



Chapter 5 Parks & Resources

Town of South Padre Island Comprehensive Plan

The Island offers many amenities including pristine beaches, the Laguna Madre Bay, and an abundance of flora and fauna. With the growing popularity the Town has experienced, though, comes development pressure. And development, if not well-managed, may disturb the very resources that attract residents and visitors. Development can impact habitats and alter natural forms – a process that can have devastating impacts. Protection and conservation of resources is essential to sustain the ecological systems and ensure long-term economic success.

Purpose

South Padre Island is one of many barrier islands located along the Gulf Coast and is separated from the mainland by the Laguna Madre Bay. It is characterized by broad beaches, vegetation-stabilized dunes (increasingly), expansive wind-tidal flats, wash-over channels, brackish and salt-water ponds and marshes, and black mangrove communities. South Padre has an important role in the coastal ecological system and as a protective barrier for ocean-bearing storms.

Tourism is the largest industry and, thus, the most significant contributor to the economy. This industry is based upon the natural resources that attract both residents and visitors. Ongoing success will rely, in part, on the existence and preservation of these natural resources.

The purpose of this element is to ensure protection and conservation of natural resources, allowing for their continued use and enjoyment by future generations. Development interests of land owners and economic development opportunities must be balanced with a commitment to resource conservation.

The greatest long-term threat to the health and productivity of the State's Bay and Estuary systems is diminished freshwater inflows. The Lower Laguna Madre Bay System is designated as a priority system for water quality improvements in the 2005 Land and Water Resources Conservation and Recreation Plan.

Accordingly, 1.6 miles of the Town's beaches are eroding at an average of eight feet per year, while 2.4 miles of beaches are accreting at rates averaging up to two feet per year. Historically, accretion has occurred in the south; however, short-term erosion rates show that the south is eroding, the middle of the Island has sporadic accretion, and the northern-most portion, although experiencing long-term erosion, is accreting. The slowing of erosion rates is primarily due to re-nourishment efforts.

Source: The University of Texas Bureau of Economic Geology

Texas has one of the highest rates of coastal erosion in the country, which can be detrimental to beaches and increase the risk to beachfront structures. In response to this the Texas Legislature created the Coastal Erosion Planning & Response Act and put the General Land Office in charge of its administration. The Coastal Erosion Fund provides funding for a two-year period to fend off the forces eroding Texas beaches.

Issues

The following issues emerged during the course of developing this plan:

1. **Protection and enhancement of the beach and dunes** – As one of its greatest assets, the beach is the highest priority for ongoing nourishment and protection against both natural and artificial (human-caused) erosion. Doing so requires pro-action to maintain a continuous dune line and prevent erosion-contributing influences. Without continuous planning and advanced preparedness, the beach and dunes will be increasingly vulnerable – as will the ecosystems they support and the development they help to protect.
2. **Sustaining the quality and environmental value of Laguna Madre** – The Laguna Madre Bay is a valuable resource that has great commercial, recreational, and conservation value. The Bay provides for a variety of recreational and eco-tourism opportunities, including boating, fishing, and bird watching. Preserving the Bayside and its marine and natural habitats, including the extensive seagrass beds, is important to sustain fish and wildlife populations and the tourism industry. Enhancing water quality is also important, as a healthy aquatic system is necessary to support Bay functions. Population growth is threatening the system with dredging, spoil removal, and excess nutrients. High concentrations of nutrients come from urban development and runoff. Together with other jurisdictions, the Island may better manage water quality by controlling nonpoint source pollution.
3. **Sustainability of habitats and valuable, native flora and fauna** – Coastal wetlands are valuable natural resources that provide many ecological and economic benefits, e.g., flood control, improved water quality, erosion control, wildlife habitat, and recreation. However, they are disappearing due to erosion, subsidence, rising sea level, and/or being filled in and built over to accommodate development. Along with the protection of valued lands, open views, and natural amenities, other natural areas and open spaces also provide areas for native vegetation, recreation, nature viewing, and habitat for wildlife. Protection and enhancement of these resources are instrumental to environmental conservation, providing for recreational and ecotourism opportunities and for long-term growth of the economy. Natural Resources and Priority Protection Areas are shown in **Figure 5.1, Natural Resources**, and **Figure 5.2, Priority Protection Habitat Areas**.
4. **Parks and recreation facilities** – The Island provides for many nature-based recreational and tourism opportunities; however, these amenities can be enhanced to provide more trails, neighborhood parks and gathering areas, and recreational

facilities and programs. While the visitor population is likely content with beach and water activities, residents have different needs, which were clearly articulated through the visioning process. Due to the nature of the population and the environment, the design of facilities must be unique. Providing for recreational needs may be accomplished through conservation of open space and protection of resources and valuable areas.

Goals and Recommendations

Beach and Dunes

- 5.A. Secure funding for beach renourishment. Ongoing funding for beach maintenance should be established as a line item in the Town's budget.
- 5.B. Protect the dune system from erosion and artificial damage
- 5.C. Adhere to strict enforcement policies for dune trespassers
- 5.D. Dedicate funding for beach and dune development and maintenance
- 5.E. Create, preserve, and enhance access to the beach

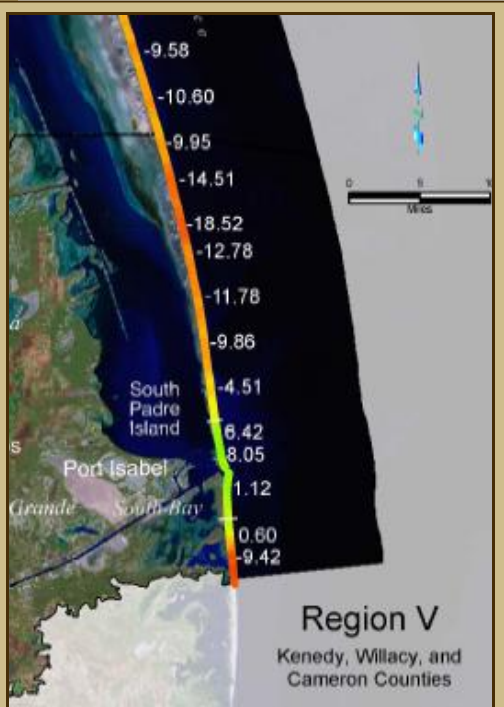
GOALS

Recommended Actions

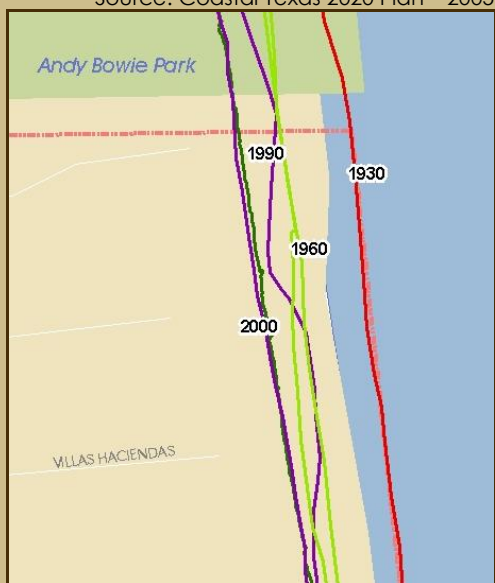
- 5.1. Construct or reconstruct two-way walkovers at all designated beach access points. Simultaneously, construct directional barriers to prevent breached access to the dunes.
- 5.2. Install interpretive signage along the walkovers and dune line for environmental education as to the function and value of the dune system and the purpose of its protection. The Town should keep at least two beach access points in the raw state for the purpose of education and enjoyment as dune preserves.
- 5.3. Actively involve beachfront owners and managers in the public education and enforcement of illegal dune access.
- 5.4. Encourage joint construction of walkovers and boardwalks when feasible.
- 5.5. Provide at least two ADA walkovers where and when feasible.
- 5.6. Establish or strengthen an ongoing, regular dune maintenance program. Continue to leverage access to State and Federal funds to continuously sustain this activity.
- 5.7. Seek legal counsel as to the ability to use park land dedication requirements as a means of beach and dune protection and development. Further, research whether fees collected through an in-lieu of dedication program may be used as a source of funds for beach/dune development and maintenance.



- 5.8. Consider seeking legislation due to the unique and different needs of the Island.
- 5.9. Regularly repair, re-nourish, and eliminate gaps in the dune line via dredging and/or hauling of sand.
- 5.10. Develop an aggressive program to re-vegetate bare dunes, including assistance from and partnership with local groups and agencies.



Average Annual Shoreline Change Rate
Source: Coastal Texas 2020 Plan – 2005



Historical Shoreline Data

Source: Bureau of Economic Geology, University of Texas Austin, Kendig Keast

- 5.11. In coordination with the General Land Office (GLO), annually re-map the dune protection line. Subsequently, monitor the change and act accordingly. Review and amend the dune protection line as necessary and applicable.
- 5.12. Promote public education regarding dune protection and beach cleanliness via signs and print media.
- 5.13. Evaluate all options and the feasibility and means for controlling erosion.
- 5.14. Evaluate and embrace Beach Management Practices (BMPs), drawing from programs and experiences of other coastal communities.
- 5.15. Implement a “Leave nothing but footprints” campaign or a similar slogan.
- 5.16. Investigate and support alternatives to beach raking.
- 5.17. A percentage of the Town’s budget should be set aside for the restoration of beach quality sand on an on-going basis, so that funds are available whenever the channel is dredged or a high quality sand source is found for on-going beach renourishment.
- 5.18. A Memorandum of Understanding should be developed with the Brownsville Port Authority to ensure that when the channel is dredged, South Padre Island will have access to that sand.
- 5.19. An on-going contract with a hopper dredge company should be established to assist with obtaining this sand.
- 5.20. A conduit system across the island should be considered to assist with sand placement.
- 5.21. The Town should create a separate, autonomous entity (i.e. Beach Manager) that will oversee and monitor the care of the beach and the dunes. This person/position should be on the city payroll but answer to the environmental concerns of the beach first.

Laguna Madre

- 5.F. Protect the Laguna Madre as a valuable resource
- 5.G. Recognize and support the multiple functions of the Bay
- 5.H. Enhance water quality to conserve habitat and minimize health risks
- 5.I. Heighten management to preserve the quality of the Bay
- 5.J. Continue maintaining and beautifying street ends
- 5.K. Protect public access
- 5.L. Impose, support and enforce rules of practical safety for the beach and Bay, and provide education and enforcement of water safety practices for the Bay / Tompkins Channel areas.

Recommended Actions

- 5.22. Prioritize and secure funding to implement the recommendations and philosophies outlined in the Ad Hoc Bay Area Task Force Report, such as:
 - a. Continue maintenance and beautification of not only street ends on the Bay within the public street right-of-way, but any and all existing public facilities (including bulkheads and retaining walls on City property).
 - b. Explore the possibility of a multi-purpose recreational area with boat ramps on the south end of Town;
 - c. Explore the possibility of a multi-purpose recreational area on the northern end of Town oriented toward non-motorized light craft (kiteboards, wind surfing, kayaks, etc.) possibly in conjunction with Cameron County;
 - d. Providing additional public boat ramps in-lieu of permitting private docks beyond the rights-of-way and Town limits toward Tompkins Channel.
 - e. Work with appropriate governmental authorities to establish a no-wake zone in the Tompkins Channel and prevent the encroachment of private docks into the public right-of-way and into Tompkins Channel.
- 5.23. Develop a recreational use plan, identifying associated facilities and improvements to facilitate its implementation, e.g. marina improvements and the requisite dredging.
- 5.24. Reduce water quality impacts as a result of non-point source pollution by:
 - a. Participating in regional water quality management efforts.
 - b. Establishing runoff controls and requirements for construction sites.
 - c. Preparing a stormwater management plan.

GOALS

- d. Adopting structural and non-structural Best Management Practices for controlling the quality of runoff.
 - e. Adopting a stormwater management ordinance that requires pre-treatment of stormwater prior to discharge off site.
 - f. Controlling pollution from marina operations, including runoff from parking and maintenance areas.
- 5.25. Prepare a Bay area management plan to address the long-term conservation and sustainability of wetlands, erosion, water quality, natural habitat areas, and recreational opportunities on the Bay.

Wildlife Habitat and Flora and Fauna

- 5.M. Conserve environmentally sensitive lands
- 5.N. Support the economy through nature preservation and ecotourism
- 5.O. Conserve marine and other habitats to ensure environmental quality
- 5.P. Protect and aggressively restore native flora and fauna
- 5.Q. Protect wetland resources through regulatory controls and voluntary conservation and restoration
- 5.R. Improve public education outreach regarding the ecological values of wetlands and plant species



Laguna Madre Bay provides for a number of amenities including wildlife viewing, boating, and fishing.

Recommended Actions

- 5.26. Identify, inventory, and map primary and secondary conservation areas in coordination with the General Land Office, Texas Parks and Wildlife, and other agencies. Conservation areas may include wildlife habitat, dunes, beaches, wetlands, scenic view areas, and areas that provide linkage.
- 5.27. Support conservation of existing wetlands and oppose development and other activities that destroy those wetlands.
- 5.28. Establish an open space acquisition program and identify funding sources for acquisition. Consider public funding sources, public/private partnerships, park land dedication and fee in-lieu provisions, and/or nonprofits like the Trust for Public Land.
- 5.29. Coordinate with the land owners to the north to request voluntary dedications of sensitive land for public purposes. Enter into a development agreement to secure their

development interests regarding annexation and allowable development rights.

- 5.30. Require a certain percentage of landscaping and bufferyard plant materials be of a native species.
- 5.31. Adopt landscape preservation provisions to protect significant populations of native flora and fauna.
- 5.32. Consider revising the landscape ordinance to prevent the installation of undesirable and/or invasive plants and trees as part of the required landscaping installed for new development.
- 5.33. Limit impervious surface allowed per site or per developed subdivision.
- 5.34. Require the use of vegetated buffers adjacent to wetlands and sensitive areas.
- 5.35. Implement strategies to protect seagrass beds, which is an important marine habitat for finfish and shellfish, including:
 - a. Establish a no-wake zone.
 - b. Improve channel access to developed portions of the Island, with appropriate signage and enforcement.¹
 - c. Develop an education and outreach program regarding the importance of seagrass beds and measures to avoid or, at a minimum, mitigate impacts by boaters.
- 5.36. Prepare a public education program to provide information about wetlands and their importance to the environmental system and economic well being of the Island.
- 5.37. Establish a system of incentives for wetland preservation, including tax incentives, funding and assistance with preservation, density bonuses, and market advantages (eco-tourism).
- 5.38. Amend the development ordinances to include strategies for avoidance, minimization, and mitigation of wetlands. Strategies include clustered development, as well as water gardens, rain barrels, pervious pavement, and vegetated swales, among others.
- 5.39. Encourage on-island mitigation for all new developments, where necessary, and identify potential mitigation sites.
- 5.40. Coordinate with the GLO in mitigating and proactively planning for oil spills and other environmental occurrences. Organize a volunteer group that may be dispatched for clean-up assistance.
- 5.41. Consider local tax abatement or other incentives for preservation of heavily vegetated properties.

"Submerged seagrass meadows are a dominant, unique subtropical habitat in many Texas bays and estuaries. These marine plants play critical roles in the coastal environment, including nursery habitat for estuarine fisheries, a major source of organic biomass for coastal food webs, effective agents for stabilizing coastal erosion and sedimentation, and major biological agents in nutrient cycling and water quality processes."

Source: Seagrass Conservation Plan for Texas. 2000

¹ Coastal Texas 2020 Plan

- 5.42. Adopt an ordinance allowing property owners to apply to have their property designated as a “Natural Habitat Area”. The purpose and policy of the ordinance is to preserve and protect the island’s remaining natural habitat, for animals, especially birds. Land designated as NHA would be subject to different mowing guidelines. Enforcement and disputes should be processed through the city manager or his designee, subject to review by the Board of Aldermen, and finally to municipal court. The ordinance should separately address matters in the current town and new development (up north). Within the town, developed and undeveloped land may be subject to different guidelines. Among the criteria for qualifying for NHA status would be to maintain a specified minimum amount of approved native plants. Financial incentives, tax credits or abatement, should be offered.

Parks and Recreation

Providing for neighborhood-focused parks and recreational programs and activities is important to the quality of life for those who live on the Island. While their intent is not to attract tourists and visitors, they may still supplement the nature-based recreational amenities on the Island. Parks are also well documented as contributors to the economic health and value of the community. Currently, the three County parks meet much of the need for larger-scale community facilities.



Trails and separated pathways are important to facilitate safe pedestrian activity.

Existing Facilities

Existing park facilities include Water Tower Park, which is a one-half acre park with a basketball goal and bleachers, a playscape, and three covered picnic tables. Additional facilities include a road island with two covered picnic tables and a pavilion (Morningside Park) and the Island Gateway. In addition are the three County parks located at the northern and southern ends of the Island. Isla Blanca Park consists of 305 acres, has approximately one mile of Gulf beach frontage, and is located in Cameron County Precinct 1. This coastal park is located at the southern tip of South Padre Island and provides public beach access, over 600 Recreational Vehicle rental spaces, and two picnic pavilions with immediate frontage to the Gulf of Mexico and one on the Laguna Madre Bay. This park also provides many retail concessions, such as a water park, full

service marina with boat sales, clothing retail, restaurants, beach rental concessions, and fast food concessions.

Andy Bowie Park consists of approximately 225 acres located just north of the South Padre Island Town limits and is also located in Cameron County Precinct 1. This park is also known as Beach Access #2 and provides pedestrian beach access, two picnic pavilions that accommodates groups of 150 per pavilion, a beach rentals concession, a fast food concession, 18 Recreational Vehicle rental spaces and two restrooms with showers.

E. K. Atwood Park, also known as Beach Access #5, consists of 2.43 acres and is also located in Cameron County Precinct 1. This park provides vehicular beach access and accommodates approximately 90 persons under a covered picnic pavilion. This park also provides restrooms and showers with a walkway for pedestrians to access the beach.

The popular Laguna Madre Nature Trail, located adjacent to the Convention Center, is also owned by the County. The South Padre Island Nature and Birding Center will also be available, although this will primarily attract tourists.

Park Standards

To satisfy diverse individual interests and ensure adequate and equal opportunity, the National Recreation and Park Association (NRPA) recommends the standards illustrated in **Table 5.1, Development Standards**. The Island is unique, though, which warrants modification of the standards to reflect the extent of available public amenities, the type of development, and the user characteristics. Therefore, following are the recommended standards:



In lieu of neighborhood park space, public streets are being used for recreation.

Table 5.1 Development Standards

Component	Use
Mini-Park	Use: Specialized facilities serving concentrated or limited population or specific group such as tots or senior citizens.
	Service Area: Less than ¼-mile radius
	Desirable Size: 1 acre or less
	Acres per 1,000 population: 0.25 to 0.50
	Site Characteristics: Within neighborhoods and close to apartments, townhouses, or housing for the elderly.
Neighborhood Park	Use: Area for intense recreation activities such a field games, court games, crafts, playgrounds, skating, picnicking, wading pools, etc.
	Service Area: ¼- to ½-mile radius, serves a neighborhood area
	Desirable Size: Minimum five acres
	Acres per 1,000 population: 1.0 to 2.0
	Site Characteristics: Suited for intense development, easily accessible, centrally located in neighborhood, with safe walking and bike access; may also be a school playground.
Community Park	Use: Areas of diverse environmental quality may include intense or combined recreation areas such as athletic complexes, large pools, and areas for walking, viewing, sitting, picnicking, etc. May include natural features such as water bodies in area for intense development. Easily accessible to all areas of the community.
	Service Area: 1- to 2-mile radius (serves several neighborhoods)
	Desirable Size: 10 to 50 acres
	Acres per 1,000 population: 5.0 to 8.0
Linear Park	Use: Area for hiking, biking, jogging, horseback riding, canoeing, and similar off-street activities.
	Service Area: No applicable standard
	Desirable Size: Width should be sufficient to protect resources and provide maximum use and safety.
	Acres per 1,000 population: Variable
	Site Characteristics: Man-made corridors such as utility rights-of-way, greenbelts, ridgeline or bluff areas, water bodies, ditches, canals, and abandoned rail lines.

1. **Mini-parks** are generally provided on site in the form of pools, tennis courts, exercise facilities, and beach volleyball, among an assortment of other offerings. To ensure adequate on-site facilities, there should be requirements and standards for development over a certain density.

2. **Neighborhood parks** represent the most significant needs. Since 74 percent of the housing units are part-time, it is recommended that the standard be 0.50 acre per 1,000 residents.
3. **Community parks** continue to be necessary within Town limits. Although the Town has the county parks on the north (Andy Bowie) and the south (Isla Blanca), the Town still needs to provide additional facilities for our residents and visitors.
4. **Linear parks** are warranted, but unreasonable for the current Town limits. To the north, they may be achieved within the required open space requirements integrated into the zoning districts (as proposed). Density bonuses may be used to offset the required open area. This, however, assumes annexation and the imposition of zoning or use of development agreements. The standard for community parks may be reduced to 3.5 acres per 1,000 residents, coupled with provision of linear parks consistent with Town requirements.

Needs Assessment

Displayed in **Table 5.2, Existing and Future Needs**, is the amount of park acreage needed to meet the demand of the current and projected populations. Based on a standard of 5.5 acres per 1,000 persons, 1.4 acres of neighborhood parks and 14.25 acres of community parks are needed. Currently, the Town has 0.5 acres, meaning there is a deficiency in neighborhood parks of one acre. The Town has sufficient acreage in community parks to meet the needs in the Year 2025. As growth continues, additional neighborhood park acreage will be needed. By the Years 2015 and 2025, the Town will need an additional one and one-half acres and two acres of neighborhood park land, respectively. Although there is sufficient acreage within the three

Table 5.2, Existing and Future Needs

Classification	Standard (acres per 1,000 persons)	Existing Acreage	2005 ¹		2015 ²		2025 ³	
			Required	Surplus/ Deficient	Required	Surplus/ Deficient	Required	Surplus/ Deficient
Neighborhood Park	0.5	0.50	1.43	(0.93)	2.00	(1.50)	2.23	(1.73)
Community Park	5.0	266.00	14.25	251.50	20.05	245.50	22.28	243.72
TOTAL		266.50	15.68	250.60	22.05	244.00	24.51	241.99

Note: The acreage for Morningside Park and Gateway Park is not included as neighborhood parks.

1 – Based on a population of 2,849 (Comprehensive Resort Market Analysis, 2005)

2 – Based on a population of 4,010 (Comprehensive Resort Market Analysis, 2015)

3 – Based on a population of 4,455 (Texas Water Development Board, 2025)

County parks to meet the Island's long-range needs, a community park will be needed in the northern development area due to the distance from Andy Bowie Park, as shown in *Figure 5.3, Park Service Area and System Plan*.

In addition to the acreage of parks, their location is also an important consideration. Neighborhood parks should be within one-quarter mile for residents. Due to the linear nature of the Island, the typical one-mile service area for community parks has been linearly elongated. Therefore, the three County parks, together with neighborhood parks in the center of the Island, may offer suitable coverage for the existing development.

GOALS

Parks and Recreation

- 5.S. Design unique parks to meet the needs and desires of residents
- 5.T. Provide adequate park land concurrent with new development
- 5.U. Provide a system of trails and pathways connecting key destinations across the Island
- 5.V. Provide indoor facilities and recreational programming
- 5.W. Improve access to the Laguna Madre Bay

Recommended Actions

- 5.43. Acquire by dedication or fee simple purchase neighborhood parkland within the identified deficiency areas displayed in **Figure 5.3, Park Service Area and System Plan**. Also, acquire community park acreage north of the Town limits. Seek to acquire this land within five years to avoid escalated land costs.
- 5.44. Coordinate with the County to preserve or acquire a portion of Isla Blanca Park for public park land in the event it sells.
- 5.45. Amend the zoning ordinance to require on-site amenities for developments having 15 units per acre or more.
- 5.46. Amend the subdivision ordinance to include the dedication of public beach access locations as well as public parks for property platted north of The SHORES.
- 5.47. Consider a tax abatement or lease on undeveloped land for use as multi-use recreational fields.
- 5.48. Develop a backbone system of trails in the area north of the Town limits, which would be required and modified as development occurs.
- 5.49. Conduct design and development workshops for the needed future parks to prepare a master development plan for each

property. Resident participation is essential to ensure development that is compatible with their needs.

- 5.50. Establish a park land dedication and fee in-lieu ordinance. This would require private development or public dedication of land concurrent with new development and consistent with the standards of this plan. The fee amount must be equivalent to the value of dedication and/or private development. It must include minimum facility and development standards.
- 5.51. Develop a community center with indoor and outdoor facilities, which could facilitate recreation.²
- 5.52. Enhance existing beach access points to include additional amenities such as public showers and restrooms, drinking fountains, benches, small play areas, and/or small picnic pavilions as per the recommendations of the Beach and Dune Task Force.
- 5.53. Continue to maintain and upgrade existing parks.
- 5.54. Improve existing boat access ramp locations along the Bay to include landscaping, benches, picnic tables, and/or other amenities. Seek a Boat Access Grant through Texas Parks and Wildlife.

² The recommendation for a community center was stated in the 2000 Parks Master Plan and the 2010 Implementation Plan.