

Goals, Objectives and Strategies

Ecoregional Goal

To contribute to conservation efforts and to foster the ecological integrity of the Gulf Coast Prairies and Marshes Eco-region through proven and innovative management practices across the Complex.

Objective

Increase knowledge through research and collaboration to evaluate the impacts and trends of accelerated climate change on refuge habitats and wildlife populations including site-specific sea level rise with corresponding sediment accretion, invasive species and habitat shifts in an attempt to enable best management practices to adapt and mitigate the impacts of a changing climate and the anticipated effects (over the life of the Plan 15+ years) on native flora and fauna.

Strategies

- Participate in the Mid-coast Initiative of the Gulf Coast Joint Venture bringing project proposals and success stories to share.
- Monitor sea level rise and accretion of sediments in the coastal marshes to further evaluate impact of rising sea-level in Mid-coast marshes.
- Map freshwater resources on an annual basis.
- Monitor native and non native species range shift (ie black mangrove in estuaries) to compensate for changes in floristic composition.
- Exercise best management practices based on results of monitoring sea level rise, fresh water shifts, and species range shifts.
- Throughout the life of the plan, continue to partner with state and federal agencies as well as nonprofit organizations and private land owners to share biological information including species trends, habitat management techniques and land conservation strategies.
- Support research from partners which would contribute to scientific information benefiting the eco-region.
- Support land conservation efforts of partners through coordination of opportunities and resources.
- Assist sister agencies and organizations with the implementation of prescribed fire to benefit native habitats through established agreements.
- Within five years initiate modeling of the Columbia Bottomlands in response to a changing climate.

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Habitat Goal

To conserve, restore, enhance, and protect refuge habitats by implementing appropriate management programs to benefit native flora and fauna, including threatened and endangered species and other species of concern.

Objectives

Bottomland Hardwood Forests — Conserve an additional 1,000-2,500 acres annually of bottomland hardwood forests while promoting natural succession toward old growth stages.

Coastal Prairie — **Protect, restore and manage 19,000 acres of coastal prairie habitat through early seral stages to a climax prairie community, while promoting rare endemic species such as prairie coneflower (*Ratibida columnaris*) and sharp gay feather (*Lyatris acidita*) through planting or seed dispersal (of Refuge produced seed) on 100 acres annually.**

Strategies

Bottomland Hardwood Forests

- Continue working with partners to conserve Columbia Bottomland Habitat, working toward the 70,000 acre conservation goal.
- Where appropriate, restore degraded habitats through removal of grazing pressure, mowing, and human encroachment, allow natural regeneration of hardwood species and where necessary, plant hardwood species to encourage succession and or diversity.
- Eradicate invasive plant species within the bottomland habitats.
- Control invasive fauna populations by means approved in management plan that minimize environmental damage of habitat and native wildlife resources.
- Where appropriate, restore natural hydrological processes, including storage basins and waterways.
- Continue outreach efforts to local communities, explaining the benefits of natural bottomland forests.
- Explore opportunities to partner with industry to protect and restore bottomland forests through the exchange of carbon credits.
- Monitor rare and endemic populations occurring within the Columbia Bottomlands and focus strategies toward protecting remaining populations.
- Continue research collaboration with State and Federal agencies, universities and NGO's.
- Immediately suppress all wildfires in bottomland hardwood forests throughout the Complex.
- Within 2 years complete a Habitat Management Plan.

Coastal Prairie

- Within 3 years, have an approved Preliminary Project Proposal (PPP) for Brazoria NWR, focusing on conservation of coastal prairie habitats for reclamation and restoration of prairie species.
- Monitor and inventory shifts in species composition within prairie habitats due to a changing climate and/or other influences, e.g. contaminants, catastrophic event, and disease.
- Mimic historic fire regimes through application of prescribed fire across prairie habitats, promoting a diversity of seral stages across the refuges.
- Maintain diversity across the refuge prairies by promoting hydrological and topographical differences.
- Continue research collaboration with State and Federal agencies, universities and NGO's
- Eradicate invasive plant species across the prairie through mechanical, herbicide, and fire applications
- Control invasive fauna populations by means approved in management plans that minimize environmental damage of habitat and native wildlife resources
- Encourage native species diversity through reseeding and transplanting native

Goals, Objectives and Strategies

Habitat Goal (cont.)

To conserve, restore, enhance, and protect refuge habitats by implementing appropriate management programs to benefit native flora and fauna, including threatened and endangered species and other species of concern.

Objectives

Wetlands — **Protect and manage 59,000 acres of wetlands, including 9,500 acres of open water across the Complex, promoting a diversity of wetland types, including saline marshes, Gulf cordgrass (*Spartina spartinae*) dominated saline prairie, freshwater ponds moist-soil units and natural waterways.**

Strategies

Coastal Prairie (continued)

- grasses and forbs.
- Promote prairie restoration off refuge through provision of seed and assistance in prescribed burning for partners.
- Protect communities through control of fuel loading in WUI areas through haying and application of prescribed fire and maintenance of fire breaks.
- Within 2 years complete a Habitat Management Plan

Wetlands

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Goals, Objectives and Strategies

Wildlife Goal

To protect, maintain, and enhance populations of migratory birds and resident fish and wildlife, including federal and state threatened and endangered species.

Objectives

Waterfowl—Increase annual waterfowl use across the Complex 5% over the term of this plan by providing quality nesting, resting, feeding, and molting habitats including 2,000 acres of seasonally flooded freshwater habitats, such as coastal prairie swales, ponds, impoundments and flooded farm fields for wintering migrating waterfowl. Increase annual mottled duck production on the Complex 10% over the life of this plan by providing 600 acres of freshwater with adjacent prairie habitat (< 2 miles away) during the late spring and summer months.

Forest Birds—Throughout the life of the plan, protect and manage existing mature forest and restore units requiring restoration due to cattle grazing, clearing, logging, etc, to provide floral diversity and high stem density at all canopy layers to provide habitat for 80% of the following indicator forest breeding bird species (Swainson's, prothonotary and hooded warblers, yellow-breasted chat, acadian flycatcher, barred owl, downy woodpecker, yellow-throated vireo, northern parula and summer tanager).

Strategies

Waterfowl

- Provide freshwater habitats through water management which includes the purchase, pumping and holding of freshwater in impoundments.
- Manipulate freshwater impoundments utilizing disking, shredding, roller-chopping, fire and or herbicide to disturb perennial vegetation, control exotic vegetation, and encourage production of wetland annual plants.
- For mottled ducks, provide nesting (prairie), and 600 acres of brood habitats (freshwater with <5ppt salinity content) in proximity of each other (<2 miles) to encourage nesting and increase nesting success.
- Increase acres of managed wetlands at San Bernard by expanding the Wolfweed and Sargent wetland complexes.
- Manage the farmland/wetlands at Brazoria NWR in such a manner as to provide a combination of high-energy foods, cover and resting areas, and natural wetland food resources during the fall and winter season.
- Manage Eagle Nest Lake at a lower water level to create a palustrine marsh and create additional waterfowl habitat.

Forest Birds

- Within two years publish information gathered by the Forest Bird Study Group on the site fidelity of some wintering songbirds in the bottomland habitats.
- Within five years evaluate the potential of reestablishing turkeys into bottomland habitats through partnering with Texas Parks and Wildlife and other organizations.
- Continue to acquire a variety of bottomland habitats which provide corridors for wildlife movement including the migration of large numbers of songbirds along waterways.
- Locate nesting territories of bald eagles and swallow-tailed kites. Consider these locations a priority in conservation activities.
- With one year, develop a forest bird habitat monitoring protocol such as a modified James and Schugart vegetation sample.

Goals, Objectives and Strategies

Wildlife Goal (cont.)

To protect, maintain, and enhance populations of migratory birds and resident fish and wildlife, including federal and state threatened and endangered species.

Objectives

Grassland and Secretive Marsh Birds—

Manage prairie and upper marsh habitats; which will support and maintain existing populations of LeConte's sparrows and loggerhead shrikes, seaside sparrows, black rails and yellow rails (as indicator species), and increase populations of northern bobwhite quail 30% over the life of the plan through continued application of prescribed fire and treatment of invasive species across 15,000 acres of prairie and marsh habitat annually. Restore old field and pasture land to coastal prairie, enabling the acreage to support grassland dependent species.

Shorebirds—Provide a combination of quality habitats including 1,400 acres of shorebird foraging habitat during spring migration (April-May) and 900 acres during fall (August-September) among managed wetlands and farm fields by providing water ranging from a fraction of an inch to several inches deep.

Strategies

Grassland and Secretive Marsh Bird

- Continue to acquire a variety of prairie and marsh habitats which provide corridors for wildlife movement.
 - Throughout the life of this plan, protect coastal and saline prairie, salt marsh and associated wetlands for resident and migratory birds including Henslow's and LeConte's sparrows, white-tailed hawk, northern bobwhite and dickcissels in prairie and yellow and black rails and seaside sparrow in marsh habitats.
 - Conduct prescribed burning rotations to provide a mosaic of habitat conditions considering food and cover resources.
 - Conduct prescribed burns in such a manner as to minimize bird mortality including utilizing backing and flanking fires rather than head fires, burn units adjacent to quality habitat to allow movement of displaced wildlife.
 - Continue black and yellow rail research in salt marshes and expanding research within 3 years into the coastal prairie to evaluate secretive marsh bird habitat requirements.
 - Within two years establish a grassland bird food and cover monitoring protocol.
 - Coordinate with the Attwater's Prairie Chicken NWR to monitor and evaluate habitat suitability for Attwater's prairie chickens.
 - Monitor populations and evaluate how refuge management would better benefit northern bobwhite quail.
 - Prepare a grazing management plan, as a management option for early successional prairie management.
 - Locate and document nesting sites of white-tailed hawks.
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- Ensure available prey for shorebirds by slowly drawing down wetlands in the spring or allowing ponds/reservoirs to dry through evaporation.
 - Begin flooding managed wetlands early August to enable feeding areas for fall migrating shorebirds.
 - Provide foraging and nesting areas associated with estuary and managed wetlands throughout the year.
 - Within 10 years, establish a shorebird monitoring protocol.
 - Continue to monitor snowy and piping plovers every five years with the International Piping Plover Survey.
 - Protect 4 miles of beach habitat of San Bernard NWR by restricting vehicle access above mean high tide.

Goals, Objectives and Strategies

Wildlife Goal (cont.)

To protect, maintain, and enhance populations of migratory birds and resident fish and wildlife, including federal and state threatened and endangered species.

Objectives

Reptiles and Amphibians—Maintain current populations by providing quality habitat for a variety of reptiles and amphibians and where opportunities arise, increase populations of threatened, endangered and species of concern such as sea turtles, timber rattlesnake, diamond-backed terrapin, Gulf saltmarsh snake, ornate box turtles and Texas horned lizard through adaptive management and protection of habitat throughout the life of the Plan.

Colonial Waterbirds—Maintain eight existing colonies of waterbirds and where opportunities lie, create three additional colonies (Bastrop Bayou, Cowtrap, Salt Lake) through terracing or dredge placement and improve four existing colonies through dredge placement, erosion control, predator barrier or other means to encourage additional nesting birds. Within the term of this plan double the population of nesting reddish egrets on and around the Mid-coast refuges.

Strategies

Reptiles and Amphibians

- Protect 4 miles of San Bernard NWR beach habitat by restricting vehicular travel above mean high tide to protect nesting sea turtles and nests
- Within five years of the Plans approval, develop an inventory and monitoring protocol for reptiles and amphibians across refuge habitats.
- Locate and protect den sites for timber rattlesnakes in the bottomlands.
- Continue sea turtle stranding and nest monitoring on area beaches, both on and off refuge.
- Continue to support research on herptile populations in association with education and non-profit organizations.
- Within five years, implement a monitoring protocol on American alligators across the refuge complex.

Colonial Waterbirds

- Continue to protect from disturbance, all refuge locations and advocate protection of other local colonies.
- Within 5 years, partner with other agencies (including Army Corps of Engineers) and organizations to protect the Dressing Point Island from erosion and ultimately find a means to increase the acres of the island and establish new nesting islets utilizing dredge material.
- In partnership with the Texas General Land Office seek a means to protect area rookeries which are not on the refuge.
- When necessary, control predator populations near rookeries which could have detrimental effects on the nesting success of colonial waterbirds.
- When feasible, establish predator –proof enclosures around rookeries to protect nesting birds from predators.
- Control invasive fauna (primarily fire ants) in accordance with approved management plans.
- In association with terracing projects to protect eroding shorelines in Salt and Cowtrap Lakes, establish new islets for nesting birds.
- Continue monitoring populations of birds on local rookeries through colonial waterbird count and other established censuses.

Goals, Objectives and Strategies

Wildlife Goal (cont.)

To protect, maintain, and enhance populations of migratory birds and resident fish and wildlife, including federal and state threatened and endangered species.

Objectives

Mammals—Maintain current populations of 45 mammal species by providing bottomlands, prairies, freshwater wetlands, and saltmarsh habitats across the Complex. Within three years of the plans approval, conduct baseline monitoring for river otter, deer in bottomlands and small mammals, in an attempt to determine population trends in 3 to 5 year intervals, and assess the need to initiate adaptive management practices if trends show declining populations or overpopulations.

Strategies

Mammals

- Locate and monitor river otter populations on core refuges and along waterways adjoining the refuge units.
- Within three years, set up an inventory and monitoring program for small mammals.
- Control feral hog populations across the Complex in accordance with Feral Hog Management Plan to protect habitat and native wildlife populations.
- Seek opportunities to reduce impacts of red-imported fire ants by reducing populations through biological control and pesticides in accordance an Integrated Pest Management Plan.
- Coordinate with education and other organizations to conduct research and monitoring of specific species.
- Within three years implement a deer monitoring program in select bottomland and prairie units to ensure healthy populations
- Partner with other organizations to monitor bat habitat use across the Complex.
- Work with our partners and adjacent land owners to help conserve habitat for the river otter.

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Public Use Goal

To develop and implement quality wildlife-dependent recreation programs, which are compatible with refuge purposes, and foster enjoyment and understanding of the Refuge's unique wildlife and plant communities.

Objectives

Visitation—Throughout the term of this Plan, increase annual visitation by 25% (Current numbers are 78,000) while striving to maintain a positive and memorable experience on the Refuge. The visitors' experience should be that they will desire to return to the Refuge Complex, recognizing it as a national treasure and a premier destination for wildlife-dependent recreational activities.

Wildlife Observation—Over the term of this Plan, provide visitors with quality wildlife observation opportunities by maintaining existing viewing areas and infrastructure while expanding opportunities at Dow Woods with an additional

Strategies

Visitation

- During the life of this plan, utilize advertising and marketing strategies, including; publishing web and news/magazine articles with information about Refuge activities.
- Within two years, increase signage on incoming highways and County roads to identify public use areas.
- Continue to offer quality public programs including the interpretive programs at the annual Migration Celebration.
- Within two years, develop monthly interpretive programs at various refuge locations during the winter months.
- Maintain and update Refuge website every six months; provide relative and up to date information on a continuous basis.
- Establish a protocol to collect visitor use information and track visitation trends on an annual or biannual basis.
- Partner with local chambers of commerce; gaining support for Refuge programs and promoting the Refuge Complex as a Great Texas Coastal Birding Trail designated site.
- Incorporate higher customer service standards by providing periodic training for staff and volunteers ensuring compliance with Fish and Wildlife Service customer service standards.
- Within five years of the signing of this plan, develop a Visitor Services Plan that evaluates existing public use facilities, identifies additional facilities needed to provide high-quality compatible wildlife-dependent recreation, and identify sources of funding for development and maintenance of facilities.
- Increase Visitor Services personnel to accomplish priority public use needs. Add one full-time staff member to assist with keeping the Discovery Center open in fall, winter and spring season. Explore innovative volunteer options such as recruitment through the Refuge Volunteer Program, SCA, interns, grants, and work study programs.
- When funds are available establish a Visitor Contact Station at the San Bernard NWR. This would facilitate increased awareness and understanding of the natural value of the bottomland units, and would likely attract additional volunteers from local communities.

Wildlife Observation

- Maintain all viewing areas on the Refuge complex to including the auto tour loops, San Bernard beach, walking trails, viewing areas, decks, boardwalks and observation platforms in a safe and usable condition. Facilities may be removed from service for public safety.
- Within two years of the signing of this plan, establish scheduled programs for wildlife-viewing such as the interpretive van tours and guided bird and wild-flower walks.

Goals, Objectives and Strategies

Public Use Goal (cont.)

To develop and implement quality wildlife-dependent recreation programs, which are compatible with refuge purposes, and foster enjoyment and understanding of the Refuge's unique wildlife and plant communities.

Objectives

Wildlife Observation (cont.) - 3 mile trail and photo blind and at the Brazoria Field Office with an additional photo blind, and 1 mile trail with 450 ft. boardwalk.

Wildlife Photography—The Complex will provide safe and high quality opportunities on the Refuge Complex by maintaining existing photo blinds and viewing areas and develop new opportunities where appropriate to achieve a 10% annual increase in wildlife photography participants throughout the Complex.

Interpretation—Over the life of the Plan the Complex will increase the effectiveness of all interpretive activities by 25% above current levels.

Strategies

Wildlife Observation (cont.)

- Continue to evaluate existing facilities for accessibility requirements every three years and make necessary improvements to these facilities as resources allow.
- Within five years of this plan, expand trail system to the west side of Bastrop Bayou at the Dow Woods Unit.
- Continue to work in partnership with local chambers of commerce, Gulf Coast Bird Observatory, Sea Center Texas, Brazosport Center for the Arts, Houston Zoo, State Parks and TPWD's Texas Wildlife Expo. Participate in selected nature-related community events.
- Provide social media outlets, including maintaining the Refuge websites and working with the Friends group to provide the latest information to ensure the site has the latest information on wildlife observation opportunities such as bird sightings, optimal viewing times, and links to other important wildlife observation websites.
- Provide a 1 mile trail and boardwalk across from the Brazoria Field Office to enhance wildlife observation opportunities.

Wildlife Photography

- Within the first year of this plan, establish bird feeding stations at Discovery Center and Complex office, and manage these stations as dynamic exhibits that promote photography, wildlife observation and environmental educational opportunities for the public.
- Host children refuge photography contests and display winning photos in the Refuge Complex office or other outreach opportunities including the Brazos Mall.
- Facilitate nature photography on the Refuge in partnership with local schools or other organizations for children and adults by making cameras and portable photo blinds available for loan to the visiting public.
- Construct two additional photo blinds on the Complex; one at Dow Woods and one on Otter Slough at Brazoria NWR.

Interpretation

- Within two years of the signing of this plan, develop and revise the "Volunteer Manual" to ensure consistency in our message to the public to include the Service mission, Refuge System mission, Refuge purpose, and difference between State and Federal areas.
- Within 3 years improve existing kiosk exhibits and add at least one new informational kiosk to be located off FM 2004 by Brazoria field office.
- Within two years of this plan, develop and schedule high-quality interpretive programs to be held monthly during fall, winter and spring.

Goals, Objectives and Strategies

Public Use Goal (cont.)

To develop and implement quality wildlife-dependent recreation programs, which are compatible with refuge purposes, and foster enjoyment and understanding of the Refuge's unique wildlife and plant communities.

Objectives

Hunting—Over the life of the Plan, the Complex will continue to work through partnerships to increase youth hunting opportunities by 20% while maintaining all other hunts at current use levels.

Strategies

Interpretation (cont.)

- Recruit, enlist and train naturalists for interpretative and environmental education programs across Refuge habitats.
- Continue to offer popular, audience-specific, interpretive programs both on- and off-site, and at special events such as the Brazoria County Library Series, “Migration Celebration,” and “Wildlife Expo”, which includes activities such as interpretive van tours, guided bird and wildflower walks, and programs for school groups, libraries, and scouts.
- Within 3 years, develop and interpret the San Bernard Auto Tour.
- Update all informational and interpretive materials to improve accuracy, consistency, quality, and availability. Revise and make some brochures available to local visitors in Spanish.
- Throughout the life of this plan, maintain and update or replace damaged and obsolete interpretive and informational panels on Refuges; including entrance signs, roadway signs, wayside exhibits, trails, and viewing areas.
- Within 5 years, develop portable interpretive displays that highlight the Refuge System mission, Refuge purposes, management, themes and natural resource highlights that can be used on-site as needed for programs or special events, and for off-site displays at festivals, special events and malls.
- Within two years, install identification markers for native plants at the Discovery Center, Bobcat Wood and Complex gardens.
- Within three years, in cooperation with Friends of the Brazoria Wildlife Refuges, offer educational materials for sale at the Discovery Center and Complex.
- Within five years, write and implement the Interpretive Concept Plans for Texas Mid Coast NWRC.
- Within two years of the Plan, develop an annual TMC visitor use survey.

Hunting

- Throughout the life of this plan, provide waterfowl hunting opportunities within designated Public Waterfowl Hunting Areas in accordance with regulation set forth by the State of Texas.
- In cooperation with Texas Parks and Wildlife Department (TPWD), provide additional hunting opportunities which foster an appreciation of Refuge resources and are appropriate and compatible (ie. Eagle Nest Lake).
- Continue to partner with TPWD and Texas Youth Hunting Program, to offer opportunities for youth deer and feral hog hunting.
- Encourage hunting participation of under-represented segments of the public such as disadvantaged youth, persons with disabilities, and women, through various outreach.
- visibility, and effective wording within informational brochures with high quality maps, signs, and posts on the Refuge website.

Goals, Objectives and Strategies

Public Use Goal (cont.)

To develop and implement quality wildlife-dependent recreation programs, which are compatible with refuge purposes, and foster enjoyment and understanding of the Refuge's unique wildlife and plant communities.

Objectives

Fishing—Over the life of the plan provide for a 55 % increase of compatible, safe, accessible, and quality recreational fishing experience while minimizing conflicts with other non-fishing visitors.

Environmental Education—Over the term of the Plan, increase both on and off refuge structured curriculum-based environmental education opportunities (DEEP) by 25%.

Strategies

Hunting (cont.)

- Throughout the life of this plan, promote hunter compliance with Federal and State regulations and encourage good sportsmanship, ethical hunting behavior, and understanding of the Refuge and its purposes through law enforcement.

Fishing

- Continue to provide a variety of fishing opportunities including bank fishing, canoe/kayak and motorboat access areas.
- Maintain facilities at the Public Fishing Areas including the accessible fishing piers.
- Revise all brochures and fishing maps to include the San Bernard beach as a public fishing area, allowing non-motorized access along the beach to the San Bernard River.
- Continue to encourage fishing among youth by offering fishing oriented educational activities in DEEP and at Migration Celebration.
- Encourage fishing participation by under-represented segments of the public such as disadvantaged youth, persons with disabilities, and women, through outreach to various organizations
- Within three years provide at least one educational fishing event for local youth with an emphasis on disadvantaged and minorities.
- Throughout the life of this plan, promote angler compliance with Federal and State regulations and encourage good sportsmanship, conservation practices, and understanding of the Refuge and its purposes through law enforcement visibility and effective wording within informational brochures with high quality maps, signs, and on the Refuge website.
- Conduct all fishing activities in accordance with State of Texas regulations.

Environmental Education

- Throughout the life of this plan, offer hands-on environmental education programs both on- and off-site such as field trips, special educational events, and special-interest group programs.
- Throughout the life of this plan, conduct annual on-site environmental education workshops that orient educators to the Refuge resources and in turn encourage them to incorporate this into their curriculum, both in the classroom and during field trips.
- Maintain existing and build additional partnerships with local, State, and Federal agencies, nonprofit organizations, businesses, and individuals during the Migration Celebration to improve the Refuge EE Program.

Goals, Objectives and Strategies

Public Use Goal (cont.)

To develop and implement quality wildlife-dependent recreation programs, which are compatible with refuge purposes, and foster enjoyment and understanding of the Refuge's unique wildlife and plant communities.

Objectives

Outreach—Increase Refuge awareness in the local community by annually providing opportunities for approximately 15,000 people to participate in off-Refuge programs and exhibits. These activities will also help recruit an additional 5 % annually of volunteers for the Refuge, and help build membership an additional 5 % annually for the Friends of Brazoria Wildlife Refuges.

Strategies

Environmental Education (cont.)

- Promote the learning trunks and resource materials for the Environmental Education Program to use on-site and take off-site for programs. These trunks include materials for topics as wetlands, wildlife, plants, conservation, endangered species, and fishing.
- Within two years, develop and maintain a multi-faceted environmental education resource library comprised of books, videos, posters, environmental education field trip guides, specific topic packets, and pertinent written materials. These will be available for use in Refuge educational programs and by educators.
- Within 10 years, in cooperation with partners and Friends group, explore the development of environmental education areas at San Bernard NWR and Dow Woods. At Dow Woods, construct an environmental education laboratory addition next to the pavilion, with seating and study/lab equipment for up to 50 students and teachers for the various schools, including Brazosport College.
- Within three years, develop the environmental education portion of the Visitor Services Plan.
- Annually review and maintain the “Educator’s Guide to Texas Mid-Coast National Wildlife Refuge Complex” that provides orientation, guidelines, grade-level, and State learning standards information, maps, and site-specific activities that focus on one or more Refuge themes.
- Throughout the life of this plan, seek funding sources such as grants for Refuge environmental education programs that promote understanding and appreciation of the Refuge’s natural and cultural resources and their management consistent with Service policy.
- Throughout the life of this plan, promote the Discovery Environmental Education Program through news releases, the Refuge website, and informational fliers and other social media.

Outreach

- Within two years, complete an Outreach Plan which will better identify the need, target audience and means for future outreach
- Coordinate with partners and Friends group, continue to work off-site to promote and support Refuge events like the Migration Celebration. Sponsor special on-site annual events such as Refuge Week, International Migratory Bird Day and National Fishing and Boating Week that engage the public in wildlife-dependent activities, and increase people’s knowledge and understanding of wildlife conservation and related issues.
- Maintain an active volunteer program which includes recruitment and training of volunteers for assistance in all Refuge programs.
- Within eight years, develop at least two outreach tools such as posters or brochures to promote public involvement or participation in support of the Refuge purposes and vision.

Goals, Objectives and Strategies

Public Use Goal (cont.)

To develop and implement quality wildlife-dependent recreation programs, which are compatible with refuge purposes, and foster enjoyment and understanding of the Refuge's unique wildlife and plant communities.

Objectives

Law Enforcement and Visitor Safety—Throughout the life of the Plan, the Complex will double its law enforcement presence in and around the Complex by increasing cooperation with other local, county and state public safety officers by formalizing cooperative agreements through Memorandums of Understandings (MOU's).

Strategies

Outreach (cont.)

- Increase outreach efforts to local schools, organizations, agencies, neighbors, and the public to enhance awareness, understanding, and support for the Refuge Complex and Refuge System.
- Partner with local hunting and fishing organizations to develop outreach opportunities specific to those uses.
- Support and help promote the Texas Junior Duck Stamp Program including featuring artwork in the Brazos Mall.
- Coordinate with local chambers of commerce, birding organizations, local attractions, and other public venues such as motels to display and provide Refuge information to the public.
- Ensure consistency of media and public communication information among staff and volunteers during all outreach functions, as an important element of the Visitor Services Plan. This involves maintaining and regularly updating the Refuge and Friends website as a “single source” for this outreach information.
- Within eight years, develop outreach plans for important resource issues in the local area for distribution in the Discovery Center, Complex and field offices.

Law Enforcement and Visitor Safety

- Continue to build strong partnerships to increase law enforcement coverage, enhance visitor safety, and emergency response. Continue to work cooperatively, developing good relations and radio communications with local law enforcement offices of TPWD Law Enforcement; Brazoria, Matagorda County Sheriff's Departments; Texas Department of Public Safety, U.S. Fish and Wildlife Service Law Enforcement Office in Houston, to enforce Federal, State, and Refuge-specific hunting and fishing regulations.
- Provide for visitor safety, protect resources, and ensure compliance with Federal, State, and Refuge-specific regulations through law enforcement.
- Maintain a good working relationship with Emergency Medical Services of Brazoria and Matagorda counties and local volunteer fire departments to provide immediate emergency response as needed.
- Within 3 years, develop a Law Enforcement and Emergency Services Management Plan.
- Annually review and revise Refuge-specific visitor regulations for consistency and compatibility.
- Maintain current law enforcement and emergency equipment and provide as necessary, including any patrol vehicles to meet applicable Federal and State emergency vehicle standards.
- Increase the public's knowledge of Refuge regulations and the boundaries on Refuge lands. Update web pages and improve Refuge Complex signs, kiosks, and facilities to better advise the public on Refuge regulations, boundaries, and safety issues.