the brushlands of South Texas.

The coastal prairie complex encompasses non-saline tallgrass prairie vegetation ranging along the coast of Texas. The prairie ecosystem used to dominate the Texas Coastal plains. According to some estimates, 99% of coastal prairie has been lost through conversion to other uses and environmental degradation due to the interruption of important ecological processes, such as fire, needed to maintain the prairie ecosystem (McFarlane, 1995). In the absence of regular fire, this ecosystem can be invaded by woody shrubs and trees. The Gulf Coast prairies are often characterized by a complex of upland and wetland plant communities. Upland dominant plants include little bluestem (*Schizachyrium scoparium*), brownseed paspalum (*Paspalum plicatulum*),

Indiangrass (*Sorghastrum nutans*), silver bluestem (*Bothriochloa saccharoides*), and big bluestem (*Andropogon gerardii*). Wetlands found in the coastal prairie include many small to moderately large ponds and swales. These wetlands may contain surface water during much of the year, completely drying out only in the driest summer months. Undisturbed prairie wetlands may be dominated by eastern gamagrass (*Tripsacum dactyloides*) and switchgrass (*Panicum virgatum*), while disturbed areas may be dominated by bushy bluestem (*Andropogon glomeratus*). Sometimes these wetlands may be dominated by square-stem spikerush (*Eleocharis quadrangulata*) and may also include arrowheads, flatsedges, seedboxes (*Ludwigia* sp.), hairy umbrella-sedge (*Fuirena squarrosa*), yelloweyed grass (*Xyris jupicai*), cutgrass (*Leersia hexandra*), erect coinleaf (*Centella erecta*), and beakrushes (*Rhynchospora* spp). Deeper, open areas in the ponds may contain floating and submerged aquatic vegetation, including sago pondweed (*Stuckenia pectinata*), coon's tail (*Ceratophyllum demersum*), watershield (*Brasenia schreberi*), big floatingheart (*Nymphoides aquatica*), yellow pond-lily (*Nuphar lutea*), and American lotus (*Nelumbo lutea*).

Live Oak – Redbay Woodland (*Quercus virginiana* – *Persea bordonica*) is the mostly evergreen vegetation type of the well-drained sands of the Ingleside Barrier. This community is globally rare and restricted to the Coastal Bend of Texas. This community has been severely impacted by coastal development. The only protected examples of the community type occur on the Aransas National Wildlife Refuge (NatureServe, 2006). Common species of vegetation in this association include small plateau oak (*Quercus fusiformis*), laurel oak (*Quercus laurifolia*), sugar-berry, blackjack oak (*Quercus marilandica*), yaupon (*Ilex vomitoria*), and American beautyberry (*Callicarpa Americana*). This community provides important stop-over habitat for migrating neotropical bird species.

Coastal Texas offers one of the premier nesting grounds for colonial waterbirds in our country. Pelicans (*Pelecanus* sp.), roseate spoonbills (*Platalea ajaja*), black skimmers (*Rynchops niger*), egrets (*Casmerodius* sp., *Egretta* sp.), herons (*Ardea* sp., *Egretta* sp.), terns (*Sterna* sp.) and ibises (*Eudocimus* sp., *Plegadis* sp.) nest on rookery islands. Both the islands and the birds are vulnerable to a variety of threats. Many islands are now posted to reduce boat landings during nesting season which runs from February through August. Predators can destroy an entire nesting population and cause entire colonies to abandon the site. Feral cats, feral hogs, domestic dogs, raccoons, and even red imported fire ants can have devastating tolls on nesting populations. Since 1973, the Texas Colonial Waterbird Society, a loose affiliation of the U.S. Fish and Wildlife Service, Texas Parks and Wildlife Department, academic institutions, and the Texas Audubon Society, have annually taken censuses of nesting islands for colonial waterbirds. Today, the Service's Texas Coastal Program is working with others to recommend, plan, fund and implement colonial waterbird habitat restoration and protection activities. With a comprehensive and current colonial waterbird nesting island inventory available, and with experience gained on successful nesting island conservation projects, the Coastal Program plans to continue working in partnerships with others to support future nesting island restoration and protection initiatives coast-wide.

The South Texas Brushlands, often interchanged with the term Tamaulipan thornscrub, encompass about 20.5 million acres in an area extending from Del Rio to San Antonio and southeast to Rockport. This area is dominated by chaparral, or brushland habitat, and fairly recent agricultural fields. Although this typical brush community characterized by mesquite (*Prosopis glandulosa*), blackbrush acacia (*Acacia rigidula*), brasil (*Condalia hookeri*), and other

thorny plants dominates much of south Texas, five additional ecoregions influence the diversity of vegetation communities along the fringes of the area. Natural features such as soils, rainfall rates, temperatures, growing seasons, and grazing pressure have shaped many of the plant communities in south Texas. Wildlife value of this region is principally derived from the diversity of plant species and vegetation communities. The region also includes fairly extensive grasslands, oak forests, and some tall riparian forests. Habitat types of particular concern are Tamaulipan communities such as the Texas ebony-anacua series and Texas ebony-snake-eyes series found in Cameron, Willacy, and Hidalgo counties (Jahrsdoerfer and Leslie, 1988). Loss of native habitat and reduction in quality of the remaining plant communities is the primary reason for declining populations of most game, nongame, and both State and federally listed threatened and endangered species in this area. Agriculture and urban sprawl now occupies large areas of what was some of the most productive habitats in the region. The use of heavy machinery to reduce or remove brush for livestock grazing and subsequent seeding of the range with introduced grasses has greatly modified the plant species composition of native habitats and reduced the quality of the land for wildlife.

### **Issues and Risks**

All of the habitat types described above are important to numerous Federal Trust Species including listed threatened and endangered species, migratory birds, interjurisdictional fishery species, as well as species listed by the Texas Parks and Wildlife Department (TPWD). Table 1 below provides a list of Federal and State listed species and interjurisdictional fish found on the Texas Gulf coast. The table also represents a partial list of migratory birds which represent focal species for the Service's Migratory Bird Office and other stakeholders of the Texas coast.

In Texas, coastal prairie once covered nearly 4 million acres. It is estimated that less than 1% of this grassland remains in a relatively pristine condition (McFarlane, 1995). This vast area of coastal prairie was interspersed with numerous palustrine marshes. These prairies and wetlands were, and still are, vitally important to numerous grassland birds as well as wintering waterfowl and resident mottled ducks.

Coastal marshes are some of the most productive ecological systems that exist. These marshes perform important ecosystem functions such as maintaining water quality and mitigating storm surges from the Gulf of Mexico. They also provide food and shelter for numerous commercially and recreationally important fishery species such as blue crab (*Callinectes sapidus*) and red drum (*Sciaenops ocellatus*), and wildlife species such as shorebirds, migratory waterfowl and colonial waterbirds. In Texas, 4.1million acres of wetlands existed in the mid 1950's. By 1992, an average annual net loss of 5,700 acres of wetlands had occurred. Most losses are attributed to subsidence, channelization, agriculture, and urban/rural development (Moulton *et al.*, 1997)

In south Texas, native brushlands dominated by Tamaulipan thornscrub species provide important habitat for endangered cats (ocelots *Leopardus pardalis* and jaguarondi *Herpailurus yaguarondi*), plants and numerous migratory bird species. It is estimated that as much as 95% of the brushlands have been lost in the lower Rio Grande Valley (Tremblay *et al.*, 2005). These losses are attributed to agriculture and urbanization. Similarly, on the mid and upper Texas coast, coastal forests have been cleared or fragmented, and the Chenier woodlands of the upper Texas coast are essentially gone (Gosselink *et al.*, 1979).

## **Regional Priorities**

The Southwest Region Management Team identified 21 Regional Priorities for all programs for the next 5 years. Of those priority topics and issues, the following are those directly related to the Coastal Program:

- Focal area funding
- Joint Ventures
- **Attwater's prairie chicken**
- **Mottled ducks**
- Children in Nature
- Strategic Habitat Conservation/Implementation

The priority species (in bold above) included in focus areas along the Texas coast are Attwater's prairie chicken and mottled duck. The Coastal program has engaged projects that have addressed these priorities in the past and will continue. The remaining priorities are issues that our Coastal Program has been addressing for many years.

As later described the focus area discussions, Joint Ventures are programs with which we communicate and collaborate with regularly.

Since the Coastal Program was established in Texas in 1992, providing educational opportunities and nature experiences for both children and adults has been a priority of the Program. The Program has provided both technical and financial assistance to organizations to introduce children and adults to nature through volunteer driven habitat restoration projects, teacher and student education workshops and field labs.

### **Strategic Habitat Conservation**

One of the Regional Director's Priorities includes Strategic Habitat Conservation and Implementation. This approach has been the concept that has guided the Coastal Program's habitat projects for most of the 15 years it has been in existence in Texas. The Program's initial tenants was ecosystem restoration which like Strategic Habitat Conservation involves using good science to plan and implement "on the ground" conservation for the maximum conservation of Federal Trust Resources. Region 2 has identified three broad geographic focal areas where the Regional Director wants our efforts directed. They are broad geographical areas and include federal, state, local and private lands. They are:

- Lower Colorado River Watershed in Arizona
- Plains, Prairies and Playa Lakes System
- Gulf Coastal Plain, Bay and Estuary System.

The geographic focus areas identified in this plan are a subset of the larger Gulf Coastal Plain, Bay and Estuary System focus area identified by the Southwest Region. The goal of the Coastal Program in this Region is to address the issues identified by our Regional Management Team, our stakeholders and other partners through Cooperative Conservation.

### **Cooperative Conservation**

The Region 2 Coastal Program works closely with other Service programs to help implement national plans such as the North American Waterfowl Management Plan, Partners in Flight

Landbird Conservation Plan, U.S. Shorebird Conservation Plan, North American Waterbird Conservation Plan, Coral Reef Action Plan, National Fisheries Strategic Plan, National Wildlife Refuge System Strategic Plan, Refuge Comprehensive Conservation Plans, and Endangered Species Habitat Conservation and Recovery plans. Because of these and related experiences, our Program will become increasingly active in integrated landscape level Federal Trust Species conservation planning, such as the National Fish Habitat Initiative, that will provide for Service-wide integrated management strategies for fish and wildlife conservation. Likewise, in this era of cooperative conservation, we will continue to provide biological and technical expertise to other Federal agencies to complement their habitat initiatives, as well as to Texas Parks and Wildlife Department to implement their State Comprehensive Wildlife Conservation Plan priorities.

The landscape of the Texas Gulf Coast has changed drastically through the years, and it is forecasted that additional wetlands, prairie, and riparian habitats will be converted or lost to agriculture, development and urbanization. The Coastal Program will continue to assist State agencies and nonprofit organizations seeking to obtain Federal dollars through the National Coastal Wetlands Grants Program, the Coastal Wetlands Planning, Protection, and Restoration Act as well as funds through the North American Wetlands Conservation Act. It is through fee-acquisition and long-term conservation easements that habitat can be preserved in perpetuity for Federal trust resources and saved for future generations and citizens of Texas.

The success of the Program relies on building trust and credibility with our partners. We achieve this by providing accurate information and being available to assist our partners in a timely manner, by leveraging resources, and by helping implement cost-shared projects. Our staff is experienced at helping people come together to forge and implement collaborative solutions that meet local and regional needs for fish and wildlife stewardship.

The Program and our partners operate in a constantly changing natural, economic, social and political environment. In the face of these challenges, we seek to strategically allocate our resources, while remaining flexible to quickly adapt and respond to change. Using the input from our partners and stakeholders, this plan describes performance measures developed to support our five strategic goals.

These five goals are designed to lead to the ultimate outcome of the Program: ***increasing and/or maintaining Federal Trust Species populations***. Progress towards this outcome will be measured primarily by the on-the-ground accomplishments benefiting target species populations. The Service will enlist the help of partner organizations and agencies to further our knowledge and understanding of the species response to the strategic habitat conservation actions described in this plan.

**Table 1. Federal Trust Species found on the Texas Coast.**

<b>U.S. Fish &amp; Wildlife Listed Species</b>	
<i>Endangered</i>	<i>Threatened</i>
northern aplomado falcon	piping plover
Attwater's prairie chicken*	green sea turtle
	loggerhead sea turtle
whooping crane	prairie dawn
brown pelican	
Gulf Coast jaguarundi	
ocelot	
Texas ayenia	
slender rushpea	
black-lace cactus	
South Texas ragweed	
Kemp's Ridley sea turtle	
<b>Interjurisdictional Fishery Species</b>	
red drum	eastern oyster
black drum	southern flounder
blue crab	Spanish mackerel
Gulf menhaden	striped bass
pink shrimp	brown shrimp
white shrimp	American eel

<b>Texas Parks &amp; Wildlife State Listed Species</b>	
white-tailed hawk	indigo snake
Texas tortoise	black-spotted newt
Texas horned lizard	scarlet snake

<b>Migratory Bird Species</b>	
<i>Waterfowl</i>	
American wigeon	mallard
Blue-winged teal	mottled duck*
Canada goose	lesser snow goose
canvasback	northern pintail
gadwall	northern shoveler
greater scaup	redhead
greater white-fronted goose	ring-necked duck
Green-winged teal	lesser scaup
<i>Shorebirds</i>	
American oystercatcher	clapper rail
Hudsonian godwit	king rail
long-billed curlew	American golden-plover
snowy plover	Wilson's plover
stilt sandpiper	marbled godwit
western sandpiper	buff-breasted sandpiper
yellow rail	Wilson's phalarope
black rail	
<i>Colonial Waterbirds</i>	
reddish egret	Caspian tern
gull-billed tern	black skimmer
little blue heron	least tern
<i>Grassland Birds</i>	
Le Conte's sparrow	peregrine falcon
Baird's sparrow	sandhill crane
loggerhead shrike	upland sandpiper
Henslow's sparrow	mourning dove
seaside sparrow	burrowing owl
Swainson's warbler	sedge wren
swallow-tailed kite	Sprague's pipit
ferruginous hawk	grasshopper sparrow
eastern meadowlark	northern bobwhite quail
<i>Woodland Birds</i>	
golden-winged warbler	painted bunting
blackpoll warbler	redstart
cerulean warbler	grosbeak
prothonotary warbler	

\* A priority species identified by the Southwest Region Management Team for all programs over the next 5 years.

### **III. GOAL 1: CONSERVING HABITAT**

#### **Regional Objectives**

The Region 2 Coastal Program's objectives are to maintain or increase the abundance of Federal Trust species through habitat restoration or enhancement activities. To meet our objectives the Coastal Program has developed geographic focus areas based on the needs of Federal Trust Species. Each of the geographic focus areas described below includes a more detailed description of specific types of habitat work which benefit a specific subset of our Federal Trust Species. We will pursue our objectives through collaborative habitat restoration or protection partnerships. Our primary tools are cost-sharing, expert technical assistance, and implementation of on-the-ground projects.

Performance will be measured by the amount of habitat provided for trust species through restoration or protection projects as well as through efforts to ascertain the status of the species for which these projects are designed to benefit. Over the course of the five-year period covered by this plan, we hope to work with internal and external partners to improve efforts to monitor the status and trends these Federal Trust Species. Understanding this information will help guide the strategy and objectives of this goal.

#### **Key Strategic Activities**

To address this goal (Goal 1: Conserving Habitat), the following key strategic activities will be implemented.

- Developing Geographic Focus Areas.
- Setting habitat acreage goals for each Geographic Focus Area.
- Involving stakeholders in the development of the Geographic Focus Areas and associated habitat acreage goals.
- Annually developing cooperative habitat conservation projects which result in on-the-ground acres restored, protected, or enhanced.

#### **Performance Measures**

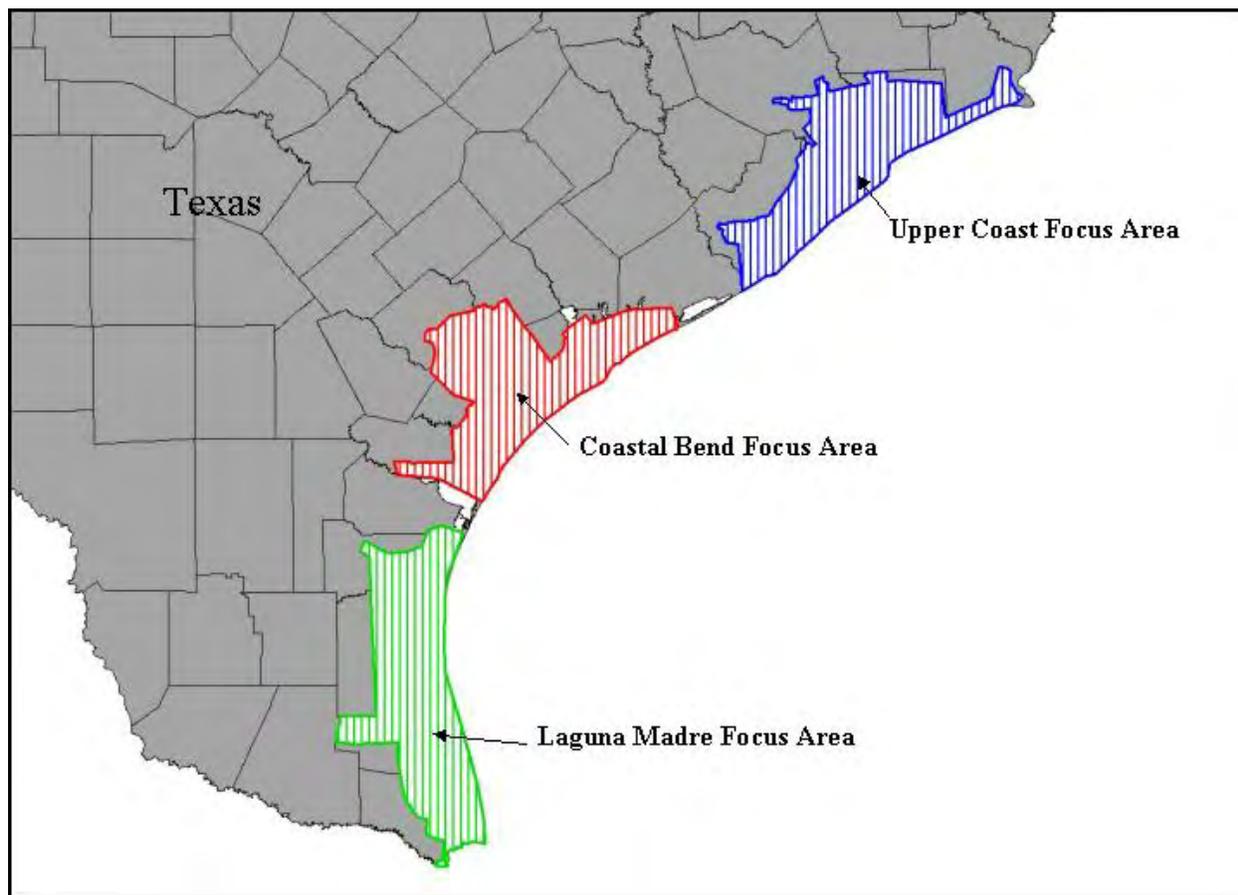
The goal of conserving habitat will be measured by the following:

- The acreage of upland habitats conserved.
- The acreage of wetland habitats conserved.

#### **GEOGRAPHIC FOCUS AREAS**

While our staff and resources are effective and considerable, we cannot conduct habitat improvement activities on every acre of landscape or near-shore habitat. Therefore, with assistance from our partners and by using existing habitat and species conservation plans the Coastal Program will focus on three geographic areas (Figure 1). These three focus areas were selected from our larger area of responsibility because of the extensive conservation planning that exists within each location. In addition, these areas represent locations where Service funds can be leveraged to the greatest extent possible to benefit Federal Trust Species. Each of the geographic focus areas is presented individually. The focus areas may be refined over time and

adjusted to reflect changing conservation objectives and updated Federal, State, and local conservation plans.



**Figure 1. Location of Coastal Program Focus Areas on the Texas Coast.**

### **UPPER TEXAS COAST FOCUS AREA**

#### ***Description***

This focus area is located in the following U.S. Geological Survey hydrologic unit codes (HUC's): Buffalo-San Jacinto (12040104), East Galveston Bay (12040202), East Matagorda Bay (12090402), North Galveston Bay (12040203), Lower Trinity (12030203), West Galveston Bay (12040204), San Bernard (12090401), Lower Brazos (12070104), and Austin-Oyster (12040205).

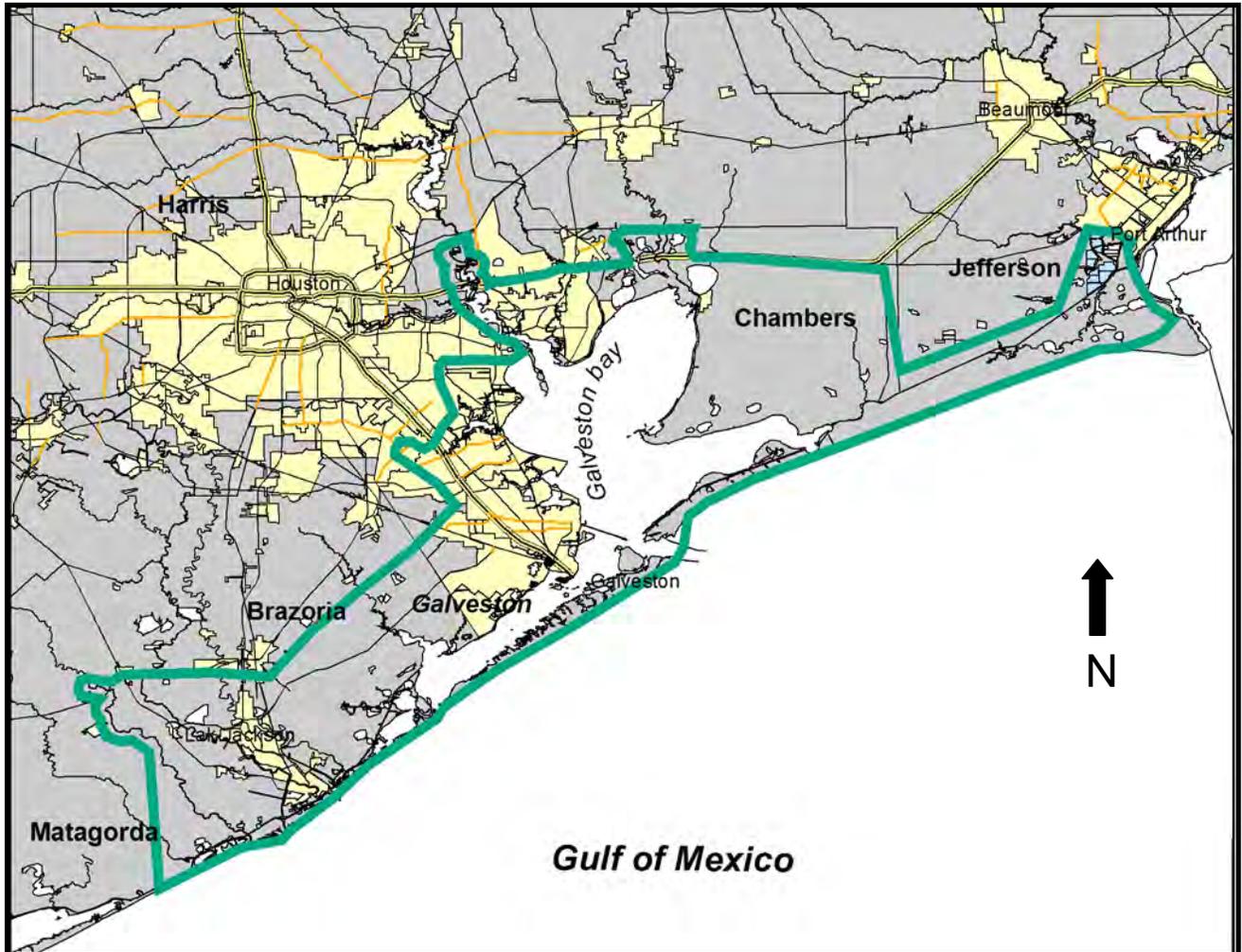
The Upper Texas Coast Focus Area is approximately 1.5 million acres in size, and extends from East Matagorda Bay to Sabine (Figure 2). This area includes portions of Matagorda, Brazoria, Harris, Galveston, Chambers, Liberty and Jefferson counties. This area includes the lower watersheds of the Trinity, San Jacinto, Brazos and San Bernard Rivers. Major estuaries of this focus area include the Galveston Bay complex (including East, West and Trinity Bays), Christmas Bay, Chocolate Bay, Drum Bay, Cedar Lakes and Oyster Bayou estuaries.

The upper coast of Texas has experienced extensive loss of coastal habitats, primarily due to subsidence, erosion, sea level rise, agriculture and residential and commercial development. For example, since the 1950's the Galveston Bay watershed has lost more than 33,000 acres of wetlands, more than 50% of its tallgrass prairie, and nearly 70% of its seagrass meadows (Galveston Bay National Estuary Program, 1993).

The Upper Texas Coast Focus Area also encompasses the Coastal Prairie Ecoregion, which has been identified in Texas Parks and Wildlife Department's State Comprehensive Wildlife Conservation Plan as an area of conservation need. The original savannahs in the northern part of the region were characterized by native grasses such as little bluestem, silver bluestem, and brownseed paspalum with scattered trees. Post oaks dominated, but other species included blackjack oak, water oak, elms, sugar-berry, and yaupon. Although much of the prairie has been converted to improved pasture for cattle grazing, significant acreage has been altered for growing rice, sugarcane, forage, and grain crops. Much of the Coastal Prairie that remains in Texas is because it was used for cattle production and never plowed or leveled for agriculture practices. Continued threats to what remains of the Coastal Prairie include conversion to other kinds of agriculture and development. Federal and State agencies have identified habitat change in the Coastal Prairie Ecoregion as a factor in the serious population decline of forty-nine (49) species of birds over the past three decades (Shackelford and Lockwood, 2000).

The Columbia Bottomlands is a network of wetlands, prairies, and bottomland hardwood forests running inland along the floodplains of three major rivers: the Brazos, San Bernard and Colorado. More than 75% of the initial acreage has been lost, and only 177,000 acres remain. The Columbia Bottomlands are a critical link to neotropical migrant landbirds which use the habitats found there. It is estimated that 239 million birds move through this important habitat annually (The Nature Conservancy, 2004).

This area along the upper coast of Texas was selected as a focus area for our Program because of the needs and positive benefits restoration, enhancement and protection activities may have for the species that depend on it. These activities will benefit Federal Trust Species such as the Attwater's prairie chicken (*Tympanuchus cupido attwateri*) and the brown pelican (*Pelecanus occidentalis*), and other focal groups such as commercial and recreational marine fisheries (drums, flounder, shrimp, crabs) and shellfish (oyster). Wintering and stopover habitats for migratory shorebirds, waterfowl and neotropical migrants will also benefit.



**Figure 2. The Upper Texas Coast Focus Area.**

**Project initiatives and species benefited**

There are several habitat types located within the Upper Texas Coast Focus Area, which include: freshwater marsh, brackish marsh, salt marsh, tidal flats, coastal prairie, seagrass beds, colonial waterbird rookery islands, and forested wetland communities.

Efforts to restore and protect coastal wetland habitats on the upper Texas coast have focused on shoreline protection and restoring elevations to support marsh vegetation. The average erosion rate since 1930 along the shorelines of West Galveston Bay, as an example, is -2.9 ft/yr. Projects aimed at protecting shorelines from further erosion have focused on various types of breakwater structures to trip or halt wave action.

A secondary effect of breakwaters is the decreased turbidity behind the structures has led to the recovery of seagrass beds scattered throughout West Galveston Bay. Prior to recent seagrass bed restoration in West Bay, submerged aquatic beds occurred primarily in Christmas Bay and upper Trinity Bay, part of the Galveston Bay system. Restoration and erosion protection projects in West Bay are being developed with seagrass recovery as a primary goal.

Numerous projects in the Upper Texas Coast Focus Area incorporate marsh restoration with needed shoreline protection. In areas dramatically impacted by land subsidence, groundwater can no longer be extracted, so in the most threatened areas the land is no longer sinking at a rapid pace. Projects are developed to excavate and utilize material to restore the bay bottom to an elevation similar to nearby reference marshes. These areas are then planted with native marsh vegetation.

Marsh restoration and protection projects directly benefit commercial and recreational fishery species (red drum, menhaden, shrimp, crabs, etc.), nearly all of which spend some portion of their life cycle in the estuarine saltmarshes. These projects also benefit resident mottled ducks (*Anas fulvigula*), migratory waterfowl, marsh birds and shorebirds by providing foraging and resting habitat.

Projects to positively impact coastal prairie habitats and their associated wildlife species typically include technical assistance for land acquisition and funds for land management (i.e., prescribed burns, invasive species removal). Several projects have been completed in the Upper Texas Coast Focus Area to restore and maintain habitat to benefit the endangered Attwater's prairie chicken and/or other grassland birds.

**Existing conservation plans for the Upper Coast Focus Area:**

- The Galveston Bay Plan - The Galveston Bay National Estuary Program, which is a program of the Texas Commission on Environmental Quality, successfully partnered with citizens, industry, business, development, academia, and government to develop the Galveston Bay Plan. The Plan is a comprehensive conservation and management plan for the Galveston Bay ecosystem. (Galveston Bay National Estuary Program, 1994)
- Gulf Coast Joint Venture Mid-Coast and Chenier Plain Initiative Plans - Ducks Unlimited, Texas Parks and Wildlife Department, U.S. Fish & Wildlife Service, and Natural Resources Conservation Service have partnered to create the Texas Prairie Wetlands Project. This program was designed to help deliver the habitat objectives of the Gulf Coast Joint Venture, a regional partnership composed of individuals, conservation organizations, and State and Federal agencies that are concerned with conserving migratory birds and their habitats along the western U.S. Gulf of Mexico. The primary goal of the Gulf Coast Joint Venture is to provide for waterfowl in winter and ensure they survive and return to the breeding grounds in good condition. (Esslinger and Wilson, 2001, Wilson and Esslinger, 2002)
- The Nature Conservancy Gulf Coast Prairies & Marshes Ecoregional Plan - This plan identifies sites of particular conservation need that, if protected, would adequately represent the natural species diversity within the Gulf Coast Prairies and Marshes ecoregion. Within the Upper Texas Coast Focus Area this plan identifies 4 specific areas for conservation: Texas City Prairie Preserve, in Texas City, West Galveston Bay-south of Galveston and Texas City, Mad Island Marsh-Oyster Lake Conservation Area and the Columbia Bottomlands Conservation Area. (The Nature Conservancy, 2002)
- The West Galveston Bay Conservation Area Plan - The Nature Conservancy has identified the West Galveston Bay Conservation Area as one which supports a diverse array of aquatic and terrestrial species. The Nature Conservancy of Texas will work to ensure that the conservation area remains an ecologically functional landscape, with intact tallgrass prairies, coastal marshes and open water estuaries. The Conservancy will

collaborate with local communities to encourage water conservation, habitat preservation, and pollution controls that help sustain the native and migratory species of West Galveston Bay. The West Galveston Bay Conservation Area supports a diverse array of aquatic and terrestrial species, as well as important natural communities. This project offers the opportunity to protect approximately 20 miles of relatively continuous coastal habitat, including: coastal tallgrass prairie, submerged aquatic vegetation, saltwater, brackish, and freshwater wetlands. (The Nature Conservancy, 2001)

- Galveston Bay Land Conservation Initiative - The Trust for Public Land designed this program to assist local governments with public involvement. The initiative is funded by the Galveston Bay Estuary Program—a program authorized under Clean Water Act amendments. Galveston Bay Estuary Program has made use of extensive stakeholder involvement to study the bay and now is implementing a comprehensive bay conservation and management plan. (Trust for Public Land, 2002)
- U.S. Shorebird Conservation Plan Lower Mississippi/Western Gulf Coast Shorebird Planning Region (2002) - The Gulf Coastal Prairie Planning Region is identical to the North American Bird Conservation Initiative Gulf Coastal Prairie Bird Conservation Region (BCR 37), located along the coasts of Texas and Louisiana. Because of the geographic location of the Gulf Coastal Prairies region, and the diversity of habitats provided by rice fields, beaches, coastal marshes and lagoons, large numbers of shorebirds migrate, winter, and breed on the Gulf Coast, making this is one of the most important regions in the United States for this group of birds. There are two Western Hemisphere Shorebird Reserve Network sites of International Significance on the upper Texas coast (Brazoria National Wildlife Refuge complex and Bolivar Flats), as well as, seven National Wildlife Refuges and several State wildlife management areas that preserve thousands of acres of important shorebird habitat.
- Habitat Conservation Blueprint – The Galveston Bay Foundation, and their partners, created this document that identifies 167 specific sites throughout the Galveston Bay System, within the boundaries of the Texas Coastal Management Zone, and identifies restoration and/or conservation strategies for each site. (Galveston Bay Foundation, 1998)
- Texas Comprehensive Wildlife Conservation Strategy 2005-2010 (2005) - This Strategy identifies the Gulf Coast Prairies and Marshes as a Tier I – High Priority area for conservation. All of the Upper Texas Coast Focus Area is within the Gulf Coast Prairies and Marshes ecoregion. The strategy also lists the Galveston Bay system as a high priority coastal area for conservation.
- Strategic Conservation Plan for the Columbia Bottomlands – These bottomland forests harbor huge live oaks and other trees, underneath which grows a rich understory of shrubs, vines, and herbaceous plants and provides residence for over 237 species of birds, including neotropical migratory songbirds. This group, or guild, of songbirds is declining in numbers, due in large part to habitat loss. The U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, Trust for Public Land, Texas Parks and Wildlife Department, Gulf Coast Bird Observatory and others have a successful conservation history in the Columbia Bottomlands, focusing on land acquisition from willing sellers, habitat restoration and management, and research. (The Nature Conservancy, 2004)

See Appendix A for citations of listed conservation plans.

### **Conservation targets FY 2007 through FY 2011**

Our habitat conservation goals for the Upper Texas Coast Focus Area are based on the needs identified by the conservation plans listed above. The habitat conservation targets 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 restored/enhanced: 2,880 acres

Uplands restored/enhanced: 1,620 acres

Uplands protected: 300 acres

### **Partnership Opportunities**

It is anticipated that our partners will include other Federal Agencies (such as NOAA Fisheries and U.S. Department of Agriculture's Natural Resources Conservation Service), State agencies (such as Texas Parks and Wildlife Department, Texas General Land Office, and the Galveston Bay Estuary Program), non-profit organizations (such as the Galveston Bay Foundation, The Nature Conservancy), local municipalities, property owners associations, and private landowners. See Appendix B for a list of recent partnerships.

### **COASTAL BEND FOCUS AREA**

#### **Description**

This focus area is located in the following U.S. Geological Survey hydrologic unit codes (HUC's): Lower Colorado River (12090301), Lower San Antonio River (12100303), Central Matagorda Bay (12100401), Lower Guadalupe River (12100204), Lower Nueces (12110111), Mission (12100406), Eastern San Antonio Bay (12100403), Aransas Bay (12100405), Western San Antonio Bay (12100404), North Corpus Christi Bay (12110201), and South Corpus Christi Bay (12110202).

The Coastal Bend Focus Area is approximately 1.8 million acres in size, beginning in Nueces County and extending north to the Colorado River in Matagorda County (Figure 3). It includes portions of Aransas, Calhoun, Refugio, San Patricio, Goliad, Matagorda and Victoria counties. This area includes the lower watersheds of the Colorado, San Antonio, Guadalupe, and Nueces Rivers. Major estuaries in this focus area include portions of the Matagorda, San Antonio, Aransas, Corpus Christi and Nueces Bay systems. This focus area is within the Gulf Coast Prairies and Marshes Ecoregion and in Bird Conservation Region 37.

This focus area was selected because of the positive benefit habitat restoration and enhancement projects can have for Federal trust resources such as whooping cranes (*Grus Americana*), Attwater's prairie chicken, aplomado falcons (*Falco femoralis septentrionalis*), and black lace cactus as well as migratory birds and interjurisdictional fish. This focus area is extremely important to whooping cranes with more than 90% of the world's population wintering here (USFWS, 1994). Past attempts to reintroduce aplomado falcons to this area have been successful and in 2005 it was reported that 12 pair were breeding on Matagorda Island.

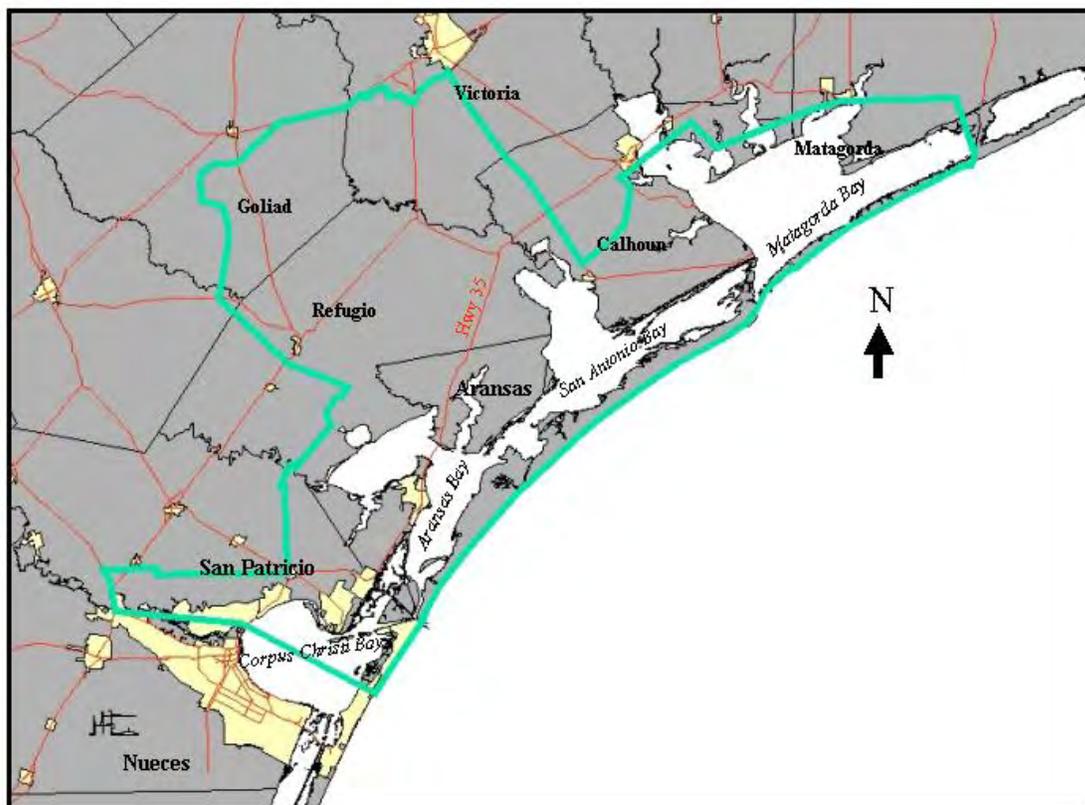
This focus area encompasses some of the largest intact tracts of coastal prairie found on the Texas coast. These grasslands are important to birds such as eastern meadow larks, northern bobwhite quail, and loggerhead shrikes. Three large rivers flow through the focus area, (the

Guadalupe, San Antonio, and Nueces Rivers). These rivers have significant riparian buffers providing habitat for numerous wildlife species.

The area also includes wooded coastal habitat associated the Ingleside Barrier formation. This Live Oak – Redbay Woodland (*Quercus virginiana* – *Persea bordonia*) is the mostly evergreen vegetation type of the well-drained sands of the Ingleside Barrier. This community is globally rare and restricted to the Coastal Bend of Texas. This community has been severely impacted by coastal development. The only protected example of the community type occurs on the Aransas National Wildlife Refuge (NatureServe, 2006). This community provides import stop-over habitat for migrating neotropical bird species.

This focus area also includes Matagorda and St. Jose islands. These coastal barrier islands are for the most part un-impacted by coastal development. However, the southern end of Matagorda Island (part of Matagorda Island National Wildlife Refuge) was impacted with levee construction designed to drain coastal marshes for past cattle grazing operations.

This focus area includes Redfish Bay. Redfish Bay is located between the cities of Aransas Pass and Port Aransas and contains the most extensive area of seagrass beds outside the Laguna Madre (approximately 14,000 acres) (Texas Parks and Wildlife Department, 1999). All five seagrass species in Texas can be found in Redfish Bay. These seagrass beds support waterfowl populations as well as provide habitat for numerous fisheries species.



**Figure 3. The Coastal Bend Focus Area.**

## **Project initiatives and species benefited**

Habitat types within the Coastal Bend Focus Area include coastal prairies, freshwater marshes, salt marsh, seagrass beds, tidal flats, and colonial waterbird rookery islands.

This focus area was specifically chosen because of its importance to grassland birds, waterfowl, and whooping cranes. Most of the habitat improvement projects within the Coastal Bend Focus Area will be prairie restoration, saltmarsh restoration, and palustrine emergent marsh development. It is anticipated that these projects will have a net benefit to the trust resource for which they are designed. Specific projects designed to improve habitat for grassland birds will include brush control, fencing, and prescribed fire. Currently, this focus area includes about 90,000 acres of Texas' remaining coastal prairie. The loss of this habitat type is due to urbanization, farming practices, overgrazing and fire suppression.

Wetland development projects will be designed and constructed to provide habitat for marshbirds and waterfowl. Much of the area important to whooping cranes is becoming invaded with live oak brush making it unusable by the cranes. Where appropriate, to provide feeding areas for whooping cranes, live oak brush will be controlled by both chemical and mechanical methods. Where possible the Program will work with partners to acquire conservation easements on habitat for whooping cranes.

Seagrass beds make up an important component of this focus area. In 2000, Texas Parks and Wildlife Department designated all of Redfish Bay as a State Scientific Area for the protection and preservation of seagrasses. In 2006 the Texas Parks and Wildlife Department made damage to seagrass meadows by boat propeller scarring illegal. The Coastal Program has assisted in this protection effort by providing funding and technical expertise for signs and restoration activities. It is anticipated that the coastal program will continue to support these seagrass protection and restoration efforts.

Colonial waterbird rookery islands within this focus area are impacted by erosion, human disturbance, and predators. It is anticipated that habitat improvement projects designed to reduce erosion and remove predators will be initiated and partnerships will be developed to construct new nesting islands.

### **Existing conservation plans for the Coastal Bend Focus Area:**

- Gulf Coast Joint Venture Texas Mid-Coast Initiative Plan - This document deals with planning efforts for the Texas Mid-Coast Initiative Area. The goal of the Texas Mid-Coast Initiative is to provide wintering and migration habitat for significant numbers of dabbling ducks, redheads (*Aythya americana*), lesser snow geese (*Chen caerulescens caerulescens*), and greater white-fronted geese (*Anser albifrons*), as well as year-round habitat for mottled ducks. (Wilson and Esslinger, 2002)
- The Nature Conservancy Gulf Coast Prairies & Marshes Ecoregional Plan - This plan identifies sites of particular conservation need that if protected would adequately represent the natural species diversity within the Gulf Coast Prairies and Marshes ecoregion. Eleven portfolio sites for conservation are located within the Coastal Bend Focus Area. (TNC, 2002)

- Texas Comprehensive Wildlife Conservation Strategy 2005-2010 (2005) - This Strategy identifies the Gulf Coast Prairies and Marshes as a Tier I – High Priority area for conservation. All of the Coastal Bend Focus Area is within the Gulf Coast Prairies and Marshes ecoregion. The Matagorda Bay, San Antonio Bay, and Corpus Christi Bay systems are listed in this strategy as high priority coastal areas for conservation.
- U.S. Shorebird Conservation Plan Lower Mississippi/Western Gulf Coast Shorebird Planning Region (2002) - Within the Coastal Bend Focus Area, this plan identifies the Mad Island Wildlife Management Area complex, Aransas National Wildlife Refuge (NWR)/Guadalupe Delta WMA complex, and Matagorda Island NWR as important areas for shorebirds.
- The Coastal Bend Bays Plan (1998) - Within the Coastal Bend Focus Area, this plan includes Aransas, Refugio, San Patricio and Nueces counties. This plan identifies habitat and living resources within this area as high priority for conservation and indicates that habitat restoration, enhancement, creation, or management could benefit whooping cranes, neotropical birds, colonial waterbirds, snowy and piping plovers, shrimp, crabs, and fish within the area.
- Whooping Crane Recovery Plan - Within the Coastal Bend Focus Area, the Whooping Crane Recovery Plan indicates that habitat protection is critical for the recovery of this species. (USFWS, 1994)
- Attwater’s Prairie Chicken Recovery Plan - Within the Coastal Bend Focus Area, this plan indicates that coastal prairie protection and restoration is needed to recover this species. (USFWS, 1992)
- Colonial Waterbird and Rookery Island Management Plan - Within the Coastal Bend Focus Area, this plan identifies colonial waterbird nesting islands from San Antonio Bay through the upper Laguna Madre with specific management needs. (Chaney and Blacklock, 2002)
- Seagrass Conservation Plan for Texas. A conservation plan prepared collaboratively by three State agencies with some jurisdiction over seagrass beds, Texas Parks and Wildlife Department, Texas General Land Office and Texas Commission on Environmental Quality. (TPWD, 1999)

**Conservation targets FY 2007 through FY 2011**

Our habitat conservation goals for the Coastal Bend Focus Area are based on the needs identified by the conservation plans listed above. The habitat conservation targets are an estimate of what the Coastal Program might accomplish for Federal Trust Species given FY 06 funding levels and knowledge of our past partnerships.

Wetlands restored/enhanced: 2,340 acres

Wetlands protected: 1,000 acres

Uplands restored/enhanced: 5,460 acres

## Potential Partnerships

It is anticipated that our partners will be non-profit organizations (such as the Coastal Bend Bays & Estuaries Program, The Nature Conservancy, Audubon, Friends of Aransas and Matagorda Island NWR, and Guadalupe Blanco River Trust), State agencies (Texas Parks and Wildlife Department and the Texas General Land Office), and private landowners.

## LAGUNA MADRE FOCUS AREA

### Description

This focus area is located in the following U.S. Geological Survey hydrologic unit codes (HUC's): North Laguna Madre (12110203), San Fernando (12110204), Baffin Bay (12110205), Central Laguna Madre (12110207), and South Laguna Madre (12110208).

The Laguna Madre Focus Area is approximately 1.9 million acres in size and extends from the mouth of the Rio Grande River in the south to Nueces County in the North. This area includes portions of Cameron, Willacy, Kennedy, Kleberg, and Nueces counties. The major water bodies of this focus area include the Upper and Lower Laguna Madre, Baffin Bay, South Bay and the lower Rio Grande River as shown (Figure 4). This focus area is within the Gulf Coast Prairies and Marshes Ecoregion and in Bird Conservation Region 37. In addition, this focus area is within the Laguna Madre Initiative Area of the Gulf Coast Joint Venture and includes portions of the Service's Partners for Fish and Wildlife Program's South Texas Brushlands and South Texas Estuaries and Salt Lakes focus areas.

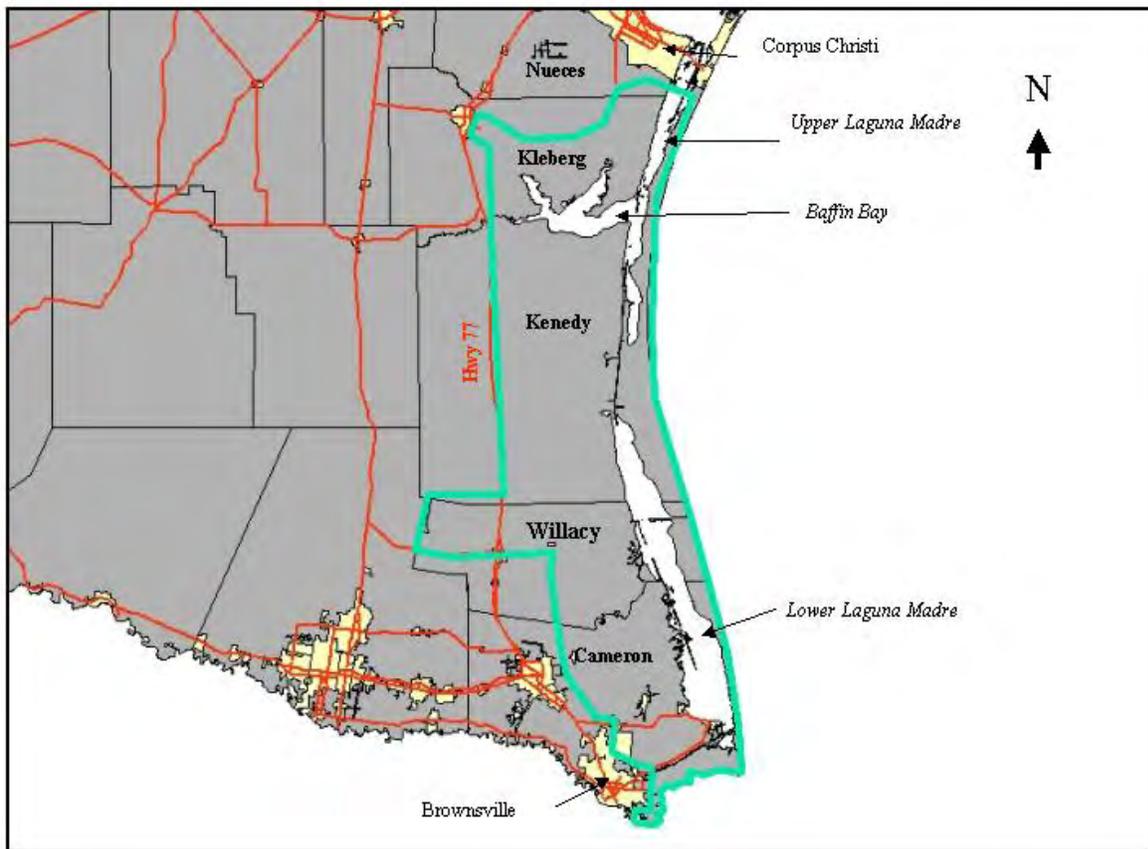


Figure 4. The Laguna Madre Focus Area.

The Laguna Madre in Texas is divided into the upper and lower Laguna Madre with a total area of 640 mi<sup>2</sup>. Because evaporation normally exceeds precipitation, the Laguna Madre is a hypersaline lagoon. This hypersaline lagoon is dominated by seagrass beds and wind-tidal flats. Seagrasses cover approximately 279 mi<sup>2</sup> of the Laguna Madre and provide habitat for numerous fish species including red and black drum. Approximately 80% of the North American population of redhead ducks winter in the Laguna Madre where they feed almost exclusively on the roots of shoalgrass, a seagrass species. Because of the hypersaline condition of the Laguna Madre, redhead ducks and other waterfowl depend on adjacent ponds for dietary freshwater. Wind-tidal flats cover approximately 361 mi<sup>2</sup> of the Laguna Madre. These wind-tidal flats are extremely important feeding and roosting area to migrating and resident shorebirds and wading birds.

The east side of the focus area includes Padre Island. This coastal barrier extends south 113 miles from Corpus Christi to Port Isabel. It is characterized by tall well developed foredunes on the Gulf side. These dunes are generally more vegetated to the north. Bayward of these dunes is an area of secondary dunes forming a ridge and swale topography.

Mainland portions of the focus area include coastal prairie, and south Texas brushlands. These diverse habitat types and subtropical climate makes the southern portion of this focus area ideal for nature tourism. It is estimated that some 125,000 people visit the lower Rio Grande Valley annually to birdwatch. The economic impact of birding in this area is in excess of \$125 million annually (McAllen Convention and Visitors Bureau, 2006)

#### **Project initiatives and species benefited**

The Laguna Madre Focus Area includes south Texas brushlands, coastal prairies, freshwater marshes, salt marshes, seagrass beds, wind-tidal flats, and colonial waterbird rookery islands.

This focus area was selected because of the ability of the Coastal Program to contribute to the habitat needs of Federal trust species in the area. These species include ocelot, redhead duck, reddish egret, piping plover (*Charadrius melodus*), south Texas ragweed (*Ambrosia cheiranthifolia*), and slender rushpea (*Hoffmannseggia tenella*).

The South Texas Brushlands are dominated by Tamaulipan thornscrub species and occur in the southern half of this focus area. This habitat type supports the only two known breeding populations of ocelots in the United States. These brushlands are also important stop-over areas for neotropical birds during migration. It is anticipated that the Coastal program will assist partners with thornscrub restoration and protection projects.

Because of the importance of Laguna Madre seagrass beds and adjacent freshwater wetlands to wintering redhead ducks it is anticipated that the coastal program will work to protect these habitat types. Project activities may include wetland enhancement and development to provide additional freshwater for redhead ducks and other waterfowl.

Wind-tidal flats are essential foraging habitats for wintering and migrating shorebirds and wading birds. These flats are important to several State and federally listed endangered or threatened species such as piping plovers, snowy plovers, reddish egrets and peregrine falcons (*Falco peregrinus*). Where possible the Coastal Program will work with partners to protect these sensitive wind-tidal flats from degradation by vehicles.

The Laguna Madre Focus area has numerous colonial waterbird rookery islands. Many of these islands are impacted by erosion, human intrusion, and predators. The Coastal Program will work with partners to protect and restore rookery island habitat in this Focus area.

**Existing conservation plans for the Coastal Bend focus area:**

- Gulf Coast Joint Venture Laguna Madre Initiative Plan - This document deals with planning efforts for the Laguna Madre Initiative area of south Texas. The goal of the Laguna Madre Initiative is to provide wintering and migration habitat for significant numbers of redhead ducks, greater and lesser scaup (*Aythya marila* and *Aythya affinis*), Northern pintails (*Anas acuta*), and other dabbling ducks, as well as year-round habitat for mottled ducks. (Esslinger and Wilson, 2002)
- The Nature Conservancy Gulf Coast Prairies & Marshes Ecoregional Plan - This plan identifies sites of particular conservation need that if protected would adequately represent the natural species diversity within the Gulf Coast Prairies and Marshes ecoregion. Within the Laguna Madre Focus Area this plan identifies 1 portfolio site for conservation, the Laguna Madre. The boundaries of the Laguna Madre Focus Area and TNC's portfolio site are nearly identical. (The Nature Conservancy, 2002)
- Texas Comprehensive Wildlife Conservation Strategy 2005-2010 (2005) – This Strategy identifies the Gulf Coast Prairies and Marshes as a Tier I – High Priority area for conservation. Most of the Laguna Madre Focus Area is within the Gulf Coast Prairies and Marshes ecoregion. The Lower Laguna Madre Bay System is listed as a high priority area for conservation.
- U.S. Shorebird Conservation Plan Lower Mississippi/Western Gulf Coast Shorebird Planning Region (2002) - Within the Laguna Madre Focus Area this plan identifies Laguna Atascosa NWR, Lower Laguna Madre, Lower Rio Grande Valley NWR, South Bay, and Padre Island as important areas for shorebirds
- The Coastal Bend Bays Plan (1998) - Within the Laguna Madre Focus Area, this plan includes Nueces, Kleberg and Kenedy counties. This plan identifies habitat and living resources within this area as high priority for conservation. This plan indicates that habitat restoration, enhancement, creation, or management could benefit neotropical birds, colonial waterbirds, snowy and piping plovers, shrimp, crabs, and fish within the area.
- Recovery Plan for the Listed Cats of Texas and Arizona with emphasis on the Ocelot. Within the Laguna Madre Focus Area, this plan indicates that ocelot habitat protection and restoration is critical for the survival of the species in South Texas. (USFWS, 1990)
- Colonial Waterbird and Rookery Island Management Plan - Within the Laguna Madre Focus Area, this plan includes all colonial waterbird nesting islands in the upper Laguna Madre and specific management needs for each island. (Chaney and Blacklock, 2002)

- Seagrass Conservation Plan for Texas. A conservation plan prepared collaboratively by three State agencies with some jurisdiction over seagrass beds, Texas Parks and Wildlife Department, Texas General Land Office and Texas Commission on Environmental Quality. (Texas Parks and Wildlife Department, 1999)

### **Conservation targets FY 2007 through FY 2011**

Our habitat goals for the Laguna Madre focus area are based on the needs identified by the conservation plans listed above. The habitat conservation targets are an estimate of what the Coastal Program might accomplish for Federal Trust Species given FY 06 funding levels and knowledge of our past partnerships.

Wetlands restored/enhanced: 360 acres

Uplands restored/enhanced: 1,300 acres

Uplands protected; 140 acres

### **Partnership Opportunities**

Our partners on these various habitat improvement projects will include private landowners, non-profit organizations (such as Environmental Defense, Valley Nature Center and The Nature Conservancy) and State agencies (including the Texas Parks and Wildlife Department and the Texas General Land Office).

### **REGION 2 FIVE-YEAR PERFORMANCE TARGETS**

The following table lists the Region 2 Coastal Program habitat conservation targets FY 2007 through FY 2011 for all focus areas combined. The target acreage goals are identified as acres of wetlands and uplands protected, restored, and/or enhanced. These targets are based on the assumption of level project funding throughout the five-year performance period. These targets will be evaluated annually and adjusted as necessary to reflect refinements in focal areas and Federal trust resource priorities.

<i>Habitat Type</i>	<i>Target Acreage FY '07-'11</i>	<i>Percent of Acreage Target</i>
Wetlands restored/enhanced	5,580 acres	36 %
Wetlands protected	1000 acres	7 %
Uplands restored/enhanced	8,380 acres	54 %
Uplands protected	440 acres	3 %
<b>Total</b>	<b>15,400 acres</b>	<b>100%</b>

The majority of the accomplishments of the Coastal Program in Region 2 will be projects that restore and enhance habitats (measured by acres) for Federal trust resources. The Program realizes that an integral part of conservation of these trust resources includes the protection of lands through purchase of fee title or conservation easements. The Coastal Program will not acquire or hold properties or easements as this function is reserved for the Service's National Wildlife Refuge System. However the Coastal Program can help other entities including the State or local agencies and non-governmental organizations protect lands primarily by providing technical assistance. We will use our knowledge of available funding sources and skills at grant writing and partnership development to assist our partners and achieve the protection goals listed above.

Although we have no direct ability to effectively control the outcomes of our protection targets, we have set a goal of 1,000 acres of wetlands and 440 acres of uplands to be protected in the next five years. A higher wetlands goal was set because most funding sources we expect will be utilized for this effort designate wetlands a priority. Both the National Coastal Wetlands Grant Program and the North American Wetlands Conservation Act Grants Program rely heavily on the wetland component to ranking and evaluate a proposal. As a result, projects with higher wetlands components are funded more often. We will help our partners and stakeholders develop projects and apply for these types of funds to accomplish our protection targets.

### **External Factors**

The ability of the Service's Coastal Program to reach its targeted level of performance may be influenced by many factors over which the Program has no control. The external factors listed below will greatly affect the ability of the Coastal Program to reach the above stated acreage goals. The accomplishment of the protection acreage targets above is especially sensitive to these external factors which may include but are not limited to the following:

- Unpredictable weather which may lead to unforeseen delays.
- Funding levels of local governments and non-profit organizations which would limit their ability to cost-share on potential projects.
- Availability of new partners to cooperate on projects.
- Ability of existing cooperators to take on new projects.
- Funding levels of State agencies which would prevent or limit project collaboration.
- Availability of construction contractors.
- Uncontrollable delays in permitting resulting from unforeseen issues such as contaminants or cultural resources.
- Availability of Federal or State approved professional service providers such as Licensed State Land Surveyors or conservation land appraisers.
- Willing landowners to participate in cost sharing projects or sell conservation rights.
- Land conversions due to development and population growth.
- Economic factors such as increased real estate prices and changing agricultural practices.
- Limitation on the use of Coastal Program funds to acquire lands by non-federal partners.
- The competitiveness and demand for National or State governed grant programs.
- Acts-of-God which may include: hurricanes, flood events, drought, fire, etc.

## IV. Goal Two: Broaden and Strengthen Partnerships

The Coastal Program in Region 2 works with our partners to successfully accomplish our objectives. The credit is to our partners who share our conservation interests and willingness to collaborate to conserve fish and wildlife habitats on the Texas Gulf Coast. It is a goal of the Coastal Program to broaden and strengthen our partnerships to further the objectives of habitat conservation for the benefit of our Federal Trust Species.

Broad and diverse partnerships exist throughout our region. Collaborative partnerships have been established with Federal and State agencies, local governments, non-governmental organizations, private corporations, foundations, land trusts and private landowners. Partners from each of these categories have cooperated with the Coastal Program to accomplish our goals. Refer to Appendix B for a complete list of partners who we have collaborated with on coastal projects.

### Regional Objectives

To address our goal to broaden and strengthen partnerships, the Coastal Program will work toward the following key objectives:

1. Maintain existing partnerships. Top priority will be given to maintaining and continuing the productive relationships established in the region with an already broad partnership base. These partnerships are the key to past and future successes of the Coastal Program in Texas.
2. Increase the partnership base. To implement strategic conservation projects on the Texas Coast additional partners will be needed. Every partner organization has limitations that can include work loads, capability, geographic interest, and funds. Increasing the partnership base can expand the capability to work in our focus areas along the coast, improve leveraging of funds and also preserve and strengthen existing partnerships. It is the goal of the Program to establish one new partnership in each Geographic Focus Area each year.
3. Provide technical assistance to our partners to achieve on-the-ground results. Some partners may not possess the time or skills necessary for all aspects of a conservation project. Coastal Program personnel can provide assistance, which may include grant writing assistance, coalition building and project planning, to strengthen a partnership and achieve conservation results.
4. Leverage funds. Budget constraints exist with the Coastal Program and all partnering organizations. Through collaboration, the Coastal Program can help our partners identify and utilize appropriate sources of funds and leverage secured funding towards additional grants to implement their conservation projects.

### Key Strategic Activities

The accomplishment of each regional objective will be addressed through the implementation of the key strategic activities described below.

#### Maintain exiting 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 our 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 of the Program's objective to ask for their assistance in 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 of their successful projects and partnership with the Coastal Program provide an excellent way to gain trust and encourage participation by new partners, especially with private landowners.
- Identify key stakeholders in focal areas and make direct contact with those which haven't previously partnered with the Coastal Program.

#### Provide technical assistance to our partners to achieve on-the-ground results

- Coastal Program personnel will work with our 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 need 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 costs and funding sources associated with projects in reports and proposals. Including all costs and sources of funds in project proposals, agreements and reports will insure accurate reporting of leveraged funds and show true costs of projects.

#### **Performance Measures & Accomplishment Targets**

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

- The number of new partnerships established per year with a goal of least two (2).
- The number of partners adopting and/or implementing recommended technical assistance actions with a target of 50% of technical assistance activities resulting in on-the-ground conservation.
- The amount of funds and in-kind services (above Coastal Program funds or services) leveraged or otherwise contributed to projects per year with an annual target of two (2) million dollars.

**External Factors**

The external factors which may reduce the Service's ability to reach their targeted level of performance for the goal of broadening and strengthening partnerships influenced by many factors for which the agency has no control. These may include but are not limited to the following:

- Availability of existing partners to take on new work or additional projects.
- Landowners willing to participate in Federal programs.
- Ability or willingness of partners and landowners to implement technical assistance actions.
- Few or no local agency or non-governmental partners in some regions of the coast.
- Available non-Federal funds applicable to competitive grant programs.

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## V. Goal Three: Improve Information Sharing and Communication

Communication and information sharing are important elements of successful conservation projects. Achieving this Goal to collaborate and share information and concerns with our partners, stakeholders, future partners, decision-makers, and others to protect, restore, and enhance habitats for Federal Trust Species directly affects Goals One, Two and Five. Communication provides a mechanism to learn of project successes, failures, tips or strategies to improve project coordination and implementation. This, in turn, directly affects on-the-ground results. Partnerships are strengthened and broadened through this goal and, therefore, accountability is improved.

### Regional Objectives

1. Increase coordination with other agencies and stakeholders. This will help insure that Coastal Program habitat conservation projects are successful.
2. Improve project results through information sharing. Sharing of project specific information with stakeholders will assist planning efforts and reduce duplication of effort. Information sharing will also improve project results by helping to eliminate previously attempted and failed techniques.
3. Inform stakeholders and decision-makers of Coastal Program activities and accomplishments in the region. Informed decision-makers and stakeholders will be better prepared to support the Coastal Program.

### Key Strategic Activities

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

#### Increase coordination with other agencies and stakeholders

- Conduct regular project meetings 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 be conducted regularly and at a minimum, semi-annually.
- Continue participation in regional councils and committees. In Region 2, councils and committees organized by National Estuary Programs or other watershed based organizations have a membership which includes various Federal and State agencies and other stakeholders. Participation in these council and committee meetings 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 is one form of technical assistance. Program biologists can assist a partner during project planning and development by providing information on lessons learned. Building from these lessons improves project results.
- Continue to present papers at scientific and technical conferences. National or regional conferences and workshops provide an opportunity to reach a broad audience. Through these presentations, ideas and techniques 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.

Inform stakeholders and decision-makers of Coastal Program activities and accomplishments in the region.

- Hold periodic stakeholder meetings, annually or semi-annually, to 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 annual program accomplishments and updates at local meetings and committees.
- Prepare annual accomplishments report and briefings. Present these materials during the annual “Hill Week” or other briefing opportunities in Washington DC and local congressional offices.

**Performance Measures & Accomplishment Targets**

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

- Proportion all new projects reported through the HabITS database with a target of 100%.
- Proportion of all completed projects accomplishments that have been updated, are accurate and include polygons in HabITS database, with a target goal of 100%.
- Proportion of HabITS accomplishments linked to species, with a target of 100%.
- Written narratives of type and number of technical assistance projects and outreach activities conducted in the region as provided in the annual data call reports.

**External Factors**

The external factors which may directly affect the Service’s ability to reach the goals to improve information sharing and communication may include but are not limited to the following:

- Connectivity of databases on a national and local level (phone lines, power outage, local server and computer issues) will affect our ability to communicate.
- The HabITS program must remain stable and operational. This system is managed external to the Regional program offices.

## VI. Goal Four: Enhance Our Workforce

The staff of our Region 2 Coastal Program is our most important resource. Maintaining and supporting the staff are the keys to the success of the Program and achieving on-the-ground results for Federal Trust Species. Providing our staff with the ability to increase knowledge and technical expertise through continued training will help insure the quality of our workforce.

The purpose of this goal is to carry on the continuous development of our staff, maintain our reputation for excellent customer service, provide employees with opportunities to teach and lead in their communities, and keep using an appropriate breadth of disciplines in delivering habitat conservation projects throughout the nation. These skills and abilities are the key to the future success of the Coastal Program.

### Regional Objectives

1. Develop and retain skilled local staff with state-of-the-art restoration knowledge, skills and abilities. A key to delivering quality projects is skilled and motivated staff. These employees are the front line of communication to area partners and stakeholders which deliver on-the-ground habitat conservation projects.
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. Increase 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 needed for effective and efficient operation of the program. This assessment should also include an evaluation of skills needed in the future.
- Use skills assessment to develop employees Individual Development Plans (IDP) and Individual Action Plans (IAP).
- Continue to provide training and educational opportunities for 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.
- Review progress on an employee's IDP or IAP during mid-year and annual performance appraisals. Update and revise these annually.
- Encourage staff to perform work details in other Service Programs and Regions.
- Promote a staff mentoring program, developed by the Washington Office, to connect highly experienced staff to new hires or less experienced employees.

### Excellent customer service

- Provide prompt responses to emails, phone messages and other correspondence from both intra-service and outside partners.
- Create and opportunity for partners to provide customer satisfaction evaluations through written surveys or open stakeholders 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 types 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 Goal Three

### **Performance Measures & Accomplishment Targets**

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 strategic habitat conservation, with a target goal of a minimum forty (40) hours per FTE.

### **External Factors**

The external factors which may directly affect the Service's ability to reach the goals for enhancing our workforce may include but are not limited to the following:

- A reduced Congressional appropriation which would limit funding for staff recruitments, travel and training.
- Local emergencies or other events precluding an employee's participation in schedule training events.
- Availability of potential training events at the local level.

## VII. Goal 5: Increase Accountability

The primary goal of the Coastal Program is to implement habitat conservation projects. Goal 5 will ensure to ourselves, our partners, and the American public that these project impacts are known, accurate, and meet the standards we have set in our State and coastal activity plans. This goal will also show that our project operations are administratively efficient and fiscally transparent. Increased accountability will occur by continuing to measure, assess, and report on the effectiveness, efficiency and fiscal integrity of our habitat conservation activities.

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 effectively report accomplishments 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 2 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.  
Annual Government Performance and Results Act goals are established each year for the following categories in Region 2, wetlands restored or enhanced, uplands restored or enhanced, wetlands protected and uplands protected. These goals are accomplished through activities of Goals One and Two of this plan.
2. Increased management and control of program activities.  
This objective is planned to improve the administration of projects and cooperative agreements which the Coastal Program and its partners exercise to accomplish on-the-ground results.
3. Increased control and quality of accomplishment data.  
Accurate reporting of program accomplishments is a critical link in all goals of this plan. Accomplishment data is used for both internal and external outreach and evidence of progress toward conservation goals. This data should be accessible and accurate to meet these uses.
4. Increased visual resources in HabITS.  
HabITS database provides both storage of raw data (text) and visual data such as maps and photographs. These photos and maps can easily be used in preparation of annual accomplishment reports and outreach materials.
5. Subactivity funding fidelity.  
Funds are approved by Congress and allocated to the Regions for the Program (1124 subactivity code). These funds are to be used to support and implement the objectives as described here and in other Service manuals or policies specific to the Coastal Program. Ensuring these funds are used for their intended purpose is critical to our accountability to the public and trust resources.

## **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.

- Annually develop cooperative habitat conservation projects. Cooperative agreements are the primary mechanism we utilize to implement on-the-ground projects that result in acres restored, protected, or enhanced.
- Establish annual Governmental Performance and Results Act habitat conservation goals which positively address the focus area acreage goals described in Goal One.

### Increased 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.

### Increased control and quality of accomplishment data.

- Increase communication with cooperators to ensure that required documentation, monitoring, and accurate funding and acreage data are provided to the Service's project officer. Validate the accomplishment data with the project cooperators.
- Standardize information recorded into HabITS database by having the regional coordinator review and edit all project entries. Program biologists will continue to enter initial project information into HabITS; however, the regional coordinator will review and finalize all entries.
- Train all employees on the HabITS data entry and reporting functions.
- Annually review projects entered in HabITS and update information and completion status.

### Increased 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. This data may include point or polygon data to identify project sites or area.

### Increased subactivity funding fidelity.

- Perform management control reviews on all field offices receiving 1124 funds to ensure the appropriate use and tracking of those funds. Each office is expected to have a review conducted within five years.
- Annually calculate percentage of Coastal Program dollars allocated for Program overhead, including salaries, versus those applied through agreements to projects.

### **Performance Measures & Accomplishment Targets**

Increasing our accountability will largely be measured by the quality of our HabITS database reports as well as other measures included here.

- Annual account of acres/miles restored or protected within each geographic focus area reported through the HabITS database.
- The timely submission of annual data call reports.
- Management control reviews performed once every five years.
- Proportion of projects accurately entered into the HabITS database, with a target of 100%
- Annual certification from the regional coordinator that entered HabITS data are 100% accurate.
- Proportion of accomplishments reported in the HabITS database linked to species, with a target of 100%.
- Percentage of HabITS project accomplishments with images (such as before and after photos), with a target of at least 75%.
- Annual regional report on number of FTE's supported by the Coastal Program.
- Annual ratio of project funds and in-kind services (above Coastal Program funds or services) leveraged or otherwise contributed to projects per year with an annual target of two (2) million dollars.

### **External Factors**

The reporting and accountability targets of this goal are directly linked to the performance of activities listed in Goals 1-4. The external factors that may affect the performance and accomplishments of Goals 1-4, also affect Goal 5. Please refer to the external factors listed in the previous sections.

## VIII. Stakeholder Involvement

### Part I: Vision Document

Ten meetings were held in March 2004 to gather input from our partners and stakeholders. Seven meetings occurred on the upper coast, and 3 meetings occurred on the lower coast. A diverse representation of partners participated in the meetings, including representatives from local, State, and Federal government agencies, private industry, 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 2's Strategic Planning Process

City of Baytown  
City of Clear Lake Shores  
Clear Creek Environmental Foundation  
Coastal Bend Bays and Estuary Program  
Coastal Bend Land Trust  
De-Go-La Resource Conservation and Development Council, Inc.  
Environmental Institute of Houston  
Galveston Bay Estuary Program  
Gulf Coast Bird Observatory  
Houston Area Research Center  
International Institute for Sustainable Water Resources, Texas State University  
National Marine Fisheries Service  
NOAA Community-Based Restoration Program  
NRG, Inc.  
Reliant Energy  
Scenic Galveston, Inc.  
Texas A&M University-Corpus Christi, Center for Coastal Studies  
Texas General Land Office  
Texas Parks and Wildlife Department  
Texas SeaGrant  
The Nature Conservancy of Texas  
Trust for Public Land  
University of Houston Clear Lake  
US Geological Survey, National Wetlands Research Center  
USDA Natural Resources Conservation Service  
West Galveston Island Property Owners Association  
Wildlife Habitat Council

### Part II: Region 2 Step-Down Strategic Plan

Preliminary discussions pertaining to Region 2 Geographic Focus Areas began during an Interagency Retreat in May 2006. Input was gathered from natural resource agency partners and three focus areas were mapped. Boundaries around each focus area have been refined as additional stakeholder input was gathered. The revised focus areas have been presented to stakeholders and partners during four meetings; the Galveston Bay Council meeting in October

2006, the Galveston Bay Estuary Program Natural Resources Unit Subcommittee meeting in November 2006, a meeting with The Nature Conservancy in December 2006, and a meeting with the Coastal Bend Bays and Estuaries Program in December 2006.

**List of stakeholders involved in Part II of Region 2's Strategic Planning Process**

Coastal Bend Bays and Estuary Program

Environmental Institute of Houston

Galveston Bay Estuary Program

Houston Area Research Center

National Marine Fisheries Service

NOAA Community-Based Restoration Program

Texas General Land Office

Texas Parks and Wildlife Department

Texas SeaGrant

The Nature Conservancy

Trust for Public Land

University of Houston Clear Lake

USDA Natural Resources Conservation Service

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## ***Appendix B: List of Texas Coastal Program Partners***

Anheuser-Busch  
Anahuac NWR  
Aransas NWR  
Armand Bayou Nature Center  
Artist Boat  
Baytown Nature Center  
Brazoria NWR  
British Petroleum  
City of Clear Lake Shores  
City of Texas City  
Clear Creek Environmental Foundation  
Coastal America  
Coastal Conservation Association  
Coastal Bend, Bays and Estuaries Program  
ConocoPhillips  
Corporate Wetland Restoration Program  
Ducks Unlimited  
Eddie V. Gray Wetland Center  
Environmental Institute of Houston  
Fish America Foundation  
Friends of Aransas and Matagorda Island NWR  
Friends of Galveston Island State Park  
Galveston Bay Estuary Program - TCEQ  
Galveston Bay Foundation  
Goose Creek Independent School District  
Guadalupe - Blanco River Authority  
Guadalupe Blanco River Trust Authority  
Gulf Coast Bird Observatory  
Gulf of Mexico Foundation  
Gulf of Mexico Program  
Gulf Ecological Management Site  
Harborwalk  
Houston Audubon Society  
Houston Zoo  
Isla del Sol Homeowner's Association  
Keep Dickinson Beautiful  
Kiki De La Garza Plant Materials Center  
Laguna Atascosa NWR  
Lower Colorado River Authority  
Mainland Concrete  
McFaddin NWR  
National Fish & Wildlife Federation  
Natural Resources Conservation Service  
NOAA - Community Based Restoration Program  
NOAA Fisheries-Habitat Conservation Division  
NRG Texas  
Ocean Trust  
Port Aransas Nature Preserve  
Port of Corpus Christi  
Private Landowners  
Reliant Energy  
Restore America's Estuaries  
SCENIC GALVESTON, Inc.  
Spanish Grant Property Owners Association  
Stephen F. Austin State University  
Sunbird Bay Development  
Telephone Pioneers  
Texas A&M University Corpus Christi  
Texas A&M University-Galveston  
Texas Audubon  
Texas Department of Transportation  
Texas General Land Office  
Texas Master Naturalists  
Texas Ornithological Society  
Texas Parks & Wildlife Department  
Texas Point NWR  
Texas R.I.C.E.  
TexasGenco  
The Nature Conservancy--Mad Island Preserve  
The Nature Conservancy--Texas City Prairie Preserve  
Tivoli Independent School District  
Trust for Public Land  
TPWD - Galveston Island State Park  
TWPD - Goose Island State Park  
TWPD - J.D. Murphree WMA  
TPWD - Mad Island WMA  
TPWD - San Jacinto Battleground State Park  
University of Houston Clear Lake  
U. S. Army Corps of Engineers  
U. S. Geological Survey

USFWS - Partners for Fish & Wildlife Program  
USFWS - Coastal Wetlands Planning, Protection &  
Restoration Program  
USFWS - North American Wetlands Conservation  
Program

Village Condos Homeowners Association  
Village of Tiki Island  
West Galveston Island Property Owners Association

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

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

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

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

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