# Boggy Bayou Nature Park Improvement Plan March 2018



Boggy Park was acquired by Calhoun County "for a park and wetlands wildlife habitat; and for public access to Boggy Bayou and Matagorda Bay..." according to the transfer deed executed by the County in 2006.

Its location and terrain offer residents and visitors activities consistent with its defined purpose:

- Access to Matagorda Bay shoreline for fishing, birding and swimming;
- Access to Boggy Bayou for kayaking, fishing and birding; and
- Boardwalk/observation deck overlooking the bayou shoreline, mud flats, and a fresh/brackish water pond to the south for birding.

#### Recent improvements in the Park have included:

- Improved 3<sup>rd</sup> Street to the boardwalk,
- Sand and culvert added north of boardwalk in attempt to improve access to rest of park,
- Picnic tables and trash cans at boardwalk,
- Frequent clean ups / adoption by Victoria Electric Co-op, and
- Cameras and signage to discourage dumping.

## **Boggy Bayou Nature Park**

#### **Current uses of the Park include:**

- fishing
- hunting
- paddling
- birding
- casual driving tours / site seeing
- walking for exercise
- swimming
- camping
- fireworks
- target practice
- dirt bikes / off-road driving

#### **Current problems include:**

- dumping, including carcasses and lawn waste
- consumer trash
- dirt bikes / off road driving destroys wetlands
- erosion
- road conditions for access to water
- safety concerns with target practice given multipurpose use

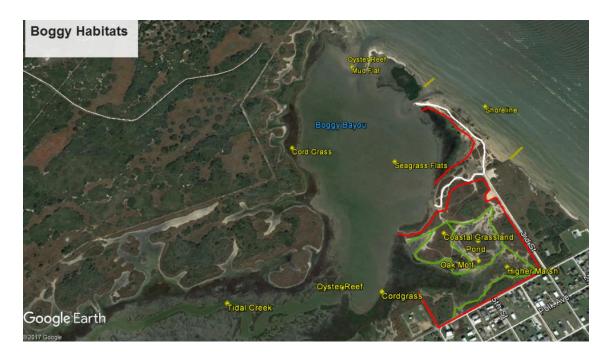
### **Boggy Nature Park Improvement Plan**

In June 26, 2017, a group of concerned citizens requested and obtained Commissioner's Court permission to develop an improvement plan for the Court's consideration. Since that time, the group has worked to develop this Plan. As presented, the Plan identifies improvements to the Park that are consistent with the purpose for which it was acquired. Specific design and cost details will be pursued once this 'master plan' is endorsed by the Court. Further, funding sources for the recommended improvements have not been developed and must be addressed. It is recognized that the Plan will likely be implemented in stages as funding is secured.

It is the committee's intent to engage the community in support of the recommended improvements. The goal is to protect and enhance the Park for the enjoyment of County residents and our visitors.

#### **Boggy Micro-Habitats**

Located on the west shoreline of Matagorda Bay, the Park is a microcosm of why the Texas Mid-Coast is so ecologically productive and so enjoyed by residents and visitors. The shallow sea grass filled lake is ringed by smooth cordgrass and supports oysters, crabs, fish and birds. A coastal creek feeds requisite freshwater from uplands after rains. It is easily accessible without a boat. And it is adjacent to the planned Powderhorn Ranch State Park / Wildlife Management Area. In short, it is a jewel! However, its heavy use has taken a toll.



- 1. Oyster Reefs
- 2. Mud Flats
- 3. Seagrass Flats
- 4. Cord Grass Shoreline
- 5. Higher Marsh
- 6. Oak Mott
- 7. Pond
- 8. Tidal Creek
- 9. Bay Shoreline

## **Boggy Nature Park Improvement Plan**

Listed below are nine proposals that are recommended to improve access to the water while protecting natural areas and providing basic Park amenities:

- 1. Upgrade roads to Matagorda Bay shoreline and Boggy Bayou shoreline so that it is passable during wet conditions.
- 2. Convert access to the natural areas to foot traffic only and lay out walking routes and a birding/interpretive trail.
- 3. Improve day use / picnic area facilities by installing additional picnic tables and restroom facilities.
- 4. Develop an outdoor / environmental education area for students and adults that includes salt marsh ecology, native plants, and birds who use the marsh.
- Submit Boggy Nature Park for inclusion in TPWD's Great Texas Coastal Birding Trail.
   Develop a bird watering / feeding station to enhance the habitat and the opportunity to observe the birds.
- 6. Submit application for inclusion of a Boggy Nature Park put-in to TPWD Texas Paddling Trial System as part of a "Powderhorn Ranch Shoreline Trail".
- 7. Add signage regarding Park rules, safety, restrictions to off road vehicles and illegal dumping.
- 8. Address Shoreline erosion with groynes and beneficial use of dredge materials.
- 9. Improve security and surveillance of the Park to curtail inappropriate activities and use.

Each of these recommendations is addressed in more detail in the rest of the report.









### #1 – Improve Boggy Park Roads

- The current access roads are unmarked sand pathways. They are subject to inundation by rain and tides and develop potholes. Vehicles attempting to avoid the water and potholes drive further upland and cause damage to sensitive vegetation.
- ➤ The improve 3rd Street entrance road should be extended further into the Park to the primary access points:
  - North to the mouth of the bayou at Matagorda Bay (.3 miles)
  - Northwest to the sandy bank used as kayak launch site (.3 miles, including the looped section).
- The improved roads should provide access to the bayou and the Bay shoreline. The sensitive salt marsh smooth cord grass along the lake and the upland sensitive area should be restricted to foot traffic.
- ➤ The preferred road bed material is crushed concrete over a mesh bed. It is readily available, moderate in price, and environmentally sensitive according to experts consulted.



- Improved roads shown in white.
- Red lines mark the areas to be closed to vehicular traffic.

## #2 -- Establish Natural Area & Walking Trails

- The south shoreline of Boggy Bayou has sandy areas that are excellent for access for kayaking and wading fisherman. Multiple sand tracks access the area.
- The Matagorda Bay shoreline and the mouth of the bayou are currently accessed via a sand road that runs north parallel to the Matagorda Bay shoreline.
- There are no current restrictions to vehicles or launch sites that provide protection to sensitive vegetation along the bayou. The upland habitat south of the boardwalk is currently being destroyed by off road vehicle traffic.

#### **Improvement Plan:**

- Protect sensitive uplands south of the boardwalk and the cord grass along the bayou by converting access to the natural areas shown on the map to foot traffic only. Install fencing and signage to mark boundaries.
- Access to the bayou will be maintained by the improved roads discussed above.
- Mark walking/birding trails, including mileage for walking exercise.
  - o Educational signage regarding birds and coastal marsh plants should be included.
  - Trail should be sand tracks supplemented with foot bridges that cross several spots that hold water for prolonged periods.
  - Include the boardwalk in trail by building stairs down at end to connect to trail.
  - o The trail should circle pond and tie to overlooks at mud flats and oyster reefs.
  - Exercise route—up to 2 miles if road to mouth of bayou is included.
- > Entrance to the walking area should be from the parking area and from Taylor Street.



- ♣ Red outlines the sensitive areas closed to vehicle traffic.
- Improved roads shown in white.
- Green designates walking trails.

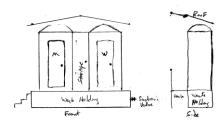
## #3 – Enhance day use / picnic facilities

The Park provides several places to picnic and relax. Recommendations include:

- Install covered picnic tables at these five locations:
  - o parking area at start of board walk (existing)
  - o kayak trailhead at Boggy Bayou
  - o mouth of bayou
  - Matagorda Bay shoreline
  - o oak mott bird feeding station
- ➤ Design can be wooden tables with integral bench and cover set on a crushed concrete pad.
  - No trash receptacles should be provided as they will be subject to animal digging and more difficult to service. Install signage requesting users to carry out to receptacle at parking area.
  - o Example picnic table



- > Install restroom facilities.
  - locate at parking area;
  - o built-in porta-potties, elevated and covered; handicap accessible;
  - o incorporate storage for supplies;
  - include waste holding tanks to increase capacity;
  - ensure easy access for service provider;
  - o water not currently available; include hand sanitizers.



### #4 - Create a Boggy Nature Park Educational Venue

**Purpose**- provide a setting for students, either in a school setting, or with family, to learn and appreciate the ecology of their home turf on the Texas Coast.

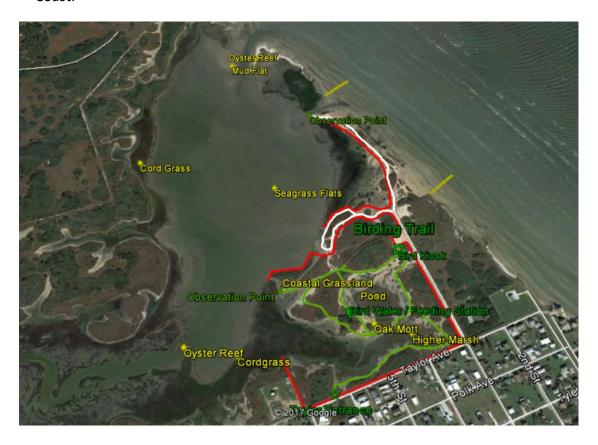
#### The venue should include:

- 1. A covered pavilion at the end of the current boardwalk sufficient to seat 12 students on benches and include a table for educational equipment.
- 2. Incorporate into the pavilion design educational posters of micro-habitats of Boggy Bayou, its plant community, marine inhabitants, and birds, both resident and migrants.
- 3. A ramp down from the pavilion that makes the boardwalk integral to the walking trail.
- An interpretive trail that meanders thru the habitat with low profile interpretive signage identifying the plant community.
- 5. The interpretive trail also provides opportunity to bird and observation points to view specific micro-habitats.
- 6. The interpretive trail should include three stations (marine seining station, bird feeding station, and oyster reef / estuary station) where focused educational activities can be conducted (covered picnic table on crushed concrete pad).
- 7. Restroom facilities located at base of board walk / parking area.
- 8. Portable equipment that needs to be available (stored offsite) includes seine and plankton seine, portable touch tank and buckets, microscope, magnification devices, binoculars, spotting scope, water cooler, teaching aids and materials, Field Guides: Birds, Fish, and Plants of Texas Coast.
- 9. Pursue development of a walking route to Boggy from School, including shortcuts to the Pavilion.



## #5 - Add Boggy Park as Birding Site on Great Texas Coastal Birding Trial

- > Boggy Nature Park offers a variety of habitats that can allow excellent birding in an accessible location.
- > The concept recommended includes a walking trail around a fresh water pond, observation points for oyster reefs, mud flats, and bay shoreline. Additionally, development of a water drip and feeding station in one of the oak motts will be considered.
- > Also, educational materials regarding birds that use the habitats will be included in a kiosk at the entrance, and perhaps along the trail.
- > Application will be made to include the site in TPWD'S Great Texas Birding Trail Mid Coast.



## #6 – Add Powderhorn Shoreline Paddling Trail to TPWD Paddle Texas System

- Proposed trail would start in Boggy Park, connect to the planned kayak put-in points at Powderhorn Ranch State Park, then to Indianola. The trail would also connect to the existing Powderhorn Lake Trail, and then extend up Coloma Creek, including access at FM 1289.
- > Estimated distance in paddling miles between the put-in and take-out:
  - 4.4 miles (one way) Boggy Nature Park up Boggy Bayou
  - 6.3 miles Boggy Nature Park along Powderhorn Matagorda Bay Shoreline to intersection of Powderhorn Lake Trail.
  - Another 6 miles along an existing Ag Life Kayak Trail to Coloma Creek launch)—
    note that Powderhorn Ranch State Park will likely put a kayak launch on this
    route.
  - 11.0 miles -- Powderhorn Lake Trail (existing Ag Life marked trail) makes a loop around the Lake starting from near the Indianola Marina
  - 4.4 miles (one way) up Coloma Creek from launch at H1289.
- Proposed put-in locations (amenities):
  - o Boggy Bayou Nature Park (sand launch, kiosk, picnic table)
  - o Powderhorn Ranch State Park on Matagorda Bay shoreline future
  - Powderhorn Ranch State Park on Powderhorn Lake shoreline- future
  - H1289/Coloma Creek (sand launch, kiosk)
  - Indianola Marina (private boat ramp, store, restrooms, restaurant)



## #7 - Develop Park rules and add signage re rules and directions

Improved signage is needed for visitors to find the Park—and to clearly set expectations regarding its use.

**Entrance Signage:** 

Welcome to Calhoun County's Boggy Nature Park
Fish – Bird – Paddle – Swim – Walk – Learn
Please tread lightly to protect this Community's Back Yard!



example

Engage POC Elementary School students to name a Park mascot to be on the sign and for ideas on the art work

#### **Park Rules**

Vehicles in designated areas only

No littering

No dumping or household trash

Under Surveillance and Community Watch – violators will be prosecuted.

Enjoy and protect our Nature Park!

## Report inappropriate activities to Sheriff at xxx-xxx-xxxx Violators will be prosecuted

#### **Road Signs:**

- at H185 and 2d Street directional like paddling trail signage currently there
- at Boardwalk for Birding Trail and Educational Materials and posters on Boardwalk
- to Kayak Launch / Boggy Bayou access; paddling trail kiosk (like Little Jetties)
- to Boggy mouth / Matagorda Bay access
- Interpretive Plant Trail ceramic on low pvc poles—can be moved.



### #8 - Protect Matagorda Bay Shoreline

- Matagorda Bay's west shoreline, from Alamo Beach to Port O'Connor is one of the most rapidly eroding shorelines in the State.
- Rock groynes placed perpendicular to the shoreline (like the one on Kingfisher Beach) can be effective in reducing the erosion rate, especially in the short term.
- Placing three groynes across the Matagorda Bay shoreline, including one on TPWD shore at the entrance the lake should help reduce current erosion rates.
- ➤ Placement of dredged spoil (beneficial use) would further reduce shoreline erosion and more fully protect Boggy Bayou. All the shore protected would be public land.
- An engineering study to design the groynes would cost about \$100k. The study would develop costs and identify permitting requirements for installation of the groynes or of an appropriate alternative. Funding would be sought through grants.



## #9 - Improve security and surveillance of the Park to address inappropriate activities and use

In order to protect the investments in the Park and the habitat, surveillance activities should be enhanced:

- a. increase patrols by law enforcement;
- b. engage neighbors and users in a community watch program;
- c. provide for a 'Park Host' to increase surveillance if the above measures prove insufficient. Considerations would include:
  - 1. Size requirements: 50 x 25' gravel pad and culverts for access.
  - 2. Location –corner of Taylor and 3<sup>rd</sup> closest to water, sewage and electrical connections.
  - 3. Ongoing Costs: Utilities
  - 4. assigning responsibilities for selection and supervision of Park host.

### **Boggy Bayou Nature Park Advisory Committee Members**

Allan Berger, Resident and Chair of San Antonio Bay Partnership Brigid Berger, Resident and Texas Master Naturalist Kelly Gee – Resident and Service Club member Troy Wygrys – Resident and Chamber representative Linda Orrick – Resident and Service Club President Joe Wiatt, Resident and Texas Master Naturalist Lea Ann Ragusin – POC Elementary Teacher Alexa Cordova – Victoria Electric Co-op Advisor-Commissioner Finster

#### Work to date:

- 1. Formational discussions with POC Service Club, POC Chamber of Commerce, and Commissioner Finster (Jan March 2017)
- 2. Understand Current Uses (Committee addressed 4/24/17)
- 3. List Current Problems (Committee addressed 4/24/17)
- 4. Obtained Commissioners' Court approval to develop a Plan for consideration (June 2017)
- 5. Develop Improvement Ideas thru March 2018
- 6. Publicize recommended plan April 2018

#### **Next Step:**

- 7. Seek community comment and support
- 8. Obtain Park Board / Commissioner's Court endorsement