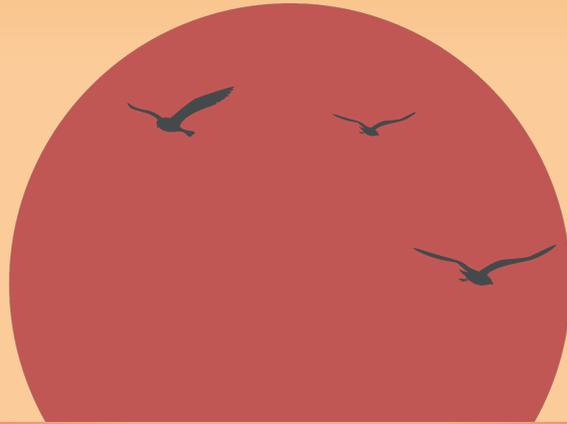


# NORTH BEACH ECO PARK PLAN

March 2023



## Acknowledgments

The planning process for the North Beach Eco Park was conducted as a partnership between the City of Corpus Christi, North Beach Community Association, Texas State Aquarium, USS Lexington, Visit Corpus Christi, and the American Society for Landscape Architects, with assistance from the National Park Service Rivers, Trails, and Conservation Assistance Program.

During the planning process, representatives from the following agencies provided feedback and guidance: Texas A&M University Coastal Studies Center, Coastal Bend Bays and Estuaries Program, Hart Institute for Gulf of Mexico Studies, Texas Parks and Wildlife, and the US Fish and Wildlife Service.

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## Introduction

The northern end of North Beach contains thirty city-owned acres comprised of wetland habitat, grassy areas, and a popular beach. This area has played an important role as a shorebird feeding ground and as a recreational amenity for residents and visitors alike.

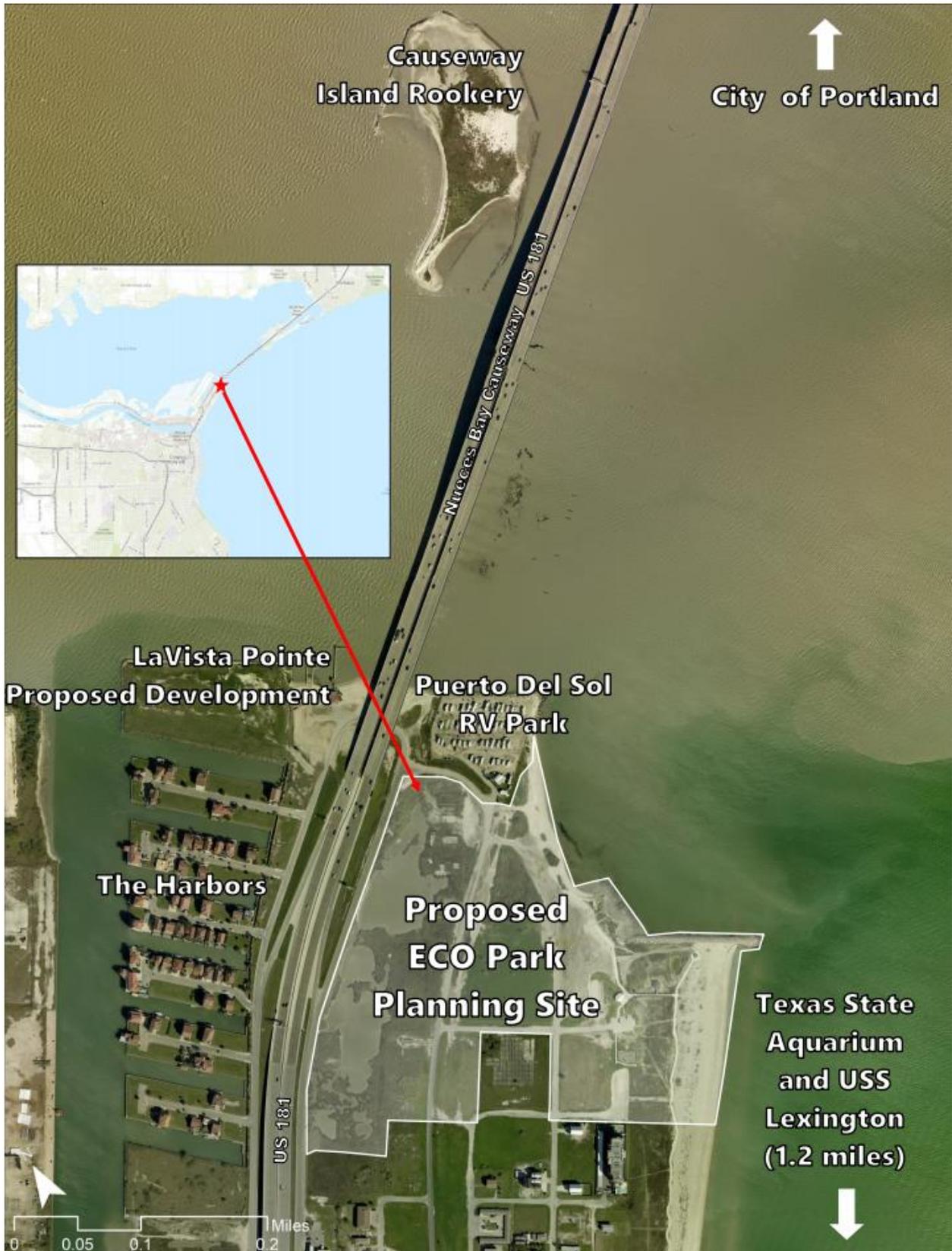
The City of Corpus Christi, in partnership with the National Park Service and local institutions, created the North Beach Eco Park plan to protect these sensitive resources and recommend recreational and educational improvements to the area.

The planning process brought together experts and advocates from the City of Corpus Christi, National Park Service, North Beach Community Association, Texas State Aquarium, USS Lexington, Visit Corpus Christi, the American Society for Landscape Architects, Texas A&M University Coastal Studies Center, Coastal Bend Bays and Estuaries Program, Hart Institute for Gulf of Mexico Studies, Texas Parks and Wildlife, and the US Fish and Wildlife Service.



*North Beach Eco Park Wetlands*

Site Map



## Site History

North Beach is located just north of Downtown Corpus Christi, across the Harbor Bridge. Having been a major tourist draw for over one hundred years, North Beach has attracted thousands of visitors to the Texas State Aquarium, USS Lexington, its shops and restaurants, and the beach itself.

Early settlers identified North Beach as the Indian Trading Grounds, after observing Native Americans using the area for trading purposes. In the early 1900s North Beach began attracting visitors with a religious summer event called Epworth-by-the-Sea revival. Between 1909 and the 1940s, more attractions including a golf course, a bath house, roller-skating rinks, arcades, dance halls, and amusement parks sprouted along North Beach. Some of these businesses and attractions, especially those on the southern end of North Beach, were adversely impacted by the construction of the Harbor Bridge in the late 1950s.

When Harbor Bridge was near completion, business owners thought a name change would be best to keep the North Beach area from getting forgotten. In February 1959, the city council approved the name change from "North Beach" to "Corpus Christi Beach". However, the name didn't catch on with locals and only road signage actually labeled the area as "Corpus Christi Beach". It wasn't until July 2012 that the city council voted unanimously to change the name back to "North Beach" and keep consistent with the local vernacular.

North Beach sits on the fairly calm waters of Corpus Christi Bay, sheltered from the open water of the Gulf of Mexico by Mustang Island to the east. However, storm surges and strong winds associated with hurricanes and tropical storms still pose a significant risk to North Beach. The worst recorded instance was the Florida Keys Hurricane of 1919, with only three structures out of the hundreds of buildings along the beach left standing. The hurricane hit Corpus Christi and North Beach on September 14, 1919 with 115 mile-per-hour winds and a sixteen-foot storm surge. In 1967, Hurricane Beulah hit near Brownsville and caused significant flood and damage in North Beach. In 1980, North Beach was devastated again by Hurricane Allen.

After the downturn of the area beginning in the 1960s, some revitalization efforts were implemented. There was a shore restoration project from the mid-1960s to 1978 that widened the beach from 400 feet to more than a mile. Parking lots and playground equipment were also added in the 1980s as hotels, businesses, and beach homes and apartments were constructed.

In the 1990s, the Texas State Aquarium opened, followed by the USS Lexington Museum. Currently, the Texas State Aquarium and the U.S.S. Lexington bring in an estimated 800,000 visitors a year. More recently, the City of Corpus Christi has invested in improvements at North Beach, including a 2008 bond-funded archway and the Beachwalk, a three-mile paved path connecting the Texas State Aquarium to Dolphin Park near the northern end of North Beach.

Currently, the area identified as the North Beach Eco Park planning area contains three aging observation platforms, a shade structure, children's play area and parking at Dolphin Park, crumbling building foundations, wetlands, grassy areas, and access to the beach, Beachwalk, and the jetty.



*North Beach Eco Park Wetlands and Beach*



*Existing Observation Platform*



*Coastal Bend Birds (TPWD)*

## Environmental Considerations

North Beach is part of Rincon Point, a natural spit that partially separates Corpus Christi Bay from Nueces Bay. Nueces Bay is a more shallow, secondary bay that is part of the Nueces River delta system. Corpus Christi Bay is one of the deeper bays on the Texas Coast with water depth ranging from less than two feet, along the shallow nearshore periphery, to about twelve feet. The tide range is small at approximately 0.6 feet. Meteorology dominates along the Texas coast due to the relatively small tidal range and more shallow water bodies. This is particularly evident during extended periods of strong winds from the southeast, the dominant wind direction, and during intermittent passage of frontal systems which reverse the wind direction from fall to spring. North Beach faces the southeast, therefore winds from the prevailing direction act over a long fetch to produce onshore directed waves most of the year. The angle of the wave approach results in longshore sediment transport that is directed toward the northeast. The result is persistent erosion on the southwest end of the beach and net accretion on the northeast end of the beach, adjacent to the terminal groin.

North Beach has a history of repeated beach nourishment in response to its sand loss. The most recent nourishment was completed during January 2016 and focused on restoring an adequate width to the west end of the eroding beach fronting the parking lot near the Lexington. The lack of a natural dune lined backshore influences the stability of North Beach. Only the far northeast end of the beach has a natural buffer zone between the beach and backshore development. This region, part of Dolphin Park and the North Beach Eco Park focus area, consists of low coppice mounds, small scale wetland and grassy flats. The backshore limit was redefined along the northeast section of the beach by the construction of the concrete Beachwalk during 2012.

North Beach varies in elevation from zero to seven feet above sea level in the main peninsula. The area around North Beach is internationally known as the winter home of the last wild migratory population of federally endangered whooping cranes. People come from all over the world to view these federally listed cranes at the Aransas National Wildlife Refuge and other places in the focal area. The Corpus Christi Bay and Nueces Bay watershed has a large agricultural composition, and the area has intact barrier island systems with seagrass beds, marshes and sand flats. It also includes some of the largest coastal prairie grasslands in Texas, which are important habitat for two other federally listed bird species, the Attwater's prairie chicken and the northern aplomado falcon.

North Beach provides an ecosystem for a wide variety of wildlife. However, Nueces Bay's increase in salinity is hurting the natural oyster and shrimp habitat. In response, the City of Corpus Christi, Texas Parks and Wildlife and two additional state agencies have worked to restore the natural freshwater inflows. The Odem Bay extension is low in salinity and serves as a nursery for shrimp, which migrate to Nueces Bay in spring. Oyster beds are common in this area as well as fish such as trout, black drum, flounder, and redfish. A diverse collection of birds nest nearby, such as the black skimmer, brown skimmer, brown pelican, great blue heron, egret, laughing gull, roseate spoonbill, tern and white ibis especially near the mouth of Rincon Bayou. Local efforts have benefited the bird populations by adding crushed oyster shells to the bay's small islands for improved nesting conditions, and the restoration of marshes.

The area's birds are frequent visitors to the wetlands in the North Beach Eco Park focus area, where they feed on fish, mollusks and invertebrates. These ponds are part of a palustrine emergent wetlands system with fresh-water marshes, meadows, depressions and drainage areas dominated by shrubs, some trees, native and introduced persistent emergent vegetation, and emergent mosses and lichens.

The North Beach Eco Park plan seeks to protect these natural resources and sensitive areas, and utilize them to provide programming and education related to wetland and coastal environments.

## Planning Process

In order to create a park plan that enjoys broad public support and is reflective of community desires, the City of Corpus Christi partnered with the National Park Service Rivers, Trails, and Conservation Assistance Program (RTCA) worked closely with area stakeholders, residents, and institutions starting in early 2019. Key partners and experts included the North Beach Community Association, Texas State Aquarium, USS Lexington, Visit Corpus Christi, the American Society for Landscape Architects, Texas A&M University Coastal Studies Center, Coastal Bend Bays and Estuaries Program, Hart Institute for Gulf of Mexico Studies, Texas Parks and Wildlife, and the US Fish and Wildlife Service. A steering committee with representatives from many of these organizations was formed in 2019 and met frequently to define the planning and public engagement process for the Eco Park.

## Public engagement process

During the public engagement phase, the City conducted two surveys, a meeting with experts and residents, a land management experts roundtable, and a public community design workshop.

Public meeting and survey participants identified nature, wildlife, serenity, and beach access as the top reasons they visit the North Beach Eco Park area. The most requested improvements for the Eco Park were trails, boardwalks or wildlife viewing platforms, interpretive signage, and recreational or educational programming. Participants also identified ecosystem protection, connectivity, and sense of community as key priorities to include in the park's master plan.

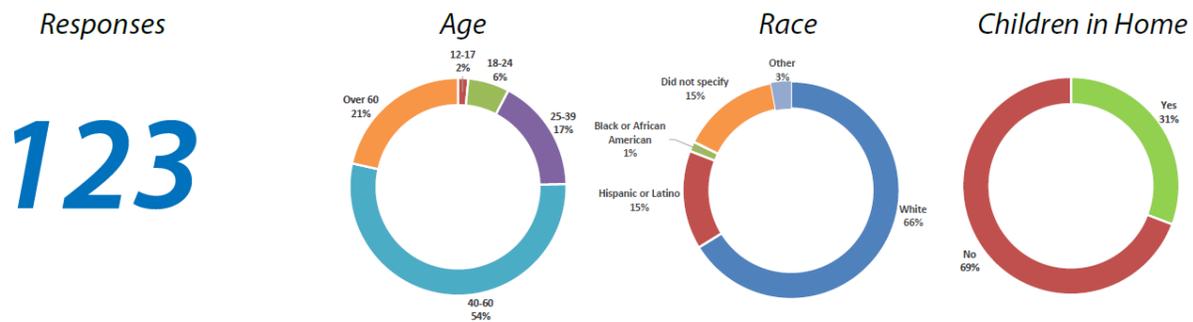
### Public Engagement Timeline

<b>April – November 2019</b>	<i>Design Survey</i>
<b>May 2019</b>	<i>First Public Meeting</i>
<b>June 2019</b>	<i>Experts and Residents Workshop</i>
<b>August 2019</b>	<i>Second Experts Workshop</i>
<b>November 2019</b>	<i>Community Design Workshop</i>
<b>December 2019 – May 2020</b>	<i>Public Preference Survey</i>

## Park Design Survey

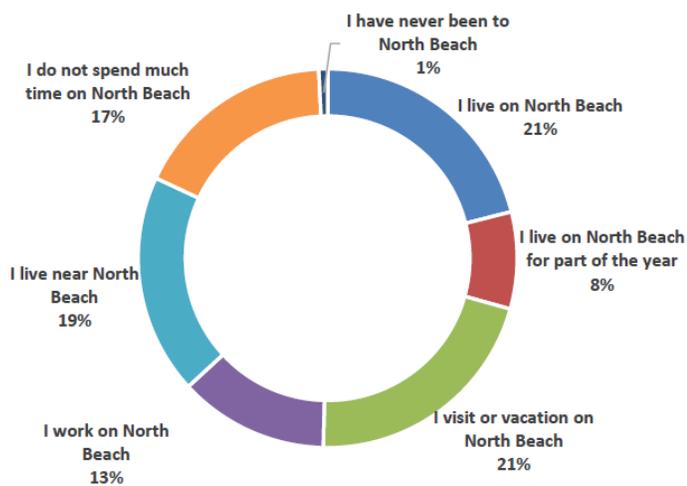
The park design survey was designed to gauge the public’s awareness, current uses, and design preferences for the North Beach Eco Park planning area. The survey was open from April to November 2019 and received 123 responses. The results of the survey are summarized in the following four pages.

### Survey Sample

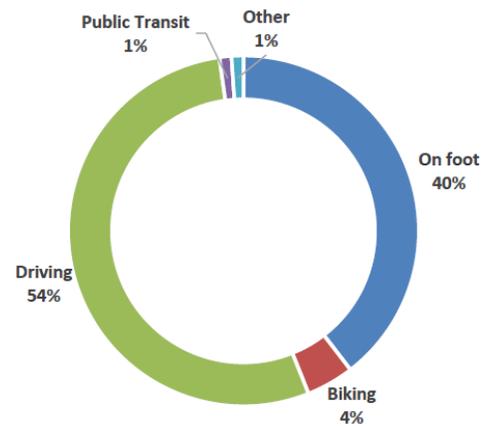


### Awareness and Current Uses of North Beach and Eco Park Area

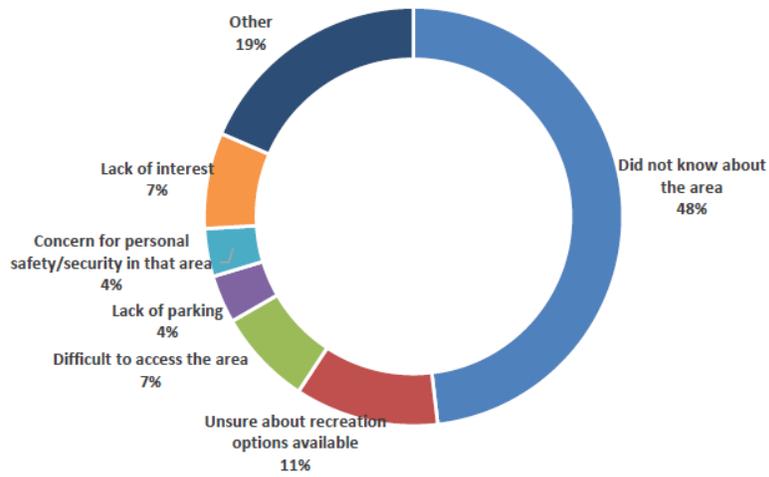
#### How much time do you spend on North Beach?



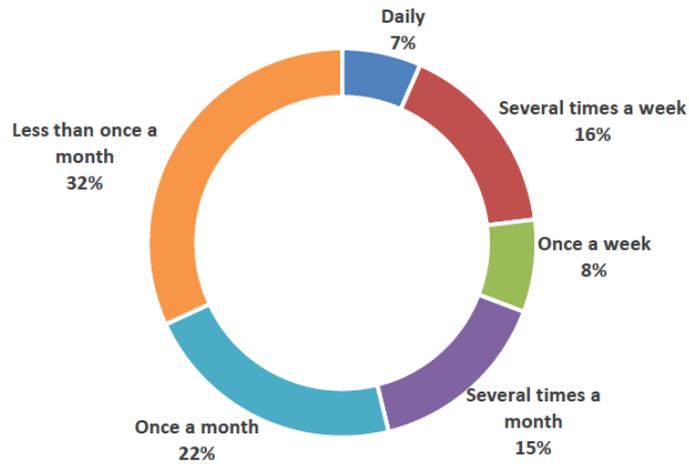
#### How do you typically travel to the proposed Eco Park planning area?



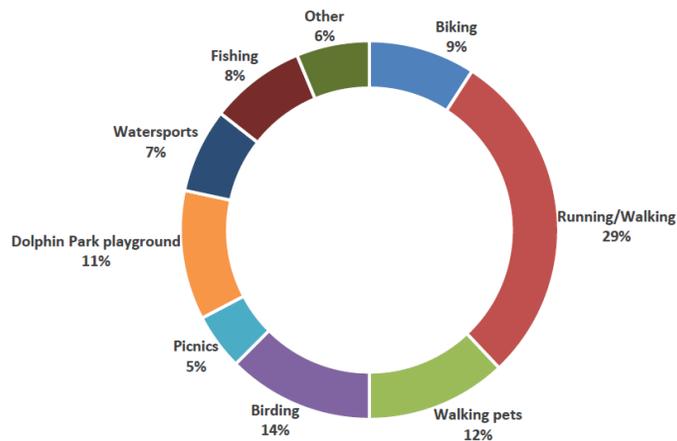
**If you haven't visited the proposed Eco Park planning area, which of these reasons best explains why?**



**If you have visited, how frequently do you visit the proposed Eco Park planning area?**

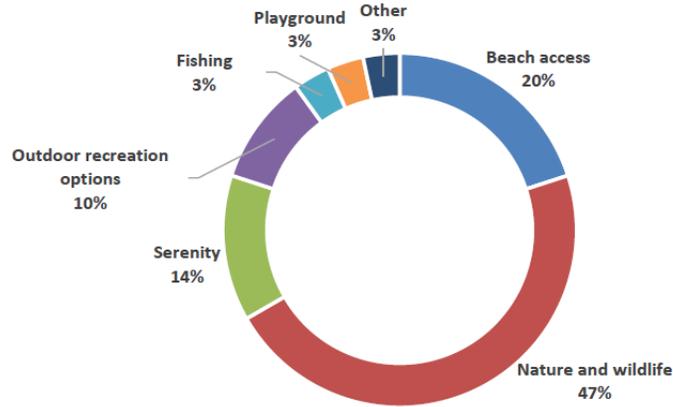


**If you have visited, what activities do you currently engage in at the proposed Eco Park planning area?**

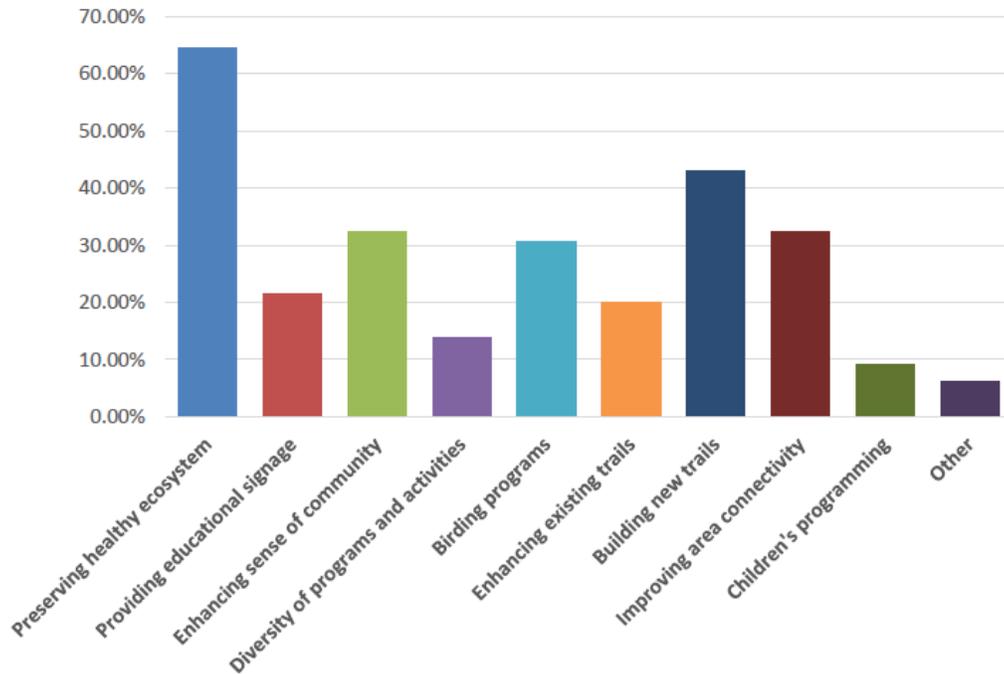


## Park Design Preferences

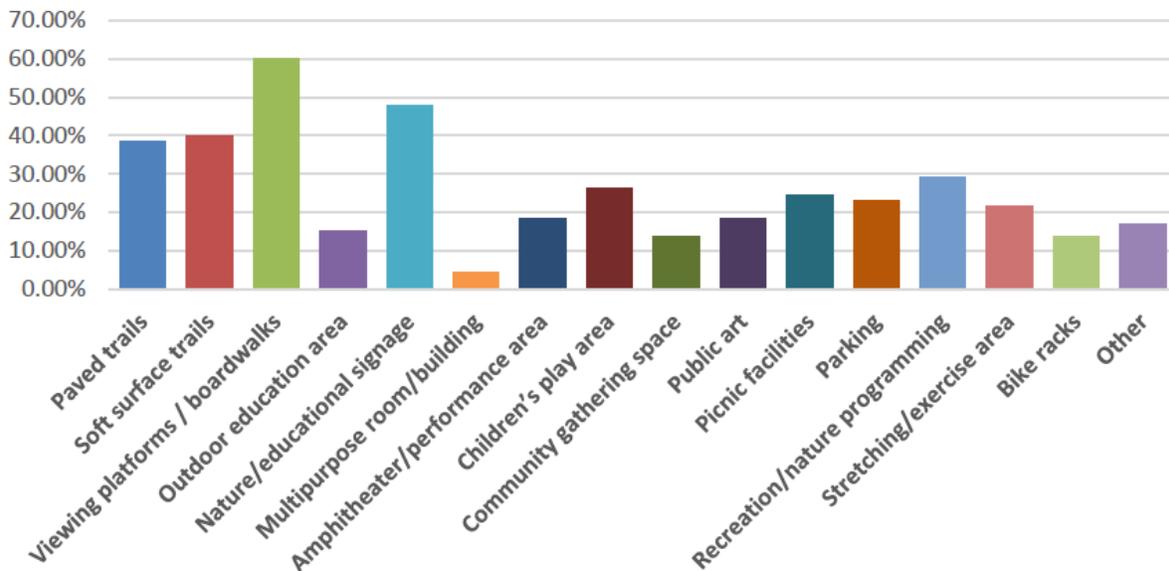
What is your favorite thing about the proposed Eco Park planning area?



Which of the following qualities or improvements would you like to see emphasized in the proposed Eco Park planning area? (Select up to 3)



## Which of the following features would you like to see in the proposed Eco Park planning area? (Select up to 5)



### Visions for the Park

*"An environmentally healthy park popular not just for locals but an inspiration for other areas."*

*"Clean, walkable, attractive area -- a model park for Corpus Christi!"*

*"A mixture of residential and tourist type amenities."*

*"A safe, comfortable, educational and inspirational place in our community."*

*"A calm environment with separate areas for children's and adult activities, an Exploratorium for kids, preservation of some of the 'funky' feel of the area."*

*"Clean and beautiful preserved nature for people to visit and play. Trails to walk and bike and a shelter for birds."*

*"Easy access. Well maintained. Benches for sitting. Green space."*

*"Areas where one can sit and enjoy nature's diversity, as well as areas for active play and exercise."*

# First Public Meeting

The first public meeting for the North Beach Eco Park planning process was held on May 9, 2019 at the Texas State Aquarium. Participants cycled through eight attended stations, which allowed them to learn about the area’s conditions and wildlife, then provide feedback on specific issues and features, desired amenities, activities, and programming.

Attendees identified boardwalks, trails, signage, and additional play areas as their top priorities. Other ideas included connections to the existing beachwalk, benches, and shade structures. Popular requested activities included birding, picnic areas, exercise classes, and water activities (see Figure).

## Desired Activities and Programming

### North Beach Eco Park Planning Initiative

Park activities can play a key role in turning little-used parks into cherished community destinations. Successful and inclusive park programming provides engaging educational and recreational options for all age groups.

What are some activities or programs which could get the groups below to visit and enjoy the North Beach Eco Park?

### Activities and Programming

#### College Students

- Beach yoga*
- Research opportunities*
- Zip lines*
- Kiteboarding*

#### Families

- Picnic tables*
- Boat launch*
- Kayak/fishing lessons*
- Birding*
- Shaded areas*
- Accessible trails*

#### Adults

- Running trail*
- Nature park tours*
- Sunset pier*
- Bike trail*
- Fishing*
- Birdwatching*
- Workout areas*

#### Children and Teens

- Geocaching*
- Shaded playgrounds*
- Informational signage*
- Bus parking area*
- Stage*

#### Seniors

- Tai chi / walking*
- Accessibility*
- Benches with views*
- Boardwalks and nature signage*
- Bus parking area*





First Public Meeting



Community Design Workshop

## Experts and Residents Workshops and Resulting Design Guidelines

On May 10, 2019, recreation, education, and land management experts, as well as North Beach residents, were invited to participate in a workshop to review public meeting comments and continue generating ideas for the Eco Park. The group met at The Breakers Condominiums on North Beach and included representatives from Texas Parks and Wildlife Department, US Fish and Wildlife Department, Texas Department of Transportation, Harte Research Institute for Gulf of Mexico Studies, Texas State Aquarium, USS Lexington, Padre Island National Seashore, Coastal Bend Bays and Estuaries, UT Marine Sciences Institute, and the City of Corpus Christi, among others. During the session, the groups drafted suggestions and guidelines for developing the North Beach Eco Park plan.

A second experts workshop was convened and met on August 16, 2019 at Corpus Christi City Hall. The experts, most of whom had attended the first experts workshop, worked to refine the ideas generated and integrate them with public feedback and desires. The group generated the guidelines and suggestions below, which the planning team agreed to follow as closely as possible.



*Experts and Residents Workshop*

## Design Guidelines (based on public meetings and experts workshops)

### What to do:

#### *Design:*

- Directional and educational signage
- Boardwalk with high permeability, wide slats to allow light to pass through (Port Aransas Nature Preserve model)
  - Railing if boardwalk is over 36" off ground.
- Accessible design
- Welcoming entrances from beach area to draw beach users in
- Include curves in boardwalks and paths
  - Bend trails at least every 20 ft
- Incorporate history/culture signage and exhibits
- Consult NPS guidebook on lighting
- Impervious material for parking lot (investigate, center for infrastructure at TAMU)
- with impervious surface, water can come up from the ground but it can help with cracking asphalt
  - Barricades to prevent walking and driving on protected areas
    - Appropriately spaced bollards without cabling
  - Sensitive light design (minimal and turned off during peak migration)
  - Minimal staff: education/interpretation center with exhibits
    - Aim for staffed center as usership increases
  - Elevated viewing platform or tower
  - Shaded areas along platforms and trails
  - Open-air pavilion for classes/gatherings
  - Design to allow closing with gates
  - Manage to prevent overcrowding (multiple large groups visiting at once)
  - Recreational uses south of the jetty
  - Wildlife habitat north of the jetty
  - Extended jetty to form lagoon and buffer
  - Oyster reef
  - Living shoreline
  - Vegetative buffer between park and highway
  - Reroute/underground electric lines if possible

#### *Connectivity:*

- Bike trails
- Shuttle
- School bus parking area
- Park-once facility with central parking lot on higher ground
- Limit access to Timon Blvd portion in planning area (egress for RV park), or create two-way frontage and close Timon

### What to avoid:

- Kite surfing is not good for migratory birds
- Lighting during migration seasons
- Biking on boardwalks
- Bird blinds not necessary for shorebird watching
  - But shade important for users in the summer
- The area is not conducive to kayaking
  - Note: closed lagoon area could be conducive to monitored/guided kayaking/canoeing

## Public Design Workshop

Following the survey, public meeting, and experts workshop, the planning team organized a two-day public design workshop held November 21-22, 2019 at the Texas State Aquarium. The workshop was facilitated by planners and landscape architects from the American Society of Landscape Architects' Houston-Gulf Coast Section, National Park Service, and City of Corpus Christi.

On November 21, the first day of the workshop, community members and representatives from area neighborhoods and associations participated in conversations about the current state of the area and saw a summary of public engagement responses before proceeding to form small groups for facilitated design of the site with a planner and landscape architect.

On the second day, planners and landscape architects convened and developed three potential concepts based on the designs created by attendees the previous day. These concepts ranged from fewest to most interventions. The designs were presented at a public meeting that evening and attendees were able to comment on each of the three designs and suggest further edits.

### Concept 1

This option includes greater levels of development and investment. Options exist for phasing in amenities such as the combined parking structure and community center.

### Concept 2

This option was developed to restore the natural wetland habitat as much as possible. Development was kept to a minimum, with pathways and viewing areas to allow visitors to experience habitat and look for birds.

### Concept 3

This option uses strategic interventions to restore ecologies and improve access within the park. 2 gates along Timon Road restrict access to only service vehicles and RV's. Existing parking lots are connected via new road to create a loop.



*Day Two of Public Design Workshop*



Existing RV park

Constructed breakwater

Shade structure

Vegetation buffer

Fishing access

Expanded & extended pier

Additional trees

Restored wetland habitat

Observation tower

Freshwater pond

Gate

Community center

Existing playground

Shade structure

Parking

Expanded playground

### Concept 1

This option includes greater levels of development and investment. Options exist for phasing in amenities such as the combined parking structure and community center.

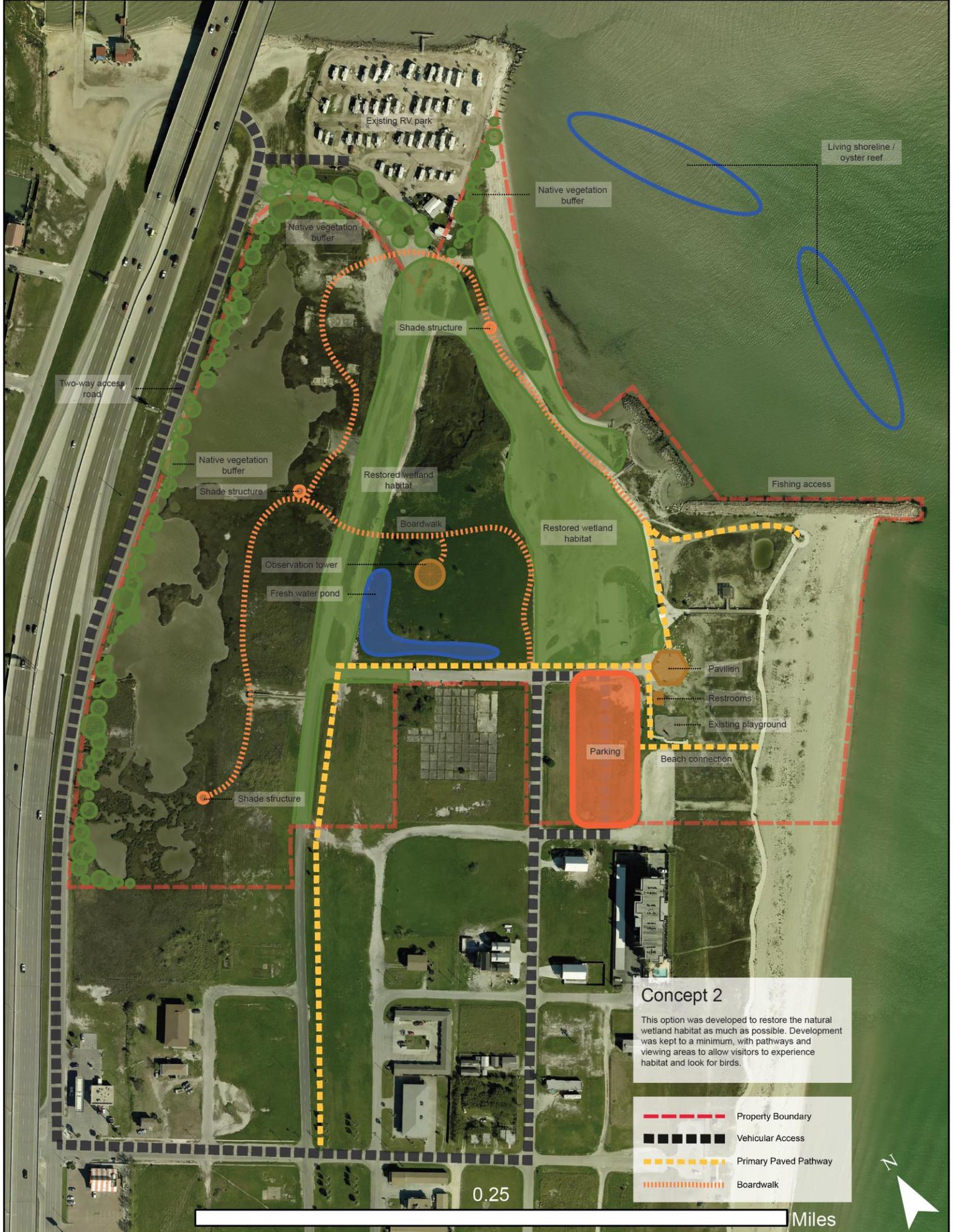
### Legend

- Property Boundary
- Vehicular Access
- Limited Vehicular Access
- Primary Paved Pathway
- Boardwalk

0.25

Miles





Existing RV park

Native vegetation buffer

Living shoreline / oyster reef

Native vegetation buffer

Shade structure

Two-way access road

Native vegetation buffer

Restored wetland habitat

Fishing access

Shade structure

Boardwalk

Restored wetland habitat

Observation tower

Fresh water pond

Pavilion

Restrooms

Existing playground

Parking

Beach connection

Shade structure

### Concept 2

This option was developed to restore the natural wetland habitat as much as possible. Development was kept to a minimum, with pathways and viewing areas to allow visitors to experience habitat and look for birds.

- Property Boundary
- Vehicular Access
- Primary Paved Pathway
- Boardwalk

0.25

Miles





### Concept 3

Concept 3 uses strategic interventions to restore ecologies and improve access within the park. 2 gates along Timon Road restrict access to only service vehicles and RVs. Existing parking lots are connected via a new road to create a loop.

### Legend

- - - - - Property Boundary
- Vehicular Access
- Limited Vehicular Access
- Primary Paved Pathway
- Secondary Pathway
- Boardwalk

0.25

Miles



## Preference survey results

During the second day of the public design workshop, Concept 2 was identified as the preferred option. Attendees remarked they liked the boardwalks, trails, and conservation focus of the second concept. Concept 1 placed second, with some concerns about the cost and feasibility. Concept 3 received the fewest votes; positive remarks included that it would be quickest and easiest to implement, but respondents felt it did not restore or protect the wetlands and vegetation sufficiently.

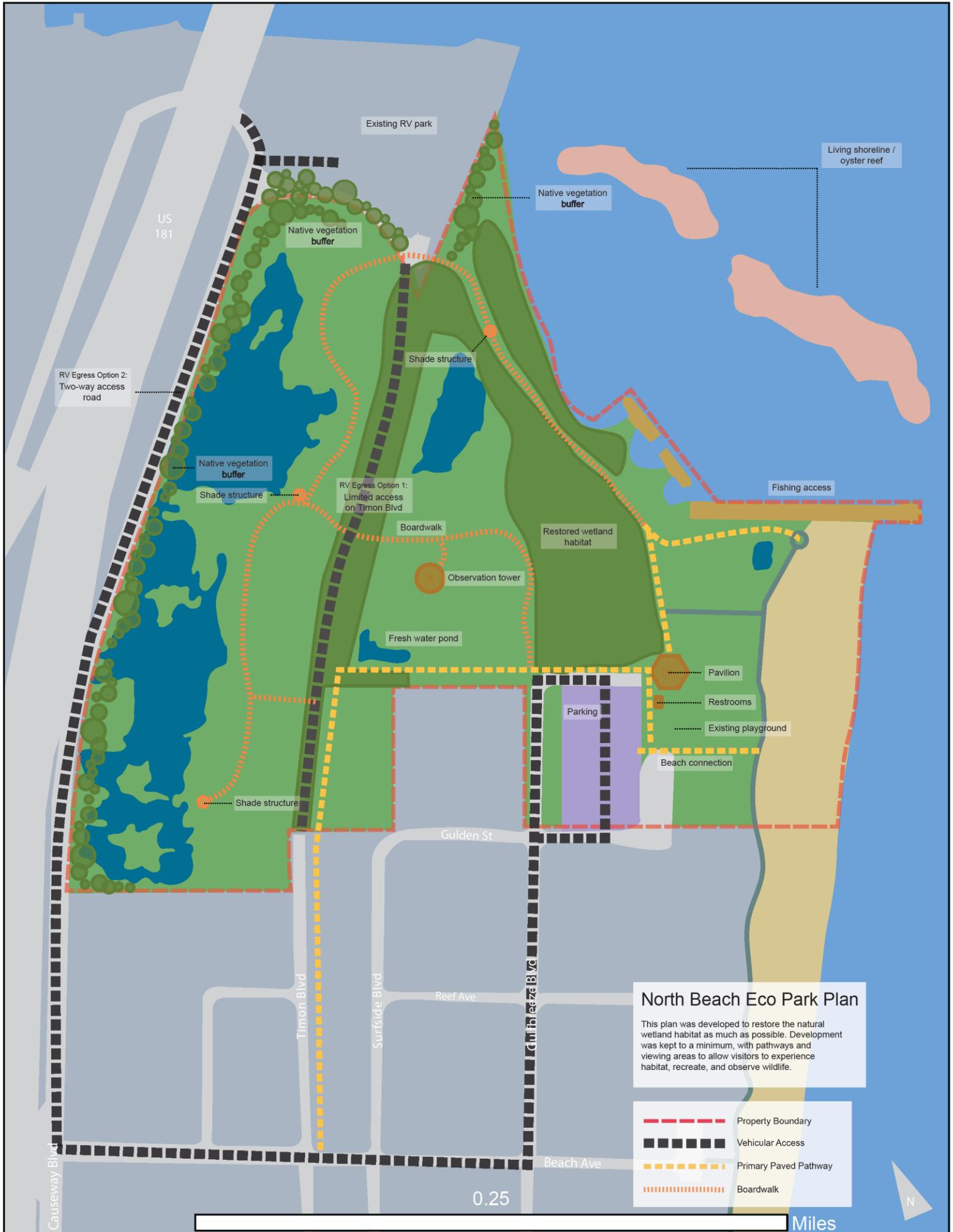
Following the design workshop, the City of Corpus Christi placed the concepts on their website along with a preference survey, which asked respondents to identify which of the three concepts they preferred and prioritize potential amenities. Over fifty responses were received, and Concepts 1 and 2 tied for preferred design. The access and circulation amenities determined to be the highest priorities were: boardwalks, connections to beach walk, barricades to protect ecologically sensitive areas, accessible design, and signage. The ecological, recreational, and conservation features determined to be the highest priorities were: a vegetative buffer between the park and US 181 frontage road, living shoreline and oyster reef, shaded areas on trails and boardwalks, and an elevated viewing platform.

## Final Plan

The final plan is based on public feedback and the guidelines and recommendations made by the experts consulted. It aims to include the community's identified priorities while taking into account the feasibility of implementation.

As the community showed a preference for a plan emphasizing ecosystem conservation, restoration, and access, the final plan includes the following defining elements:

- Restored wetland habitat
- Multipurpose pavilion
- Boardwalks
- Shade structures
- Trails
- Limiting traffic on Timon Blvd or replacing it with two-way access road
- Observation tower
- Vegetative buffer along US 181
- Living shoreline and oyster reefs



### North Beach Eco Park Plan

This plan was developed to restore the natural wetland habitat as much as possible. Development was kept to a minimum, with pathways and viewing areas to allow visitors to experience habitat, recreate, and observe wildlife.

- Property Boundary
- Vehicular Access
- Primary Paved Pathway
- Boardwalk

0.25

Miles



## Implementation and Maintenance Considerations

### *Models and Recommendations*

Several Coastal Bend and South Texas parks and preserves were cited as references or models to guide the development, implementation and management of the North Beach Eco Park. The most frequently mentioned were county- and city-operated parks such as Packery Channel Park, Port Aransas Nature Preserve, Oso Bay Wetlands, and the South Padre Island Birding and Nature Center. All of these parks strongly promote interpretation, coastal ecology, and birding, which could also be the focal points for the North Beach Eco Park.



Packery Channel Park



Oso Bay Wetlands



Port Aransas Nature Preserve



South Padre Island Birding and Nature Center

Overall, experts and residents recommended keeping costs to a minimum to maximize the feasibility and impact of the Eco Park. Cost-saving measures recommended including maximizing use of existing amenities, such as roads, lighting, streets, and Dolphin Park amenities, promoting a self-guided model with interpretive signage and intuitive flow that minimizes the need for park staff, allowing concessionaires for fishing, kayaking, or beach activities, and partnering with local institutions or Nueces County to operate the park.

Maintenance and operation recommendations include fencing or bollarding sensitive areas to promote environmental restoration and prevent degradation due to vehicular traffic, creating decomposed

granite trails, yearly invasive species assessment and management, and light-sensitive design to limit impact to migrating birds. Timon Boulevard gated to allow only traffic exiting Puerto del Sol RV Park, or the street can be closed entirely and restored, with traffic rerouted through a two-way access road along US 183. Park guides or local volunteers, such as the Master Naturalists, can guide interpretive walks for school groups, visitors, and birders. It is recommended that the City consider having the area patrolled for law and park rules compliance, as many areas have limited visibility, especially at night.

A phased approach to implementation is recommended, with more affordable and quick interventions, such as bollarding and rehabilitating existing viewing areas and habitat, prioritized in the first phases.

### ***Funding***

The City of Corpus Christi has established Tax Increment Reinvestment Zones in areas including Downtown and North Beach. Existing or new TIRZ funding for implementation should be considered for the North Beach Eco Park.

Other potential funding sources include:

- Direct funding from the City of Corpus Christi
- Philanthropic donations from local areas of business and donors
- Bond-funded improvements
- Coordination of fundraising with North Beach Community Association
- State and Federal agency funding. Examples: Texas Parks and Wildlife, General Land Office, Texas Water Development Board
- Future developments funding improvements over time
- Grant Funding:
  - [Local Parks Grants — Texas Parks & Wildlife Department](#)
  - [Recreational Trails Grants — Texas Parks & Wildlife Department](#)
  - [RESTORE Act](#)
  - [GLO Coastal Management Program](#)
  - [National Fish and Wildlife Foundation](#)
  - [Economic Development Agency](#)

### ***Cost Considerations***

The following table provides estimated costs for various improvements identified in the final concept plan for North Beach Eco Park. Rather than presenting them in phases, the improvements are organized into four categories by broad objectives: Access and Interpretation, Restoration and Protection, Comfort and Expansion, and Timon Blvd Management. Projects recommended for implementation in the first phases of park development are highlighted in blue. All cost estimates were calculated in 2021.

Partnerships with local and regional institutions should be pursued as much as possible to share costs and labor, as well as build stewardship and community commitment to the park. Potential partnerships include Texas State Aquarium for developing interpretation materials and programming, Texas Master Naturalists for volunteer guides and service projects, local businesses for sponsorships, and schools or volunteer groups for wetland restoration.

<b>Improvement</b>	<b>Amount</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
<b><i>Access and Interpretation</i></b>				
Natural Surface trail	2000	Linear Feet	10	20,000
Shade structures	3	Structures	8,000	24,000
Gravel or crushed granite parking lot	30	Parking spots (375 sq ft)	750	22,500
Interpretive and directional signage <i>Signage can be created in collaboration with local experts</i>	20	Sign	750	15,000
Boardwalk	1500	Linear Feet	250	375,000
<b><i>Restoration and Protection</i></b>				
Bollard and cable fencing around sensitive areas <i>Prioritize areas with vehicular access and streets already officially closed by the city</i>	1500	Linear Feet	15	22,500
Native vegetation buffer	2500	Linear Feet	12	30,000
Wetland habitat restoration northwest of Dolphin Park	2.5	Acres	5,000	10,000
Living shoreline	800	Linear Feet	150	120,000
Oyster reefs	1	Acres	50,000	50,000
Freshwater pond to attract birds <i>A freshwater pond would require refilling to prevent it from drying or becoming brackish</i>	1	Acres	25,000	25,000
<b><i>Comfort and Expansion</i></b>				
Restrooms	1	Building	50,000	50,000
Observation Tower	1	Building	50,000	50,000
Welcome and gathering pavilion	1	Structure	35,000	35,000
Additional soft-surface parking	30	Parking spots (375 sq ft)	750	22,500
Benches	15	4' Bench	700	10,500
Environmentally sensitive lighting bollards	50	Light	1000	50,000
<b><i>Option: Reduced Access on Timon Blvd</i></b>				
Gates at north and south of Eco Park on Timon Blvd	2	Gates	10,000	20,000
<b><i>Option: Closure of Timon Blvd</i></b>				
Closure and restoration of Timon Blvd	44,000	Square Feet	5	220,000
Reconfiguration of US 183 Access road to allow two-way traffic <i>Consult with transportation department or TXDOT for estimated costs to City</i>	0.5	Miles	Unknown	Unknown