



# SEABROOK OPEN SPACE & PARKS MASTER PLAN

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April 2012  
Seabrook City Council





## SEABROOK OPEN SPACE & PARKS MASTER PLAN

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**Cover Photo by Dick Bricker.**

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## EXECUTIVE SUMMARY

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Seabrook is known and admired for quality parks, trails and natural areas. Residents repeatedly identify the city's waterfront and natural areas as key community assets. This Open Space and Parks Master Plan is intended to ensure that parklands, open space, and waterfront views remain prominent public assets and components of Seabrook's appeal as the city grows.

Goals are based on a three-pronged approach:

- Best use of existing park holdings
- Explicit focus on open space and natural settings
- Selective acquisition to serve the anticipated increase in residents

Making the best use of existing parkland is a baseline objective. Parks include two recently acquired properties for which uses are still being refined (Drusilla Carothers Coastal Gardens; 40-acre addition to Seabrook Wildlife Refuge). Proposals for conserving natural space and expanding park holdings for future needs are an effort to respond to public preferences. Using locally adapted trees and plants is favored for beautification.

Current park acreage is about 200 acres, or about 5 percent of the city's land area. Among the goals of this plan is to increase open space areas. The projected ten-year budget is nevertheless quite modest at some \$1.5 million. Every effort has been made to keep costs within the range of feasibility.

Recommendations interface with other funded projects in the city, such as roadway development and renewal of the Waterfront District.

Note that this is one of three companion documents in a single 2009-2011 suite of parks planning. It should be read in conjunction with the *Seabrook Hike and Bike Trails Master Plan* (March 2010) and *Drusilla Carothers Coastal Gardens Master Plan* (February 2010). The present plan includes both a priority facilities listing (section 2.1), which addresses short-term needs; and a set of longer-term goals (section 2.2), representing an overall vision.

A cornerstone of this vision is caution about adding amenities that carry high operating costs. Trail expansion and keeping certain lands in a natural condition are public preferences. Not everyone uses parks, but everyone benefits from them. Even people who never set foot in a city park enjoy scenic components of the local environment, green islands in the urban fabric, and the resulting sense of peace.

# 1.0 INTRODUCTION

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## 1.1 Definitions

For the purpose of this document, certain terms and words are to be used and interpreted as defined in this section.

*Common Open Space* means a parcel or parcels of land or an area of water or a combination of land and water designed for the use and enjoyment of residents. Common open space as defined herein includes both passively landscaped sites without improvements of any kind or complimentary structures and improvements as necessary and appropriate for the enjoyment of residents.

*Green Space* is a plot of undeveloped land separating or surrounding areas of intensive development that is maintained for recreational enjoyment.

*Greenway/greenbelt* is a linear open space or a recreational corridor that often links parks and/or other open space.

*Natural Space* means property with a minimum of built structures and a maximum of natural features.

*Park* means a publicly accessible property with recreational amenities as its primary purpose.

## 1.2 Vision, Scope and Public Process

Seabrook takes public pride in its park system, trails network, waterfront, and natural areas as hallmarks of the community. This plan responds to public concerns about ensuring the continued prominence of these community assets as the city grows. Recommendations are provided for emphasizing the known priorities of park excellence and public waterfront access; for ensuring effective use of existing park holdings; and for keeping pace with population growth through careful acquisition of property for parks, open space and green space.

The plan is wider in scope than past parks planning documents, based on guidance emerging from opinion surveys. Parks, trails, the waterfront, and natural areas are high on the list of valued aspects of Seabrook in three major surveys (see Appendix A for summaries of survey results from 1998, 2004, and 2009); the waterfront and waterfront access are at the top of the 2009 identification of community assets, as conducted by Seabrook’s Master Plan Commission. Parks and trails are second, by a narrow margin. “Small town charm” ranked third in the 2009 identification of assets. Clearly these features are key factors in why people choose Seabrook.

Methods for gathering public opinion for this parks and open space plan were to:

- use past surveys as a basis for drafting a new parks master plan
- make the draft plan available for public comment
- circulate the draft to selected advisors and City committee volunteers for comments
- invite comment on the draft by members of the public
- revise the draft in light of comments received (see Appendix E for full compilation of comments)

## 1.3 Background and Related Plans

The last plan for Seabrook’s parks (*Seabrook Parks, Recreation and Open Space Master Plan, 1998*) was prepared by Clark Condon Associates, Landscape Architects. It was later partially amended by Duke Landscape Architecture and Planning. In 2009 the Open Space, Beautification and Preservation

Committee was assigned to produce a new master plan for parks and open space. Two other documents are part of the same 2009-2011 suite of planning work: the *Pine Gully Park and Carothers Coastal Garden Master Plan* (October 2009), prepared by Burditt Consultants, and the *Seabrook Hike and Bike Trails Master Plan* (March 2010), prepared by the Open Space Committee.

In effect the present document is part 1 of the new parks master plan, while the trails plan is part 2, and the Carothers plan is part 3 (although the Carothers and trails plans were produced earlier). Goals for all three are given in section 2.0.



**Figure 1. Kayakers have several launch options in Seabrook, including the Boat Ramp at the south end of the city. A launch site specifically for their use is among plan recommendations.**

Three related documents and projects involve urban infrastructure. The *Seabrook Comprehensive Master Plan 2030* (April 2010), prepared by Master Plan Review Commission, provides population projections and an overarching context of objectives for the city. The *South Seabrook Waterfront Development Plan* (June 2006), prepared for Seabrook’s Economic Development Corporation by JJR Consultants, provides more detailed guidelines for the waterfront. Furthermore, TxDOT’s plans for development of Highway 146 through Seabrook will bring significant changes.

Three more involve local wildlife habitat. The *Seabrook Habitat Island Feasibility Study* (August 2009), prepared by AECOM for the Galveston Bay Foundation and Seabrook Economic Development Corporation, provides specifications for a project that has components of storm protection, economic

recovery, and habitat restoration (see section 4.2). Restoration is also the core of a project envisaged for the northern bayou called Pine Gully (see section 4.3).

The *Seabrook Slough Restoration Plan and Ecotourism Initiative* (September 2002) is a proposal for creating marshes in the Slough near Second Street. Ownership issues resulted in no action on this plan. However, land that has subsided to become shallow, sheltered open water remains a good candidate area for marsh restoration. Marshes are key nursery habitat for many marine species of fish and shellfish, and loss of marshland has been extensive all around Galveston Bay. In time this proposal (see Appendix L for a summary) or a variation of it may warrant reconsideration.

Actions in surrounding cities also have bearing, illustrating the widening commitment to parks, trails, and open space as a source of economic benefits as well as public health benefits. The City of Houston has intensified its emphasis on parks in recent years, most notably with Discovery Green, successfully anchoring a surge of downtown redevelopment by creating, right in the city center, a major new green attraction complete with performance space and events (opened in April 2008; see [www.discoverygreen.com/](http://www.discoverygreen.com/)). League City's ambitious 20-year plan for 200 miles of hiking trails warrants note (*League City Trails Master Plan, Draft*, December 2009), as does the even more ambitious Houston Wilderness coordination of a giant network of greenways linking local ecosystems in a great ring around the metropolitan area.

It is worth noting one more document, local evidence for the importance of parks to home buyers. In the new subdivision Searidge, off Todville Road, the construction company Bayway Homes has a sales catalogue featuring eight home designs in plan view. The house styles are called the Baybrook, Bayside, Miramar, Meador, Friendship, Robinson, Wildwood, and Pine Gully. As noted in the catalogue, they are all named for City parks "*connected by a 10-mile hike/bike path that runs directly through the entrance of our beautiful subdivision!*" (Bayway Homes 2010, emphasis theirs).

#### **1.4 Using This Plan**

Goals and priority needs are listed in section 2.0. A fuller needs review in section 3.0 provides background on the basis for these goals and priorities. Section 4.0 addresses special projects that dovetail with this plan, some of which were initiated by other bodies and are already in process. Section 5.0 provides recommendations for reaching the identified goals. Costs and financial strategies for implementation are presented in section 6.0.

Seabrook is fortunate in the presence of high quality natural resources. (See Appendix E.) Trails and natural areas are considerably easier and less expensive to operate and maintain than are built recreational facilities or intensively managed landscapes.

## **2.0 GOALS AND PRIORITIES**

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The priorities and goals listed here are intended both to achieve ongoing excellence in parks and to honor residents' wishes for Seabrook's flavor as a city. Facility improvements and renewals are needed within particular parks to achieve best use of existing park holdings. These are the primary short-term needs and are given first. Longer-term goals for the system as a whole follow, giving more focus to open space, green space and parks and proposing selective acquisitions to serve anticipated increases in residents.

### **2.1 Priority Facilities**

These priorities were set by the Open Space Committee following a City Council request. All parks should receive new signage with the city's new logo.

**Priority #1 – Pine Gully Park**

- Plant shade trees
- New playground equipment
- Bench on the pier
- Natural looking signs identifying trees and wildlife; possible Scout project

**Priority #2 – Miramar and Meador Parks**

- Plant shade trees and install benches around perimeter
- Swimming pool improvements

**Priority #3 – Brummerhop Park**

- Fill in retention pond to create a practice field
- Refurbish playground equipment
- Connect trail

**Priority #4 – Robinson Park**

- Increase parking
- Refurbish sign
- Signs identifying plants and wildlife; possible Scout project
- Refurbish pooper scoopers

**Priority #5 – Seabrook Wildlife Refuge**

- Install pooper scooper
- Signs identifying plants and wildlife; possible Scout project

**Priority #6 – Boat Ramp**

- Provide restrooms/portapotties
- Refresh sign and stripes for parking

**Priority #7– Bayside Park**

- Repair bulkhead
- Refurbish sign
- Provide kayak launch

**Priority #8 – Friendship Park**

- Provide backstop
- Provide bleachers
- Build a pavilion with concrete slab and 4-6 picnic tables

**Priority #9 – Hester Park**

- Add parking with the installation of a culvert
- Signs identifying plants and wildlife; possible Boy Scout project
- Pooper scooper receptacle

**Priority #10– Baybrook Park**

- Plant shade trees
- Provide benches
- Tennis backstop
- Tennis scoreboard

**Priority # 11– McHale Park**

- Provide more seating on platform
- Sign to identify birds and indicate park is on Great Texas Coastal Birding Trail

**Priority #12 – Wildwood Park**

- Purchase property by sewer lift station for kayak launch
- Add benches
- Plant shade trees



*Figure 2. A bronze bell and traditional fireplace at the new Drusilla Carothers Coastal Gardens are among features in this park that evoke the area’s Spanish land grant history.*

**2.2 Open Space and Parks Goals**

A hallmark of Seabrook’s public profile is natural assets including bay and lake waterfront views, bayous, and woodland. Naturalness is valued within the community and often commented upon by visitors to the city. The longer-term goals of this plan aim to respond to this public sense of attraction to natural qualities. See Sections 5.0 “Recommendations” and 6.0 “Implementation” for more detailed proposals for achieving these goals.

Goal 1: Expand bay, lake and slough waterfront access for walkers, cyclists, and kayakers.

Goal 2: Preserve views, with emphasis on open space and naturalness.

Goal 3: Maintain and enrich conditions that sustain local wildlife.

Goal 4: Ensure best use of existing park holdings.

Goal 5: Establish appropriate guidelines for operating new types of parks.

Goal 6: Adjust park facilities in response to community preferences.

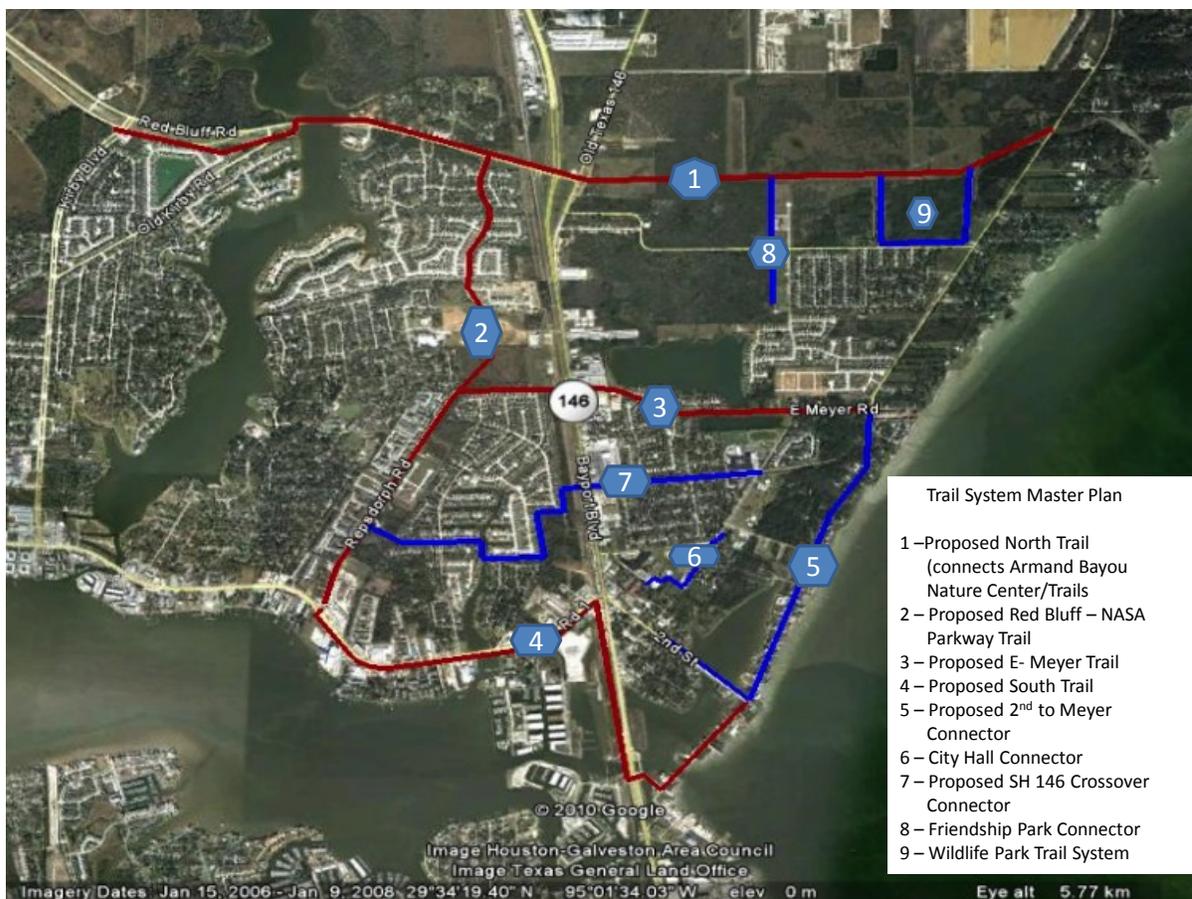
Goal 7: Identify choice wetlands and green space for conservation by various means.

**2.3 Trails Plan Goals**

The city’s trails plan, as noted, should be viewed as part 2 of this document. Recommendations are for a Figure 8-shaped trails network throughout the city as illustrated in Map 1. The layout calls for an

additional 25 miles of hike and bike trails, including crossings of Highway 146. Goals are as follows (*Seabrook Hike and Bike Trails Master Plan*, March 2010, p. 8):

1. Connect the people of Seabrook via a citywide trail system that ties neighborhoods to one another and to natural areas for recreation.
2. Focus trail expansion on Highway 146 crossings and fuller trail development in the western and southwestern parts of the city least well served by existing trails.
3. Create spurs that improve residents' access to the network directly from their homes without needing to drive.
4. Encourage the inclusion of a park land dedication requirement in the subdivision regulations to facilitate the development of trails to and through future neighborhoods.
5. Preserve easements and rights-of-way to maintain views and future trail opportunities.
6. Promote trail design and maintenance standards aimed at providing safe and secure ways for users to enjoy local natural areas.
7. Extend City trails to connect them with regional trails, notably to Armand Bayou Nature Center and along the Red Bluff Road corridor.



**Map 1. Proposed Trails (red = tied to roadway work; blue = connecting parks)**

## 2.4 Carothers Plan Goals

The Carothers plan should be viewed as part 3 of this document. This 8.5-acre property adjoining Pine Gully Park was acquired by bond referendum in 2007. It was formally opened in April 2011, following alterations to bring the main building into compliance with requirements of the Americans with Disabilities Act. Goals are as follows (*Pine Gully Park and Carothers Coastal Garden Master Plan*, October 2009, p. 8):

- Provide a destination for event rental
- Control access to site with gated entry
- Cater for more than one small function at a time
- Financially self supported
- Restore wetlands
- Walking track and different use zones

Fees for use of park properties can be found on the City website. The Seabrook Community House has long been the city's main publicly owned events venue, and to some degree its operation has prepared the way for a second such venue at Carothers Coastal Gardens.

## 3.0 Inventory and Needs Assessment

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When a link to a draft of this plan was posted in the City newsletter, some 70 Seabrook residents looked at the draft, answered a short survey on it, and provided comments. Their feedback is shown in full in Appendix E. A majority of respondents favored expanding the trail system, preserving more natural areas, and expanding access to the waterfront. A majority supported holding a bond vote to accomplish the goals in the open space plan. Fewer than 25% thought Seabrook had enough parks and trails. Following is a sampling of one dozen comments:

- *A city is only as inviting as its park system is beautiful.*
- *It is very refreshing and heartening to see a community that is working hard to preserve and enhance its ecological heritage.*
- *You can never have too many parks and trails!*
- *We need a waterfront park and public boat launch on Clear Lake.*
- *Can't the City do something with the 25-foot private strip of land fronting the Seabrook-Kemah Channel? As public waterfront it would be an ideal focus for redevelopment at the Point.*
- *One of the reasons I moved to Seabrook seven years ago is because one can still see the night sky here.*
- *The reason I love Seabrook is its parks and trails. I value the trails the most.*
- *Please work hard to maintain our waterfront views and to connect all of the trails together.*
- *Have we examined the waterfront access opportunity that Repsdorph Road represents? It is a county road that reaches all the way to the Clear Lake waterfront. The end segment is not currently in use as a roadway . . . It may offer us some interesting options.*
- *Our City needs to establish a "public face" that will attract new residents, as well as commercial business. . . will, in my view, lend to an enhanced "public face."*
- *When my wife's and my family and friends visit . . . they are ecstatic seeing nearby deer, possum, and raccoon plus blue jays, cardinals, monk parakeets, sparrows, humming birds, and other birds in our backyard.*
- *The parks and trails attracted us to Seabrook.*

In contrast, some people do not use parks, consider it problematic that lands are removed from the tax base, and feel that open space is "just nothing." We do have Community House and Carothers rental

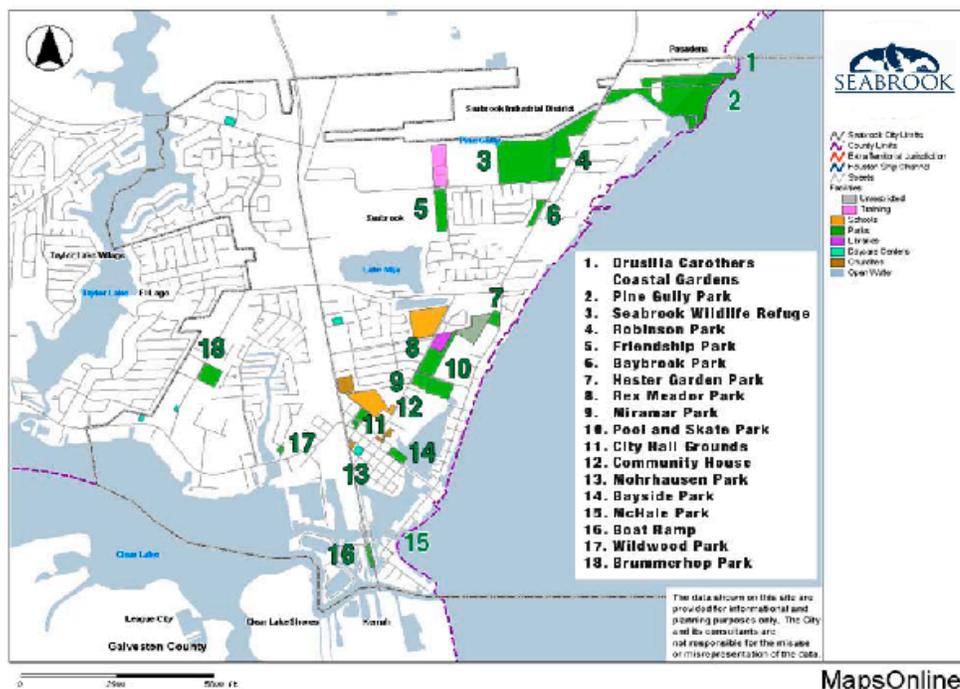
records and gate data at Pine Gully Park based on gate fees. There is an absence of user data for most city park systems in the nation (Walls 2009), including ours.

This nationwide data gap means that even if local information were available, there would be little with which to compare it. For this reason, the needs assessment in the present plan is instead based on accepted national standards used in parks planning, and on recent state and national reviews of parks acreages and facilities.

### 3.1 Parks Inventory

Seabrook has 18 park properties covering almost 200 acres. Eight parks are small parcels, such as the McHale Park pelican-viewing platform and Wildwood Park of less than half an acre. The remaining ten range in size from the 5-acre Miramar Park with pool to the 50-plus wooded acres of Pine Gully Park and the Seabrook Wildlife Refuge.

See Appendix B for an inventory showing acreage and facilities at each park, and see Map 2 for park locations. The City website provides fuller details of amenities available, fees where relevant, and applicable rules and regulations (see <http://www.ci.seabrook.tx.us/>).



**Map 2. Seabrook Parks**

Built amenities exist in most of the parks. These include active recreational amenities—a swimming pool, tennis courts, ball fields, basketball facilities, playgrounds, pavilions, boat launch facilities, and a skate park and disc golf course. Installations also include picnic tables, barbecue grills, gazebos, and informational signage. At the extremes in terms of amenities are Carothers Gardens, which is a fully fledged event venue, and the Seabrook Wildlife Refuge, which is almost completely undeveloped.

The city has established a reputation for excellence in parks, trails, and natural areas, and this needs assessment is intended to ensure that this reputation is maintained. It is an important aspect of

Seabrook's "branding" as part of the greater Houston metropolis. It is also a component of the "small town charm" often mentioned.

### **3.1.1 Acres of parkland per 1,000 people**

TPWD collected information from 388 Texas cities for its *2005 Land and Water Resources Conservation and Recreation Plan*. A summary of findings is given in Appendix D; source: [http://www.tpwd.state.tx.us/publications/pwdpubs/pwd\\_pl\\_e0100\\_0867/land\\_priorities/park\\_analysis/](http://www.tpwd.state.tx.us/publications/pwdpubs/pwd_pl_e0100_0867/land_priorities/park_analysis/))

Findings were that mean park acres per 1,000 population for Texas cities of over 100,000 population is 15.5 acres; mean acres per 1,000 for cities of 20,000 to 100,000 is 11.4 acres; and mean acres per 1,000 for cities under 20,000 population is 15.6 acres. Of the 388 cities, 133 (38 percent), have less than 10 acres of local parks per 1,000 population.

With about 200 acres of parkland and a 2008 population of 11,577, Seabrook's acreage per 1,000 people amounted to 17.2 acres—a fairly strong number for the present, slightly above the state average of 15.6 acres for small cities. However, the strength of that number threatens to dip as population grows. Projected Seabrook population growth is indicated in the city's 2010 comprehensive plan (*Seabrook Comprehensive Master Plan 2030*, p. 7) as follows:

12,102 for 2010  
15,388 for 2020  
17,859 for 2030  
19,994 for 2040

Acreage per 1,000 population thus starts to drop rather quickly, to:

16.6 acres for 2010  
13.0 acres by 2020  
11.1 acres by 2030  
10.0 acres by 2040

Obviously as population grows, there will also be less land available for designation as parkland. The city should always look for opportunities to acquire land.

### **3.1.2 Acres of parkland as a percentage of city land area**

An alternative way to view the proportion of parkland available to residents is through an assessment based on the *proportion* of city land in park uses.

### **3.1.3 Skate Park, Disc Golf Course, Dog Park**

These are relatively new categories of amenities, absent from many cities and without national standards per 1,000 population. In the dozen years since the skate park was built in Seabrook and half dozen years since the disc golf course was built, both have become popular and receive steady use.

*Disc Golf Course:* The nine-hole disc golf course is low-maintenance, trouble free, and complaint free. Players take pride in it, hold tournaments there, and promote use via players' associations. Expansion has been considered.

*Skate Park:* The skate park gets substantial after-school use. Recommendations for the park include a rewards program for tips about vandals; creating a local skating event ("First Annual Seabrook World Championship Challenge"); and occasionally inviting notable skaters to demonstrate their skills.

*Dog Park:* A dog park has received discussion; such parks generally receive high use (Walls 2009). However, given Seabrook's large existing parks and extensive trails, multiple opportunities exist for walking dogs, and a dog park is not currently proposed.

### **3.2 Open Space Inventory and Needs**

The key idea driving conservation of community open space is that it is a way of enhancing a city's development trajectory in ways favored by existing residents and likely to attract future residents. Promoting open space and parks thus also serves to promote development.

#### **3.2.1 What to Protect**

*Waterfront Access:* Physical access to the waterfront has traditionally been provided at two parks. The Boat Ramp is a launch point, and Pine Gully Park has a fishing pier and waterfront walking trail. The Drusilla Carothers Coastal Gardens has a small beach, but as currently envisioned, rental of the entire facility is required to access its shore. McHale Park provides bay viewing at a single point. In a city with several miles of bay and lake shorelines, the amount of physical waterfront access for residents is extremely limited.

*Green Space:* The central and northeastern parts of the city have large parks. City-owned green space in western sections of the city is limited to Brummerhop Park (7 acres) and Wildwood Park (0.47 acres). Small private parcels belonging to homeowners' associations are the only other designated green space in most of the western half of the city. East of Highway 146, most remaining wooded parcels are privately owned and destined for development. Public green space is nonexistent at the Point and very limited in Old Seabrook.

*Views:* Views are intangible and not easily quantified, but they are nevertheless an important component of quality of life for local residents. It is risky to assume that view assets will always be there and to take them for granted. They are easily lost through lack of foresight. Many people choose Seabrook because of proximity to the water, as surveys clearly show. Being near the water becomes a much lesser asset if you can hardly see the water while going about ordinary life. It would be a loss to all if water views were gone. The city should work with developers to retain open view corridors.

*Needs identified:*

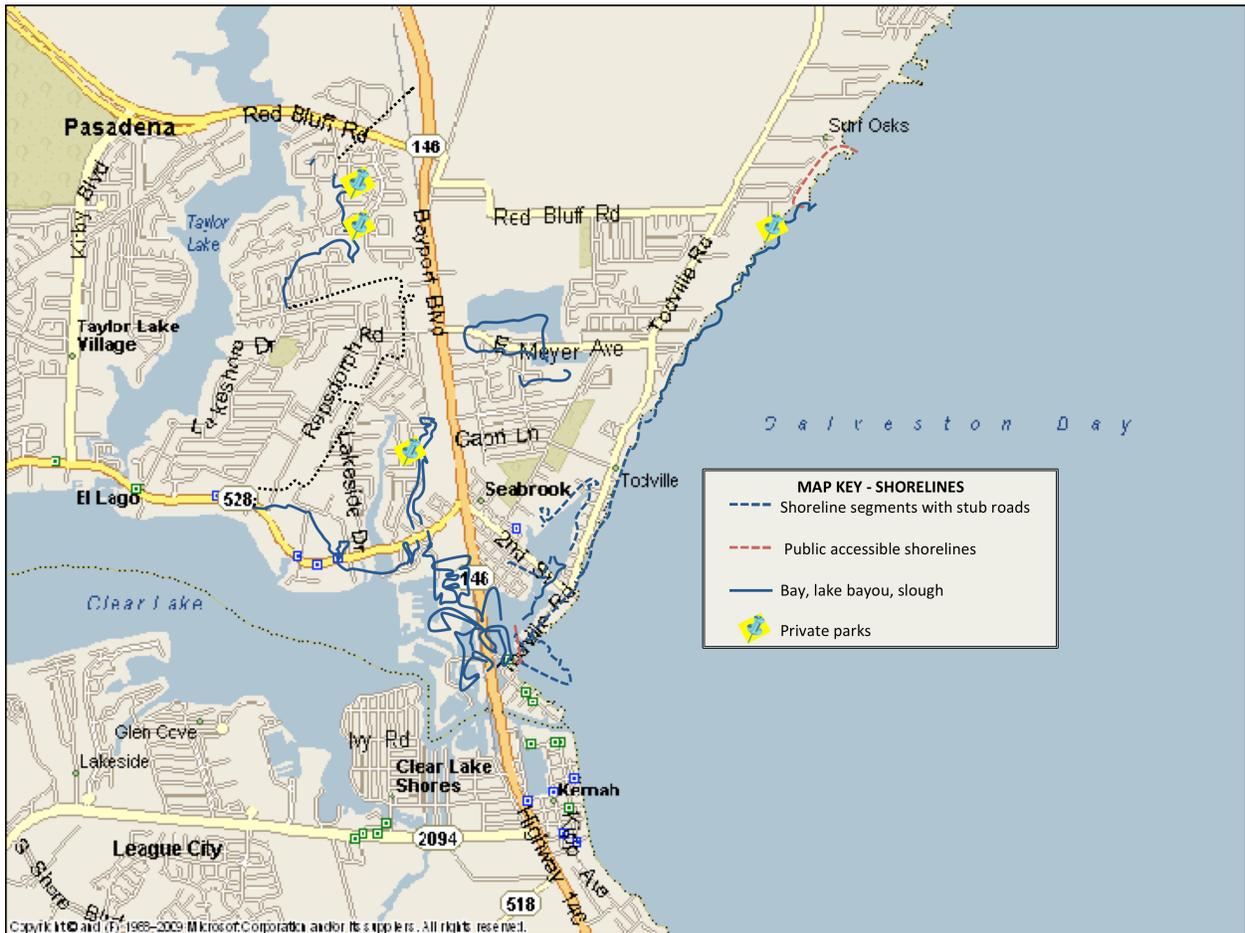
- Expand physical waterfront access
- Increase green space in underserved portions of the city
- Protect public waterfront views

#### **3.2.2 Resource Inventory**

A community visioning process and work group are preferred modes for cities to assess community opinion and identify opportunities for conservation of open space (*Local Open Space Planning Guide* 2007). In the absence of a budget for this, the Open Space Committee consulted with city staff and others to develop an initial identification of open space features of note.

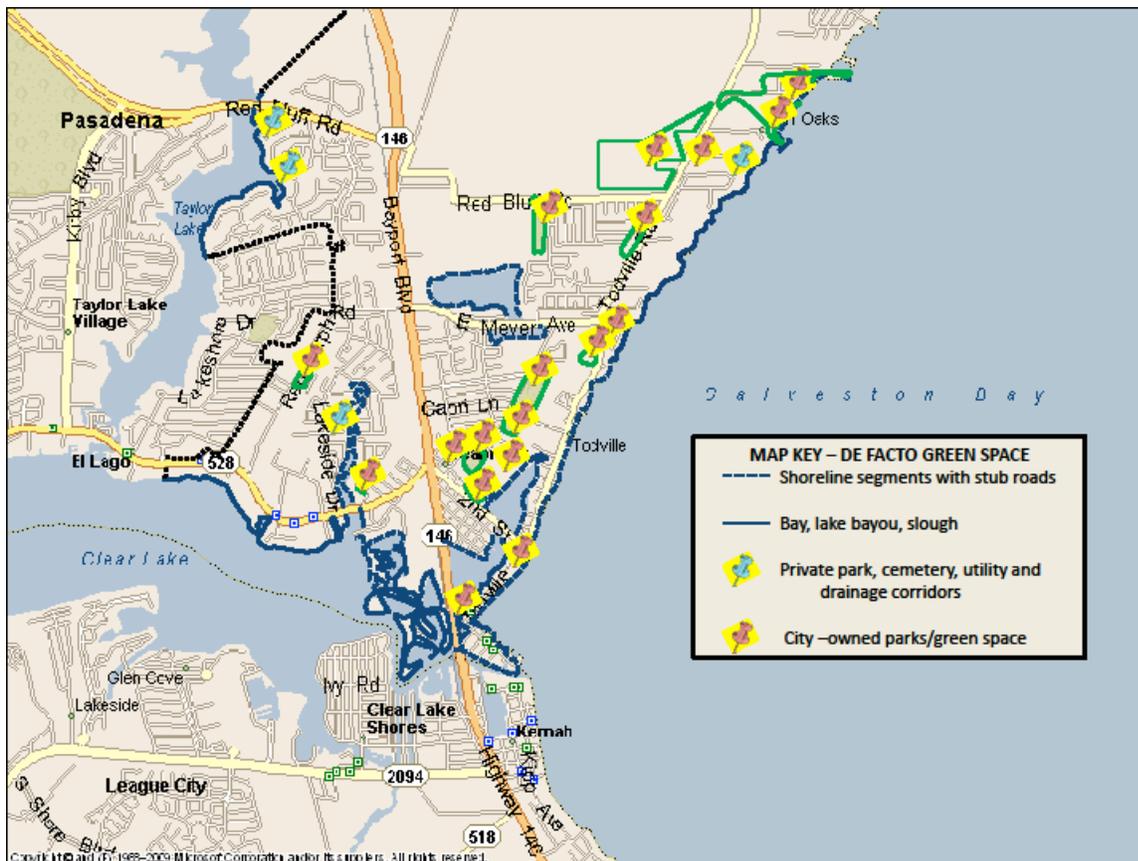
A preliminary inventory of the city's open space resources was drawn up and is presented on Maps 3 and 4.

Further discussion and GIS mapping are still needed to refine the options and to begin reviewing appropriate locations to consider for management as open space resources. The City does have the GIS capability and staff knowledge to conduct this type of inventory in-house, although staff time to assist with this is at a premium.



**Map 3. Shoreline View Resources Bay and lake shores (blue lines), showing publicly accessible bay segments limited to Pine Gully Park and the Boat Ramp (pink lines). Pins show three private parks.**

**Map 4. De Facto Green Space (See text below for types of entities identified.)**



Properties of note from an open space perspective (pins on Map 4) include:

**Parks:** Major assets are Pine Gully, Carothers, Wildlife Refuge, Hester, Meador, and Brummerhop

**Drainage easements:** Upper Pine Gully, Lake Cove

**Rights of way:** Railroad/power line/pipeline easements are a green corridor along Highway 146

**Roadways with bay views:** Todville Road, the Point, Second Street, Repsdorph, Baywood

**Slough and lake views:** Old Seabrook, marinas, Lake Mija, Sandpit Lake

**Stub roads:** Roads ending at the bay and Slough are view resources and public rights of way

**Wooded lands:** These provide a sense of wildness although slated for development

**City-owned lands:** City yard, fire house and training facility, sewage plant

**Other:** School district-owned ball fields, Girl Scouts-owned camp, cemeteries, homeowner association-owned parks, private holdings where people fish unauthorized

The resources indicated on Maps 3 and 4 are combined on Map 5 with parks and trails and are the basis for several of the open space goals and recommendations given in section 5.0. Key findings are that the amount of bay and lake shorelines open to the public is limited; that waterfront views from roadways are becoming compromised; that de facto open space assets such as cemeteries and utility corridors are present; that remaining wooded land exists. Most is destined for development, but some of the above lands will remain green and have potential for such actions as tree planting.

### 3.2.3 Relevant Public Input

A survey that contained numerous detailed questions about natural qualities was conducted in 2004. Some examples of results are:

Wildlife habitat along the shoreline and bayous should be preserved.

Yes 292 (162 strongly agree + 130 agree)

No 13

No opinion 11

The City should support ecology based activities, i.e. bird watching, trails, etc.

Yes 283 (145 strongly agree + 138 agree)

No 19

No opinion 15

Should Seabrook enhance its appearance by conserving or creating green belts and open space?

Yes 254

No 42

No opinion 18

The City should provide access to bodies of water around the city to the public.

Yes 234 (109 strongly agree + 125 agree)

No 65

No opinion 17

These are positive answers with very large margins—more than twice as many respondents favor the City providing water access, and more than ten times as many favor maintaining wildlife habitat.

### 3.3 Gathering Current Public Input about Needs

The Open Space Committee consulted at some length with parks and survey professionals regarding how best to achieve strong public input for this plan. Individual discussions were held with the local PR company Griffin Marketing; with faculty at Rice University and the University of Houston-Clear Lake who specialize in opinion surveys; with public lands consultant Linda Shead, formerly of the Trust for Public Lands; and with HGAC parks specialist Rachel Powers.

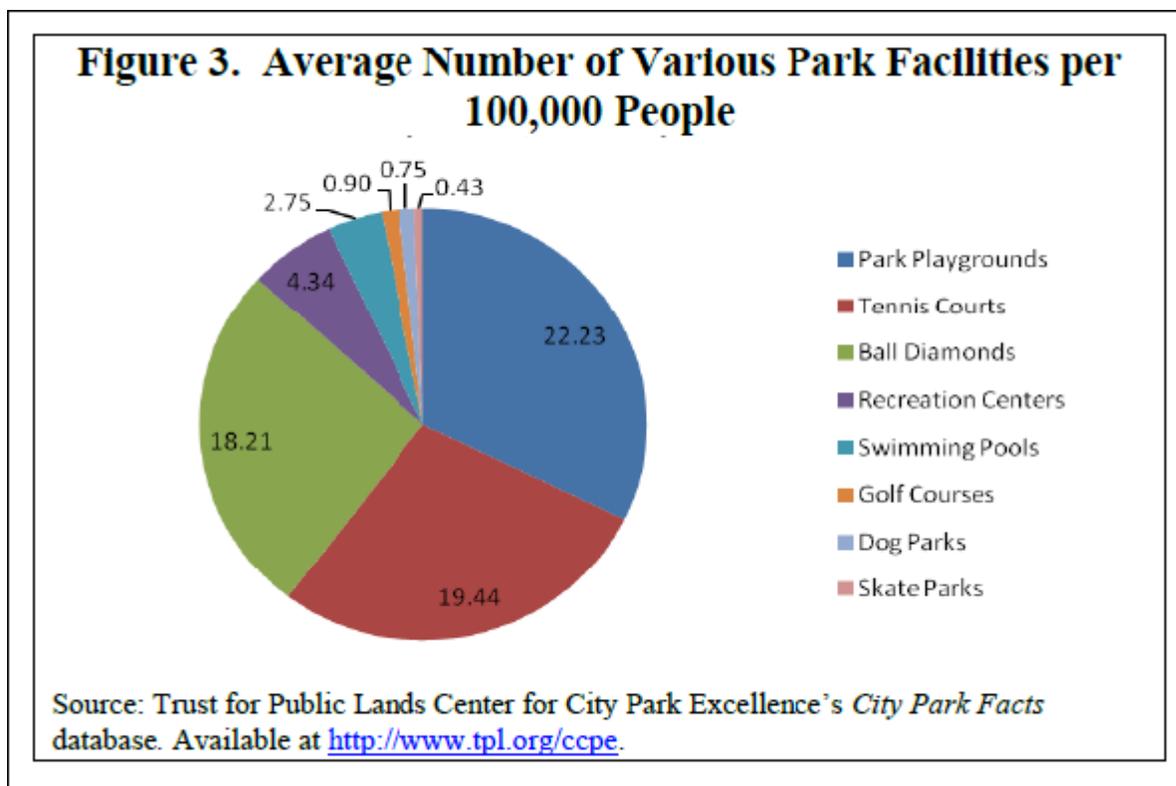
The span of options and costs for surveys is wide. Some entities favor brief telephone surveys on a limited range of questions (perhaps 50 respondents answering 3-5 questions). One UH faculty member advocated reducing survey questions to a very small number or even a single highly focused topic. The committee considered such surveys too limited to provide useful understanding of community preferences.

At the opposite extreme, another UH faculty member emphasized getting all questions answered in quantifiable ways and advocated a minimum of 1,500 responses, with location and income data, to achieve truly random representative sampling. Given limited budget and manpower, trying for 1,500 responses seemed over-ambitious. The course selected was therefore to draft the new plan based on *prior* public inputs, make the complete draft publicly available, invite comment on it, and then incorporate that feedback into the final plan. See Appendix E for feedback received.

### 3.4 Amenities per 1,000 Population

In the absence of dedicated surveys to establish actual demand in Seabrook, the Open Space Committee based the needs assessment for facilities on national standards as described in Walls (2009). This report provides tabulations of 2008 Trust for Public Land assessment of parks as a percentage of city land area and park space per 1,000 people. A proper national database is nonexistent; the Trust for Public Land annual sampling is the best available data for national trends and expectations.

Findings were that Seabrook is supplied with recreational amenities—pool, ball fields, and playgrounds—in line with national standards or with other Texas cities.



Seabrook's population is close to 12,000. The numbers per 100,000 people in the Center for City Park Excellence pie chart (above) were then converted in Table 1 to numbers per 1,000 population and per 10,000 population, for ease of comparison with the figures that are presented in Table 2 for other Texas cities.

These two tables reveal that the numbers of major sporting facilities in Seabrook compare favorably with national averages. Additional facilities will in due course be needed as the city's population expands, but there do not appear to be urgent expansion needs for major sporting amenities in the next ten years.

Comparison with other cities in Texas is also available in the Trust for Public Lands review ([http://www.tpl.org/tier3\\_cd.cfm?content\\_item\\_id=20531&folder\\_id=3208](http://www.tpl.org/tier3_cd.cfm?content_item_id=20531&folder_id=3208)). Seabrook numbers were not included in that review.

**Table 1: Average of Facilities per 1,000 and 10,000 Population**

Facility	1,000	10,000	Seabrook Parks
Playgrounds	0.22	2.22	6
Tennis courts	0.19	1.94	2
Ball fields	0.18	1.82	4 (3 soccer,- 1 baseball)
Recreation centers	0.04	0.43	0
Swimming pools	0.03	0.27	1

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**Table 2. Average of Facilities in Other Texas Cities**

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**Park playgrounds per 10,000 people**

Corpus Christi	4.9
Lubbock	2.7
Plano	2.6
Fort Worth	2.3
El Paso	2.1
Austin	1.5
Dallas	1.5
Houston	1.4
San Antonio	0.9
Average for all cities in TPL study is	2.2 park playgrounds per 10,000 people
Seabrook	6

**Baseball diamonds per 10,000 people**

Houston	1.1
Fort Worth	0.7
San Antonio	0.4
Dallas	0.3
Average for all cities in TPL study is	1.8 ballparks per 10,000 people
Seabrook	2 (plus 3 soccer fields)

**Dog parks per 10,000 people**

Houston	0.3
Dallas	0.2
Forth Worth	0.2
San Antonio	0.2
Average for all cities in TPL study is	0.7 dog parks per 10,000 people

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**3.4.1 Playground Equipment**

The national standard calls for a minimum of 0.50 playgrounds per 1,000 population. With a present population of about 12,000 people, this means Seabrook should have at least six playgrounds. Six playgrounds do exist in city parks (see Appendix B for locations). In addition, several homeowners associations have installed play equipment in their private neighborhood parks (e.g., Lakepointe Forest, Seabrook Island, and Lake Cove).

In the absence of use data, the Open Space Committee notes that ways to increase playground usage would be to add more shade and to locate playgrounds within subdivisions whenever possible.



**Figure 4. The Pine Gully Park playground gets use on holiday weekends but is too far from concentrations of homes to receive use by resident children during most days of the year. It also illustrates how exposed to the full sun some playgrounds are.**

One third of 2010 survey respondents favored additional playgrounds (23 out of 68; Appendix E). As the city grows, the likelihood is that homeowners' associations will provide additional play equipment where desirable—in the heart of new neighborhoods.

*Needs identified:*

- Updating to include more appealing newer styles of equipment .
- Planting shade trees to make existing playgrounds more appealing.
- Review 2010 survey responses to identify zones where people want more play equipment.

### **3.4.2 Baseball, Soccer and Basketball**

National standards indicate one baseball field per 6,000 residents. Seabrook has one city field for 12,000 residents. In addition, Seabrook has three soccer fields at Friendship Park and has basketball courts and/or hoops at five parks: Baybrook, Brummerhop, Friendship, Meador and Wildwood. Pressure for more was not evident in the 2009 Master Plan Commission survey, but ten respondents to the 2010 survey on this plan called for softball facilities (see Appendix E). Conversion of some soccer fields may provide a way to address this request.

### **3.4.3 Pool**

The national standard indicates one pool per 15,000 population. Although its population remains below that level, Seabrook has long had a public swimming pool. Need for a second was not identified.

### **3.4.4 Other Amenities**

Appropriateness of these facilities depends less on population than on local conditions and demand.

*Piers:* The pier at Pine Gully Park attracts fishermen and received increased user pressure after Hurricane Ike destroyed other piers in 2008. Casual estimates by park personnel indicate that a high percentage of use is by nonresidents. Resident pressure for additional piers was not noted.

*Gazebos:* These exist at Second Street and Robinson parks, adding shade and visual interest, and occasionally being used for small-scale events. As relatively low-cost and low-maintenance structures, and with a welcoming quality as rest stops with shade, gazebos may be worth considering for one or two more of the city's parks .

*Picnic Tables, Shade Structures and BBQs:* These items should be monitored on a regular basis in order to maintain them.

*Butterfly Garden:* Created by the Eco-Tourism Committee partnering with Lyondell, the Butterfly Garden in Hester Garden Park has benefited from ongoing volunteer maintenance and has occasionally attracted event use (as a free venue, without closure of the surrounding park or trail system).

Note: Opinion gathering in recent years has not been sufficiently detailed for much clarity on how popular these amenities are or whether additional need exists, but absence of requests for more of the above suggests that the level is about right.

### 3.4.5 Indoor Sports Facilities

Seabrook is lacking an indoor recreation center since the loss of the church-operated Ed White Youth Center. Cities with a population of 12,000 are not typically in the business of running a full-scale indoor sporting facility (see Table 1). Beyond the major capital costs of construction, such a facility would require ongoing staffing, operation and maintenance. In short, creating City-owned indoor sporting facilities is largely beyond our reach.

Although an indoor facility was identified as a wish item in the 1998 parks survey (see Appendix A), it drew substantially less interest in subsequent opinion surveys. Residents' priorities appear to lie elsewhere.

### 3.4.6 Likely Population Growth

Seabrook's population of not quite 12,000 people is expected to increase to about 20,000 in the next 30 years. The projections in Tables 3 and 4 are drawn from the city's 2010 comprehensive master plan.

**Table 3. Population Projections**

	TWDB	HGAC	Average
2010	11,943	12,260	12,102
2020	14,377	16,399	15,388
2030	16,771	18,946	17,859
2040	19,141	20,846	19,994

**Table 4: Growth and Percent Change in Population of Seabrook, 2000 to 2040**

	Population	Change	% Increase
2000	9,443		
2010	12,102	2,659	28.2%
2020	15,388	3,286	27.2%
2030	17,859	2,471	16.1%
2040	19,994	2,135	12.0%

Sources: Population figures are averages developed by the Master Plan Review Commission based on Houston-Galveston Area Council and Texas Water Development Board projections (*Seabrook Master Plan 2030*, p. 11).

## 3.5 Views

People love to look at the water. The most obvious visual factor distinguishing Seabrook from every other city in Harris County is the appeal of its waterfront views—the long open-water vistas, marinas with rocking masts, lines of flying pelicans, winding wooded bayous, and marshes with wading birds.

Such views convey a sense of relief from urban congestion, release from workaday pressure, and recreation awaiting.

“Proximity and access to Bay and Lake” drew the second highest rating (153) among local assets identified in a 2009 survey. The only suite of assets to score higher was “Parks, Trails and Pool” (159). Third was “Small town charm” (142). For a full listing of how survey respondents identified and ranked various community assets, see the *Seabrook Comprehensive Master Plan 2030*, appendix).

Views are available to residents and visitors by car when crossing the Seabrook-Kemah Bridge, driving along Todville Road, and from a few other roadways in Old Seabrook. Good waterfront viewing is available on foot only at Pine Gully Park, McHale Park and Second Street Park. The importance of expanding pedestrian access to waterfront views is acknowledged in the city’s trails plan (*Seabrook Hike and Bike Trails Master Plan 2010*, e.g., section 4.5), which includes major components addressing this.



**Figure 5. Water views of the Slough and Bay are prime along Todville Road, while Pine Gully Park offers natural bayou views and fine birding.**

Retaining waterfront views and public waterfront access is an issue that becomes clearer when shorelines are mapped (see Map 3). The city has more than 10 miles of lake and bay shoreline, but only a few hundred yards of bay shore and a few hundred feet of lakeshore are publicly owned (at Pine Gully Park, Carothers Gardens, McHale Park and the Boat Ramp). Slough and bayou views are somewhat better served, with parkland and trails reaching along portions of Pine Gully and Hester Gully, and Second Street.

Along other roadways, structures already block the waterfront view along nearly all of NASA Parkway. Grade elevation and larger homes are progressively eliminating water views from upper Todville Road. Lower Todville Road, parts of Old Seabrook, and the Point provide the city’s major remaining waterfront view opportunities. In these areas, the stub roads dead-ending at the shores of the bay and the Slough thus provide significant viewshed focal points and resources.

### **3.6 Pressure at Pine Gully Park**

During most of the year, park and pier use are at levels allowing a quality experience for all. Visitor pressure builds on fine summer weekends and holidays. Peak visitor days intensify the operational work load in bathroom maintenance, trash handling, and the like. Peak days generate complaints from trail users of feeling "crowded out," and complaints from neighboring residents about noise and about park visitors moving along the shore onto private land.

Periodic pressure is addressed through gate staffing and the fee structure: no charge for residents, \$20 per car for nonresidents, as of June 2010. When parking is filled, some new arrivals park on the roadway and walk in (avoiding the entry fee). When heavy use generates issues and complaints, an entry quota suggests itself.

Siltation of the bayou and erosion of the prehistoric shell middens at its mouth are also concerns at Pine Gully. For bayou restoration plans, see 4.3.

*Needs identified:*

- Action is needed to preserve the integrity of the bayou and the shell middens.
- Recent fee changes designed to constrain heavy use should be monitored through gate counts for effectiveness in encouraging resident use and reducing nonresident use.
- Gate staffing may need review to reduce it at low use times but increase it at high use times.
- Parking booms may provide a tool to reduce gate staffing needs.

### **3.7 Other Needs**

#### **3.7.1 Silent Constituencies**

Some groups who do not readily speak for themselves in public opinion surveys (and do not turn up as majority interests) include children and disabled people.

*Programs for Children:* Based on existing facilities per 1,000 population and park usage, it appears that what is needed for children are additional *programs of activity*. Such programs require either volunteer effort or a budget for City staffing or contractors. In the absence of such a budget, existing volunteer groups and organizations in the community should be explored as possible organizers and venues for such programs.

*Facilities for the Disabled:* Beyond the requirements of the Americans with Disabilities Act for City-owned facilities to be wheelchair accessible, Seabrook does not have custom park offerings for disabled people. Dedicated grants are available for such purposes. The feasibility of customizing landscaping for people who are blind or wheelchair-bound should be investigated. See Appendix G for background on “sensory gardens” and for Texas examples.

*Needs identified:*

- Children’s activity programs.
- Park amenities for disabled people.

#### **3.7.2 Operational Issues**

*Staffing and operations:* Staffing is beyond the scope of this plan and is mentioned only to indicate limitations. Maintenance and security take priority. Seabrook lacks children’s programming in its parks because there is no staff for this. Some gate management and visitor pressure issues at Pine Gully likewise have staffing implications. As noted, staffing needs are one reason this plan does not include indoor recreational facilities, and ornamental plantings are one more category in which options are limited by staff and budget constraints.

Note that while this plan was being prepared, park budget cuts resulted in staff reduction and shorter summer pool hours. The main implications for park operations were to transfer maintenance

responsibility for parks to the Public Works Department. Hence any new program suggestions require caution until budgets strengthen, and volunteer contributions are helpful in all parks activity.

*Park development trends:* The first wave of park creation (1800s), was to create “pleasure gardens” or pastoral islands in the urban environment. Starting in the early 1900s, demand arose for recreational facilities for children: “Thus was born the notion of the playground. The recreation concept expanded to include swimming pools, ball fields and indoor recreation in the early and middle of the twentieth century. But after World War II, interest in city parks waned. The move to the suburbs, where everyone would have a yard of their own, was thought to make the notion of public parkland rather obsolete” (Walls 2009, 3). Some urban parks declined.

In the 1990s, however, parks across the nation experienced a revival of interest. Walls surveyed city parks directors about usership and challenges. On usership, a central finding was increased public demand for virtually all activities offered in local parks—especially for trails (Walls 2009, fig. 4). On challenges, fully 65 percent of parks directors placed funding for operations and maintenance in the category of a “huge issue” or “major challenge” (Walls 2009, fig. 10).

*Lighting:* Requests arise from time to time for less or more park lighting. Club-sponsored soccer field lighting has generated public complaints. How lights can be shielded so as not to inconvenience neighbors needs exploring. Lighting some sections of hiking trails for evening use in hot weather is a request arising from time to time. Investigating options, costs, and demand seems advisable.

### **3.8 Summary of Needs**

A priority facilities list was developed by the Open Space Committee and is presented in section 2.1 of this plan. It reflects short-term needs. Longer-term needs identified from national standards and local opinion surveys are to expand park holdings, conserve green space, and protect views. In summary, the needs identified are:

#### *Park Space*

- Increase park space to serve projected population increase.
- Increase green space in underserved portions of the city.

#### *Waterfront Access and Views*

- Expand physical waterfront access.
- Protect public waterfront views.

#### *Pine Gully Park*

- Monitor fee changes for reducing overcrowding.
- Renew amenities on a basis that favors residents.
- Review gate staffing for appropriateness at low and high use times.

#### *Playgrounds*

- Plant shade trees.
- Renew equipment on a selective basis.
- Review 2010 survey for zones where people want more.

#### *Silent constituencies*

- Consider partnering for children’s activity programs.
- Consider partnering for park amenities for disabled people.

#### *Operations*

- Review staffing levels.
- Strengthen the operating budget.
- Consider lighting questions.
- Parks Director.

Trail safety is one more need identified by residents. Several respondents to the 2010 online survey noted traffic hazards for particular trail segments and crossings. (See Appendix E, comments 7, 10, 20, and 45.)

## 4.0 RELATED PROJECTS



This section describes several projects contributing positively to the city’s natural asset base. Initiated by various different entities, some are in progress; some are reflected among the recommendations in this plan; and some are still at the idea stage. Descriptions are included here in an effort to ensure that the Seabrook Open Space and Parks Plan interfaces well with related initiatives.

A guiding principle in this plan is that open space resources carry identifiable economic and other benefits for a community. In particular, a growing body of data shows that parks, trails and green space strengthen city tax revenue by boosting property values. See Appendix F for a discussion of tax-related benefits of open space. Other benefits range from promoting fitness to maintaining a sense of community and supporting wildlife that people enjoy. A Trust for Public Land report (Harnik et. al. 2010) notes that green space can:

- *Attract investment*—Parks and open space create high quality of life that attracts tax-paying businesses and residents. Corporate and small business owners rank quality of life, including parks and open space, among their top priorities for choosing a business location.
- *Revitalize cities*—Urban parks, gardens, and recreational open space can stimulate commercial growth and promote revitalization. A key to restoring neighborhood economic vitality is restoring the residential vitality.

These topics are fully addressed elsewhere, notably Lerner and Poole’s *The Economic Benefits of Parks and Open Space* (1999). Special park development funding options used in other cities are described in the Center for City Park Excellence report “When There’s Nothing to Conserve—Create!” (Harnik et al. 2010).

### 4.1 Plans for the Waterfront

#### ***Parks and Walkability***

The *South Seabrook Waterfront Development Plan* (2006), prepared for Seabrook’s Economic Development Corporation by JJR Consultants, has major emphasis throughout on enhancing the natural environment and promoting connectivity and walkability in Seabrook’s waterfront districts. The following objectives are drawn from the JJR Plan and mirrored in the city’s 2010 comprehensive master plan (section 5.3):

#### ***Enhance Old Seabrook’s parks and open space infrastructure***

- Create a more walkable and pedestrian-friendly Old Seabrook
- Create a signature civic square along Second Street that serves as a central hub
- Develop boardwalks and wildlife viewing trails from Old Seabrook to Todville Road and the Point
- Implement a tree planting program throughout the district
- Include public access boardwalks and overlooks



**Figure 6: Sailing on the bay, with a flight of pelicans winging above the leading boats. Windsurfing and kiteboarding are other action sports watchable from the waterfront when the wind is up.**

#### **At the Point**

- Develop a central green space around which commercial activity can thrive
- Provide uninterrupted public access to the waterfront perimeter of the Point
- Enhance walkability
- Maintain the working shrimp fleet as a vital asset to the community

#### **Along Clear Lake**

- Encourage that views to Clear Lake are maintained in each development along the waterfront
- As part of mixed use and commercial developments, provide public access to and along the waterfront through plazas or boardwalks wherever possible

### **4.2 Habitat Island**

#### **Island Restoration and Creation of Coastal Marsh**

This is a project that underscores the convergence of conservation and development interests in the city. It derives from the JJR Plan discussed in 4.1, is fully described in a new study (*Seabrook Habitat Island Feasibility Study 2009*), and is a component also outlined in the city's 2010 comprehensive master plan (section 5.7). Depending on the selected location of the island, it may lend itself to dovetailing with expansion of McHale Park, with possible bridge access.

As background, a marsh reconstruction project undertaken in the Seabrook Slough in the early 1990s has been a success. Close to 20 years later the restored marsh has required no maintenance beyond cleanup following Hurricane Ike in 2008, yet it has steadily provided ecological benefits in the form of nursery habitat for many estuarine organisms in the shallow water of the Slough. The restored marsh, highly visible from Highway 146, also attracts wading birds.

In 2009 the city's Economic Development Corporation proposed and the City Council commissioned a feasibility study for building Habitat Island—in effect, restoration of the former Goat Island, which

disappeared during the decades of coastal subsidence resulting from groundwater pumping (*Seabrook Habitat Island Feasibility Study* 2009). Efforts are under way to obtain grant funding for construction of marsh habitat making up the new island, which is gauged to be feasible both physically and financially.

Beyond naturally sustaining native wildlife and providing walkers with a new bird viewing area, the island's creation carries storm protection benefits and is also expected to help anchor redevelopment at the Point following serious 2008 storm damage.



**Figure 7. Silting in Pine Gully, May 2010. Sand washing in from the bay has built up since 2005 and has damaged the productivity of tidal marshes that are important nursery habitat for the young life stages of many marine species. Restoration is planned.**

#### **4.3 Pine Gully**

##### ***Bayou Remediation and Protection***

Serious siltation problems arising in Pine Gully since 2004 are being addressed through restoration work for which engineering studies have been completed and permitting is almost complete as of February 2012, under the purview of the Seabrook City Council and facilitated by Galveston Bay Foundation. The City of Seabrook does not own Pine Gully but has spearheaded effort toward restoration because of having major park properties along this bayou. Remediation and protection of the bayou's proper tidal functioning and its archaeological resources are the project objectives. Physical work is expected to occur during 2012, with monitoring to follow.

#### **4.4 Seabrook Is a Bird Sanctuary**

##### ***Consider the Birds***

For more than 20 years, street signs have proclaimed Seabrook as a bird sanctuary. Pelicans have become the city's trademark wildlife, in the form of a wintering flock of white pelicans and growing numbers of brown pelicans, an endangered species that has recovered well and is now a year-round resident species nesting on Galveston Bay.

Roadside bar ditches support a population of the yellow-crowned night-heron, which hunts crawfish in the ditches. During spring migration trail users often see large flocks of cedar waxwings, solitary but colorful buntings, and many other migrant songbirds. In fall and winter numerous birds of prey pass through the area, sometimes including bald eagles. Birdhouse workshops where people built their own

birdhouses were conducted annually by the former Eco-Tourism Committee for several years and proved popular among residents interested in attracting nesting birds to their yards. Ensuring the continued presence of birds over the long term requires a focus on retaining habitat quality as the city grows. Migrant birds on long-haul journeys need coastal woodland belts for food and shelter. Herons need bayous, ditches, and other shallow waters for fishing. Pelicans love old pilings for safe roosting.

In the absence of a local volunteer group focused on birds, the Open Space Committee is an appropriate entity to encourage birding organizations to have a presence in Seabrook. Focal species and options to consider include:

- Pelicans—advocate for retaining the pilings favored as roosts
- Herons—protect shallow waterways, including ditches
- Hummingbirds—encourage appropriate plantings in private and public settings
- Ospreys—promote awareness and consider providing nesting platforms
- Songbirds—further birdhouse workshops

#### **4.5 The Urban Forest and Native Species**

##### ***Replenish the Tree Canopy***

As a general trend, intensifying urban development reduces tree coverage. Land is typically stripped of vegetation for drainage work during the construction phase. In Seabrook a tree ordinance protects a few specimen trees, but these are often lost soon after construction as a result of surface hardening and grade raising. Replacement landscaping is routinely lower in profile and designed for ornamentation rather than with emphasis on native vegetation appropriate for native wildlife.

Storms also reduce the tree canopy over time; often large trees that are lost are not replaced. And larger houses leave less space for large trees. In combination, these factors have significantly reduced the local tree canopy. Shade makes any setting more inviting in a hot climate, and large shade trees provide special landscape qualities not duplicated by ornamental plantings. The City of Houston and CenterPoint Energy are two of several entities that have tree programs to draw upon as models for reforestation.

The Open Space Committee is an appropriate entity to support maintaining and replenishing the native tree canopy. Following are sample planting locations for trees proposed for selected land:

- Flanking Hwy 146 – major tree planting effort along and near the route of Highway 146 seems advisable; timing of highway redevelopment is uncertain, and trees planted soon could be 30 feet tall by the time highway work occurs
- Robinson Park
- Pine Gully Park
- Meador Park
- Other parks
- Fire training facility frontage

Other options include:

- Drawing upon volunteers in the Master Naturalist and Master Gardener programs for counsel
- Encouraging homeowners to plant locally appropriate species

Acquisition of land with distinctive trees

A local “Champion Trees” list (city’s biggest live oak, hackberry, yaupon, etc.)

Native trees and plants should be favored. “The notion that native plants are somehow fundamentally shabby, ill behaved, or second-rate . . . persists in the minds of many people ” (Noke 1986), but these are the trees, shrubs and smaller plants best adapted to local conditions. The city’s tree ordinance lists many native tree species, such as cedar elm, hackberry, pecan, magnolia, and various oak species (see Appendix J). East Texas native trees that put on a fine springtime floral show include the eastern redbud and dogwood; planting these in numbers would produce an impressive show each year. Some shrubs are appropriate for exposed coastal conditions and a salt-laden breeze, such as wax myrtle and lantana; some wild plants flourish in soggy conditions, such as Louisiana iris. Massed native plants with a low and compact growth habit can be a good alternative to mown grass in areas of full sun (fig. 8).

A key source of tree/shrub/plant recommendations for the Gulf Coast region is the Texas Coastal Watershed Program based in Clear Lake, and its WaterSmart Gardening program coordinator, providing consulting for numerous native gardening efforts. Other sources include the Houston Chapter of the Native Plant Society of Texas, the regional group of Master Gardeners, nursery operators knowledgeable about native plants, and many books. See, for example, Sally and Andy Wasnowski’s *Native Texas Gardens: Maximum Beauty, Minimum Upkeep* (1997).

**Figure 8. (See next page also.) Wildflowers can be showy, especially when massed for effect. All species pictured are Gulf Coast natives and were photographed locally.**





#### 4.6 Red Bluff Green Plaza

The new Highway 146/Red Bluff Road commercial hub is indicated in the *Seabrook Comprehensive Master Plan 2030* as a key focal point for business expansion in coming years. It is on the city's major arterial road and a gateway to the city. Green space of some kind near this new hub could help attract and anchor the commercial development there. Such a park plaza would have significant benefits:

- Setting a pleasing tone where people enter the city
- Serving as a "signature civic square," as in the JJR Marine District plan for Old Seabrook
- Providing a trail destination/start point for hiking trail connection across Hwy 146

The time to consider such a plaza, park, or square for Red Bluff/Hwy 146 is early in the development of this commercial zone. Possibly park designation of an appropriate parcel can be achieved through contractual agreement with the state (TxDOT), Harris County, or a developer.

The Houston model is Discovery Green, which has served well to anchor major surrounding development. A shady park area at Seabrook’s northern business center would beautify a key city entry point, enhance restaurant/hotel appeal, help attract new business, and supply a first Seabrook stopping point on the proposed future regional hike/bike trail crossing Hwy 146 from/to Armand Bayou Nature Center and beyond. Grass and trees only would mean relative ease of maintenance. A gazebo might be appropriate, and other amenities might be added in due course.

#### **4.7 Tallgrass Prairie**

Authentic native prairie has great species richness, but because grassland is easily developed for agriculture or planted for pasture, such natural prairie has now become an extremely rare habitat type in coastal Texas. Armand Bayou Nature Center has a bank of knowledge about prairie restoration for us to draw upon.

At Pitman Park in Bellaire, a luxuriant small prairie plot (about 30 x 30 feet) was created by the simple expedient of moving patches of sod and their rooted plants to Bellaire from a rural site that had long been unplowed prairie but was about to be paved for a car dealership. Pitman Park is heavily shaded and has only a limited section sufficiently sunny to support prairie plants. Within a single season of being moved there, the prairie plants stood six feet tall and too dense to walk among. Seabrook, in contrast, has extensive sunny park areas that are appropriate for such a demonstration prairie.

\* \* \*

All the projects profiled here have crossover economic and environmental benefits. They all provide visual enhancements, contribute to city branding, support open space and wildlife, and serve to enhance civic pride.

## **5.0 RECOMMENDATIONS**

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Beyond the priority actions already listed in section 2.1 for the short term, further recommendations follow to address goals that support a longer-term vision. Goals 1-3 and accompanying recommendations address retaining open space and natural qualities, based on efforts to respond to public opinion. Goals 4-6 focus on best use of existing park holdings, based on direction in the city’s 2010 comprehensive master plan. Goal 7 involves expansion to maintain park excellence as the city grows, based on needs identified. Wetlands conservation is an aspect of goals 1-3 and 7.

### **5.1 Goal 1: Expand bay, lake and slough waterfront access for walkers, cyclists, and kayakers.**

Civic commitment to a city’s waterfront can create well-used and much-loved public spaces. *The River Walk* in San Antonio, for example, is inviting and has become a major attraction as the public face and abiding impression of the city. Given the modest amount of publicly accessible Seabrook shoreline, and the high value that residents place on being near the waterfront, provision of fuller accessibility is an important objective.

Parks and trails in Seabrook provide several bayou and woodland segments where people enjoy a sense of retreat among lush greenery, small waterways, and wading birds. But access to the bay shore and lakefront is quite limited—Pine Gully, Second Street, and small parcels at McHale Park, Wildwood, and the Boat Ramp. Old Seabrook and the Point offer the best views and opportunity for pedestrian access.

Although Texas coastlines are legally public property, neighboring landowners are protective, and most shoreline is thus effectively private. The Texas General Land Office had to publish a *Beach and Bay Access Guide* to advise people where to enter waterways without challenge. Generations of residents will benefit from improved waterfront accessibility.

#### *Recommendations*

- 1. Back Bay:* Identify and acquire or contract for two to four parcels in Old Seabrook that can provide a Second Street gathering hub (as proposed in the JJR plan and comprehensive master plan) and/or provide a green core and pedestrian shoreline access elsewhere in Old Seabrook.
- 2. The Point:* Identify and acquire or contract for a parcel that will constitute a “natural destination” at the Point. Added to roadway/utility upgrades and the planned Habitat Island viewing point (see section 4.2), a park parcel would be third factor boosting redevelopment at the Point.
- 3. Slough:* Revisit past planning effort for a Seabrook Slough boardwalk to explore whether conditions that formerly stopped the project still persist, and whether adjusting parameters or locations may enable pedestrian Slough access.
- 4. Kayaking:* Develop dedicated kayak put-in points for lake and bay access. Paddling can allow passage in places where pedestrian options are difficult, and a kayak launch could be a component within any or all of the preceding three recommendations.
- 5. Coastal Footpath:* Begin long-term work toward eventually enabling people to walk or jog along the Seabrook shoreline of Clear Lake and Galveston Bay, with all the commercial potential this offers (as in San Antonio’s River Walk). Models for this include the Seattle and Chicago waterfronts and Britain’s ambitious intent to create a 2,800-mile coastal "corridor" around England, with Scotland and Wales implementing similar plans.



**Figure 9. Brown pelicans almost disappeared from Galveston Bay but have now returned as a breeding species. Pelicans in flight add drama and grace to waterfront views; pelicans diving for a meal add natural action; and birds roosting on pilings add a comic air. Whatever way we look at them, they are a plus, worth keeping around. Photograph by Richard W. (Dick) Bricker.**

## **5.2 Goal 2: Preserve views, with emphasis on open space and naturalness.**

Classic open space assets are waterways and wetlands, natural woodlands, and mown park like terrain. Views of these have a major impact on quality of life, yet views are not easily quantified as a community asset. Rather, their importance is thrown into focus by public shock when views are changed. For example, since 2000, high-rise and container crane development beyond Seabrook's control have altered coastal skyline views to the east and north.

Examples of view losses inside the city include commercial structures masking the waterfront , large homes obscuring water views , loss of wetlands, and loss of large old trees.

Public dismay at loss of views is not readily quantified either, but it nevertheless warrants addressing. Measures proposed here are based on incentives rather than regulation. To work, incentives must provide owners with substantial and long-term benefits, as conservation easements do.

### *Recommendations*

1. *Waterways:* Use incentives to promote a mix of green space and structures along bay, lake and slough shores to create more interesting views for the long term than buildings alone can provide. Trees, pilings and marshlands benefit wildlife and create more interesting texture in viewsheds than open water alone.
2. *Wetlands:* Create specified benefits applying to each wetland component preserved or created during new development, and use this benefits structure to promote owner/developer decision making that not only enhances appearance but also conserves or creates usable habitat and perhaps adds low-impact boardwalks (e.g., during drainage work, grade raising, bulkheading).

3. *Wooded lands*: Provide specific incentives for maintaining wooded sections during new development. Noting that land is essentially stripped before construction despite tree-removal permit requirements, new measures (regardless of tree size and species) are needed to encourage keeping some woodland canopy. For example, maximum benefits might apply to fully wooded bands left along roadways, with lesser benefits where wooded stretches are discontinuous.

4. *Parklike lands*: Create a detailed project list for volunteer work by Scouts and other civic bodies to enhance mown green space (e.g., ball field, cemetery, right-of-way easement). For example, promoting vegetation for screening and shade makes de facto green space more productive than plain mown grass. Scouts in particular regularly request to build benches, small bridges, etc., which can result in installation of amenities not planned and sometimes later removed; focusing such volunteer effort would serve all parties better.

5. *Roadway corridors*: Involve neighboring business owners and residents in five focus groups on how best everyone can work together to preserve views and attractive appearance for the long term along the five city's major thoroughfares:

NASA Parkway  
Todville Road  
Red Bluff corridor

Lakeside Drive as a new thoroughfare  
Meyer Road as a new thoroughfare

### **5.3 Goal 3: Maintain and enrich conditions that support local wildlife.**

Beautification is recommended on the long-term basis of maintaining, restoring, and creating woodland and wetland habitats, so that Seabrook's parklands continue to look inviting and to support local wildlife for 50 years and beyond. The larger northern parks and wooded neighboring private properties create a single "urban forest." Retaining a good shade canopy across the city as a whole and working to retain green space corridors are two aspects of a commitment to natural qualities.

Some smaller park holdings have ornamental plantings (e.g., Mohrhausen Park), several larger parks consist chiefly of grass (e.g., Meador and Miramar parks), and the biggest holdings are more wooded and natural (e.g., Pine Gully Park, Seabrook Wildlife Refuge).

#### *Recommendations*

1. *Tree canopy*: Establish a citywide tree planting and maintenance program to promote canopy trees on both public and private lands, with emphasis on native tree species that sustain wildlife (see 4.5). Components include:

- Plant additional shade trees in heavily used park areas.
- Create a live oak avenue along portions of the city's Highway 146 main axis.
- Create low-maintenance wildflower displays along portions of Highway 146.
- Encourage developers to retain or establish screening belts of trees.
- Publicize the tree ordinance.
- Promote wildlife-friendly gardening among residents (e.g., plants that support butterflies, hummingbirds, and other migrating birds; owl nesting boxes).

2. *Green corridors and native plants*: Assess potential for connections around the city to take advantage of existing drainage and utility installations as ways to make habitat/green space continuous for walkers, joggers and wildlife. Large roadways are the most challenging barriers.

A Highway 146 undercrossing point that is safe for wildlife as well as safe for pedestrian crossing would be a major accomplishment. Native plants make sense in that they are adapted to local conditions. A further reason to use them is that they support the native pollinators, which in turn support birds (see 4.5 for more detail). Conservation easements may help create corridors.

3. *Habitat wish list*: Create wish list of 20 habitat-related items for volunteer projects by Scouts, civic groups and similar. Possible examples include:

- Build nest boxes.
- Create an osprey nesting platform.
- Establish wildlife food plantings.
- Renew food plantings regularly.
- Create migrant bird feeding stations.
- Supply feeding stations during months of migration.
- Establish a 50x50-foot tallgrass prairie plot. (See 4.7.)

4. *Habitat Island*: Facilitate and monitor the Habitat island project. (See 4.2.)

5. *Pine Gully*: Facilitate and monitor bayou restoration. (See 4.3.)

#### **5.4 Goal 4: Ensure best use of existing park holdings.**

Trails to connect all the city's parks into a single network are a top priority and are covered in the *Seabrook Hike and Bike Trails Master Plan* (2010). The hope is that when budget allows, Seabrook may once again have a parks director. In general, the Open Space Committee is cautious about proposing built structures that will need maintenance and renewal. Following are recommendations for existing parks, arranged from north to south.

##### *Recommendations*

1. *Drusilla Carothers Coastal Gardens*: Establish vegetation screening along the northern boundary to secure privacy and seclusion for the facility; wooded neighboring land could at some point in the future cease to be wooded. (See also 5.5.)

2. *Other northern parks—aim for naturalness*: Maintain natural conditions as far as possible. Damage across the city by Hurricane Ike in 2008 threw into focus that recovery is relatively straightforward on lands that are kept natural and have a minimum of built structures; a few fallen trees do not matter.

*Pine Gully Park*: Plant shade trees now to replace trees lost since the park's establishment. Seabrook residents value the natural qualities in this park (while usage of the built facilities is largely by nonresidents). Best use of this park is thus to retain naturalness.

*Robinson Park*: Plant trees and reduce mowing, so as to allow a volunteer shrub layer to become established, enabling the property to serve better as the buffer it was intended to be when it was acquired. To serve effectively as a buffer, this land needs to be wooded, not mown.

*Seabrook Wildlife Refuge*: Leave most land as a refuge for wildlife and buffer between residents and industrial development. Minimum maintenance benefits the budget. (See also goal 5.)

*Friendship Park*: Explore partnering to create softball facilities. Add shade trees near the playground.

*Baybrook:* Benches are desirable. A natural playground, drinking fountain, and exercise cooling station are appropriate.

*Hester Garden Park:* This is a potential location for an outdoor classroom. Enhance pond viewing, and find a partner to undertake periodic butterfly garden maintenance.

3. *Central parks—focus on amenities:* Make these high-use parks more inviting with perimeter shade trees, and focus the expansion of built amenities in Miramar Park and the south end of Meador Park.

*Pool, skate park, pavilion and playground:* No major needs were identified. Use of these amenities is almost entirely by Seabrook residents. The facilities are intensively used and need routine maintenance and renewal. The pool needs summer staffing, and operating it entails significant expense in staffing. The skate park is popular among young people, as are basketball hoops in the large pavilion. The smaller pavilion with picnic tables gets good community use as well. Natural playground installations are appropriate, and a drinking fountain near the playground is desirable.

*Disc Golf Course:* Extend the nine-hole course. The facility is popular, and users are respectful of it. For the moment it serves well, but additional holes have been discussed and should likely be added within four to six years. Solid surfaces on stations are desirable.

*New offerings:* There is room for additional amenities in these spacious parks. Fitness equipment may be desirable, for example. Yet caution is in order, as the wide expanse of open grass in Meador Park has proven useful as a venue for large-scale events held from time to time. The central parks offer enough space to be highly flexible, and the community may be best served if this openness and flexibility are retained.

4. *Old Seabrook and Waterfront District—Seabrook’s public image:* Use these parks for welcoming visitors to Seabrook, welcoming residents to the city’s civic heart, and “branding.” This is the portion of the city where people experience the waterfront, and it is the zone that most clearly exemplifies the “small town charm” rated so highly in the 2009 Master Plan Commission opinion survey.

*City Hall-Community House-Mohrhausen Park:* Enhance use of this public property complex by connecting its short trails to the overall trail system (see trails plan).

*Second Street and McHale Park:* Expand park holdings to create a gathering place/civic square/green space anchor for commercial development (discussed more fully under goal 7)

*Boat Ramp:* Portapotties are desirable.

5. *West-side parks:* Provide pedestrian connections between parks and expand west-side park holdings.

*Brummerhop Park:* Connect to other parks via trails (see trails plan). This major new park was established to answer the greatest need identified in the 1998 community survey. It has both a high-use developed area and a more natural section, and will serve residents better if it also connects with the rest of the trails network.

*Wildwood Park:* Shade trees are desirable.

6. *Mowing and Use*: Reduce the amount of mowing required. Mowing is a large labor and a significant operational cost. Some mown areas are underused and lend themselves to other kinds of treatment that would better serve goals of naturalness and habitat enhancement. Various options exist, such as:

*Wildflower plantings* that need scheduled mowing only once or twice a year to keep out trees and shrubs, leaving wildflowers to self-seed (e.g., Meador Park).

*Expanded shade tree coverage* to replace grass (e.g., Robinson Park north of gazebo).

*Maintaining only neat pathways* of mown lawn amid sections of prairie plants and longer grass cut much less often, instead of trimming large areas intensively cut (e.g., Wildlife Refuge).

7. *Use by visitors to the city*: Partner with the Economic Development Corporation and Bay Area Convention and Visitors Bureau to promote local parks, and especially trails and their routes, to people staying in local hotels. Hotel operators have requested brochures and trail maps to assist with this. Visitors to the city who discover and enjoy its parks while here for other reasons are more likely to revisit Seabrook and to spread the word about it.

### **5.5 Goal 5: Establish appropriate guidelines for operating new types of parks.**

Two major park properties acquired since earlier rounds of planning—the Carothers addition to Pine Gully Park and 40 acres added to the Seabrook Wildlife Refuge—are both partly intended to buffer residential areas against industrial development north of the city. Both also represent new types of lands added to the park system, requiring new approaches and operating guidelines.

*Drusilla Carothers Coastal Gardens*: This property acquired in 2007 and opened in 2011 provides the city with a versatile new event venue that offers revenue potential. Physical aspects of the new holding are indicated in the *Pine Gully Park and Carothers Coastal Garden Master Plan* (October 2009). Operational aspects will need consideration as uses develop. The Community House rental serves only partially as a model. Needs include promotion/sales, landscape maintenance, security, decorating, and monitoring.

Management guidelines need review and refinement during the first year of operation and probably at intervals thereafter. For example, a north side vegetation barrier is advisable (see goal 4 above); walking trail access is envisaged; wetland components may need attention; promotion on a commission may be useful; and the facility has potential for weekday daytime rental for workshop-type use by small groups and possible environmental education activity.

*Seabrook Wildlife Refuge*: This recently acquired property is an undeveloped buffer zone. Low maintenance is its hallmark. The intended purpose for this land is to expand the vegetation buffer between residences and industry and to function as a wildlife refuge. It is not intended for camp-outs (which are permitted for local Scout troops at Pine Gully Park). Trail development at the refuge is envisioned only along its perimeter (see trails plan). Management guidelines are needed to ensure that this land remains in a natural condition. For example, enhancement of wildlife food plantings may be desirable.



**Figure 10.** *Turtles and deer are animals residents enjoy seeing in parks and along trails.*

**5.6 Goal 6: Adjust park facilities in response to shifting community preferences.**

Beyond maintaining park facilities per 1,000 population, more detailed determination of what residents want for the future is needed. Ongoing review of the appropriateness of existing facilities should also be conducted. Sample questions to consider:

New subdivisions now commonly provide playgrounds and pools serving their residents. Does the City need to provide additional such amenities as the population grows, or will new residents prefer private amenities operated by homeowners associations, and to what extent will these answer future needs?

Review of playground use levels and preferences is advisable to gauge whether they need upgrading of equipment or different features that might increase their popularity and use. Should existing public playgrounds be renewed in their present form when they degrade, or would other types of amenities be more appropriate?

Sports shift in popularity over time. How are population increases and other changes affecting the demand for sporting facilities?

Trails are generally treated with respect, but occasionally they suffer abuse from four-wheelers and golf carts. Would it make sense to install barriers/signs preventing mechanized use of trails intended for hikers and cyclists?

The community favors maintaining some lands in a natural condition. How much natural terrain is enough?

Some areas need reforestation, some would benefit from showy specimen trees, and others need shade or native tree species that attract and sustain birds. How much tree planting is advisable?

Demand for picnic tables and BBQ facilities appear low among Seabrook residents. Should some be allowed to fall away instead of being replaced when they degrade? Heavy use parks seem to need them.

Vandalism of park facilities is a periodic nuisance. Are there more effective ways to respond to this?

What is the relative importance of different types of expertise among parks staff—for example, is it more useful to have a background in grant writing, a knowledge of plants and local ecology, or experience in recreational or educational programs?

What is the level of demand for activity programs in the parks?

Questions in the 1998 opinion survey emphasized sporting amenities; those in 2004 emphasized green space; and 2009 and 2010 surveys spanned both but asked far fewer questions. Ongoing review can help pinpoint which park and open space features warrant attention vs. which are loved as they are and considered satisfactory in their present form.

### **5.7 Goal 7: Identify choice wetlands and green space for conservation by various means.**

Portions of a city's de facto complement of green space are typically made up of such entities as school lands, cemeteries, drainage and utility easements and rights-of-way, and similar. Such open space resources should not be ignored. Small wetland components on private land also should not be ignored. All these carry potential for enhancement as view assets and habitat resources.

#### *Recommendations:*

1. Explore with owners their interest in green space goals and conservation activity.
2. Where owner interest and willingness is found, work jointly to develop management actions that benefit landholders, neighbors, and the City's open space goals indicated in this plan.



**Figure 11. Open space involves everything from stands of Louisiana iris to picturesque marina views.**

## 6.0 IMPLEMENTATION

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Funding sources, implementation strategies, and timing are the hard part. The time span for most actions envisaged is within ten years. Proposed timing is indicated in 6.1, with projected costs in 6.2, and funding mechanisms suggested in 6.3. Ways to increase recognized open space assets are outlined in section 6.5.

Reminders: This plan should be read in close conjunction with the *Seabrook Hike and Bike Trails Master Plan* (March 2010) and *Drusilla Carothers Coastal Gardens Master Plan* (February 2010), and also overlaps significantly with the *Seabrook Comprehensive Master Plan 2030* (April 2010) and the JJR Consultants' *South Seabrook Waterfront Development Plan* (June 2006).

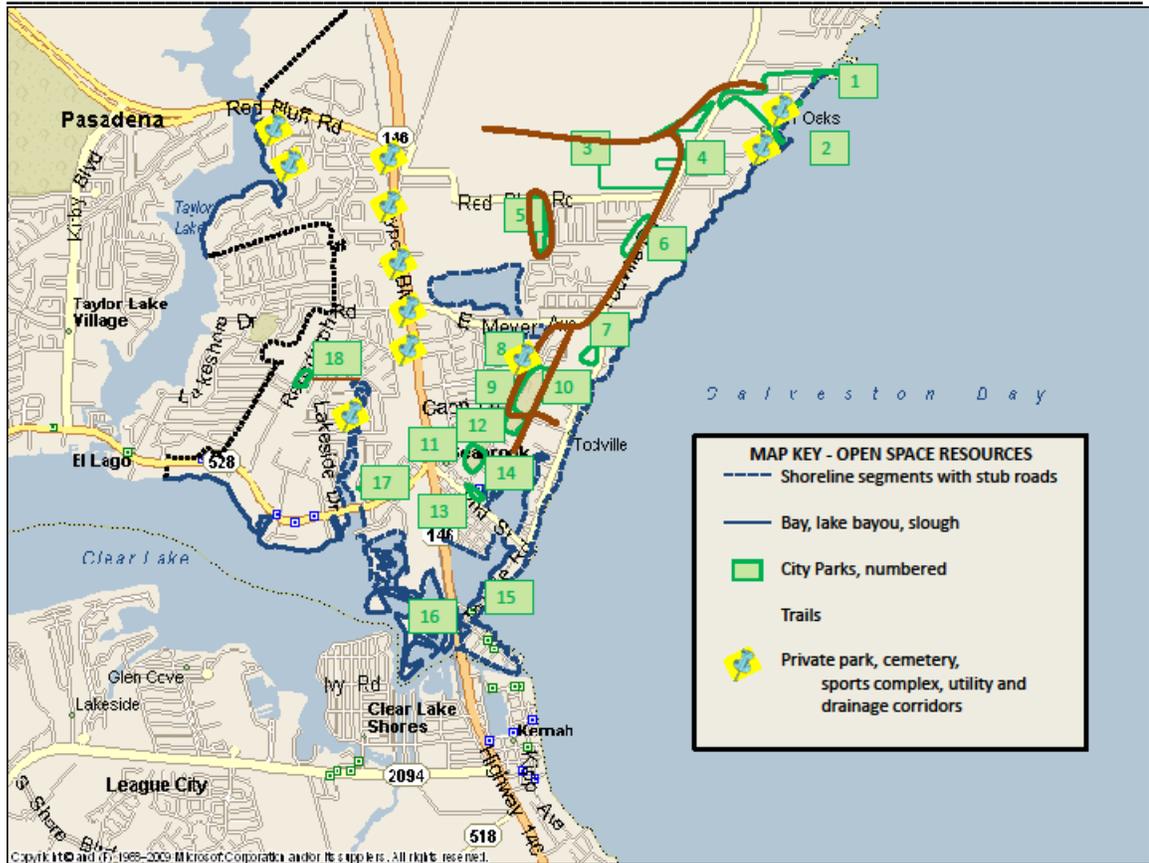
### 6.1 Timeline

*(NC = no charge, actions undertaken by Open Space Committee volunteers and staff)*

- 2011            **Start on priority parks goals** (Section 2.1)  
Establish guidelines for parks donations and memorials (see Appendix L)  
Launch 5-year shade tree initiative, multiple locations  
Develop wish list to guide volunteer projects (NC)  
Monitor Pine Gully restoration (NC)
  
- 2012            **Complete priority parks goals** (Section 2.1)  
Target trail development, Lakeside/Meyer, Red Bluff Road  
Seek grant funding for SH 146 trail crossings
  
- 2013            **Focus on waterfront access options**  
GIS mapping to refine open space inventory (NC)  
Develop large-scale version of Map 5 to guide on plan implementation (NC)
  
- 2014-16        **Focus on open space/park acquisitions, agreements, and easements**  
Acquire park land, Old Seabrook, the Point, west side  
Encourage development of flood buyout protocols  
Five-year review of Open Space and Parks Master Plan, trails plan, and Carothers plan
  
- 2018-20        **Focus on enhancements**  
Promote Habitat Island, review other projects for open space assets (section 4.0)  
Promote native plantings  
Refine guidelines for all parks and open space components

The preceding timeline serves to suggest a desirable sequence for actions. Yet it is important to remain responsive to opportunities arising along the way.

Map 5. Open Space Resources



These include property destined to remain green, zones with views, and such entities as drainage rights of way, besides 18 parks. Areas west of SH 146 offer fewer open space options and scenic resources, but they also offer good pedestrian connections because most subdivisions have sidewalks. Trail crossings of SH 146 are proposed (see Map 1). To balance open space across the city and cater for the projected increase in population, acquisitions are recommended especially in the western and southern sectors.

Parks:

- |                               |                         |                         |
|-------------------------------|-------------------------|-------------------------|
| 1. Drusilla Carothers Gardens | 7. Hester Garden Park   | 13. Mohrhausen Park     |
| 2. Pine Gully Park            | 8. Rex Meador Park      | 14. Bayside/2nd St Park |
| 3. Seabrook Wildlife Refuge   | 9. Miramar Park         | 15. McHale Park         |
| 4. Robinson Park              | 10. Pool and Skate Park | 16. Boat Ramp           |
| 5. Friendship Park            | 11. City Hall grounds   | 17. Wildwood Park       |
| 6. Baybrook Park              | 12. Community House     | 18. Brummerhop Park     |

## 6.2 Costs

Seabrook’s prior parks plan (1998) contained no cost estimates of any kind. Parks and open space plans for other cities typically provide at least some indications of costs envisaged. The projected costs shown here are estimates and are included to provide a general sense of the possible spread of expenditures. These projections obviously do not constitute budget commitments, as budget decisions are made annually by the sitting City Council. Note that Table 5 does not include projects that are funded by other means, such as Pine Gully restoration or the Habitat Island.

**Table 5. Estimated Costs for Open Space and Parks Proposals**

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|                                      |           |
|--------------------------------------|-----------|
| Trail development                    | 800,000*  |
| Acquire Old Seabrook lots            | 220,000   |
| Acquire west side lots               | 300,000   |
| Tree planting                        | 150,000   |
| Native plantings (\$5,000/yr, 5 yrs) | 25,000**  |
| Tallgrass prairie plot               | 5,000     |
| <br>                                 |           |
| Total                                | 1,500,000 |

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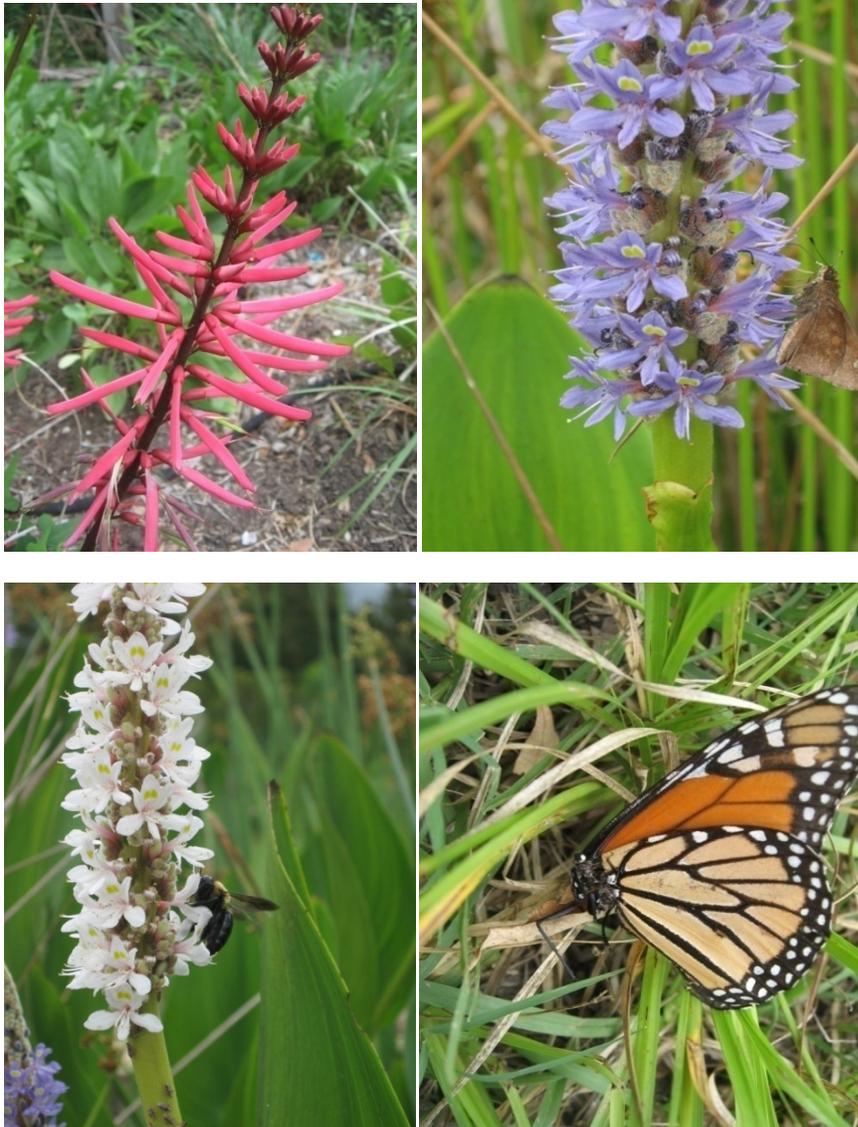
\* Estimated City commitment to leverage grant funds to \$4 million (see trails master plan).

\*\* Assumes partnering and donations, for which both agency and private sector programs have been successful in many cities.

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The parks department operating budget has been in the range of \$675,000 to \$830,000 per year since 2006. Trails plan proposals include an increase from 10 to 25 miles of trails, indicating either more than doubling the trail maintenance budget over time or limiting maintenance.

A key benefit of the recommended emphasis on natural conditions vs. built amenities is that maintenance and renewal budgets are lower when structures are fewer. Locally adapted plants fare better than nursery plants in a low-care context. Other benefits are that risk from storm damage and vandalism are likewise lower, and a community preference for natural green space where residents can enjoy local wildlife is also well served.



**Figure 12.** *Native pollinators work tirelessly on our behalf, at no pay and regardless of budget cuts. It makes sense to support their free labor with appropriate host plants.*

### **6.3 Funding Sources and Financial Strategy**

Some preceding action items in section 6.1 require no funding and can be conducted rapidly by the Open Space Committee. Others span periods of several years and call for local and other funding. Following are a series of strategies and funding sources already in use or likely to be applicable. Local funding options are presented first, followed by potential sources of support at the county, state and federal levels. Some large-scale funding comes via transportation projects, and Table 6 shows state-level grant programs specifically focused on outdoor recreation.

#### **6.3.1 Local Funding**

Examples below are funding sources that have been pursued in Seabrook or in other communities to support parks.

*Pay as You Go:* Cuts in the current parks operating budget derived from general funds underscore the need to examine other funding sources.

*User Fees:* Fees apply for use of the Seabrook pool, nonresident visitors to Pine Gully, and park facility rentals. All such fees accrue to the general fund; they are not directly returned to park operations.

*Economic Development Corporation funds:* The Seabrook EDC has supported trail construction and selected other parks activities. Continued EDC trail funding was among the wishes expressed in public feedback on this plan (see Appendix E).

*Local capital improvements:* A capital improvements program can provide a yearly appropriation for the Parks and Recreation Department for park development and maintenance.

*Private-sector funds:* Local industries and businesses may agree to support selected park installations through cash donations or assistance with the cost of materials.

*School district partnering:* Baseball fields are leased from the school district, and other school district partnership opportunities warrant exploring.

*Bond referendum:* Communities around the nation, including Seabrook, have successfully placed park propositions on local ballots to fund open space acquisition and habitat protection.

*Penny sales tax:* Such a tax can be levied for a designated time only or to raise a specified amount. Voters are more willing to support sales taxes with built-in limitations and for special purposes they favor, such as expanding a park system.

### **6.3.2 County Funding**

Some parks and trails adjoin county roadways and a county library, and proposed trails will eventually connect the Seabrook network with the regional trail system, including the county-owned Armand Bayou Nature Center property. County roadside and bar ditch maintenance has been a plus for Seabrook. Current pressure on the county budget suggests that for several years the county is not likely to be a parks funding avenue with large potential.

### **6.3.3 State Funding**

*TPWD Grants:* The Texas Parks and Wildlife Department administers a suite of grants designed for outdoor recreation. This grants program provides 50% matching grant funds to municipalities, counties, Moods and other local units of government with a population less than 500,000 *to acquire and develop parkland or to renovate existing public recreation areas*. There are two funding cycles per year, and projects must be completed within three years of approval.

The maximum grant award is \$500,000, with lower limits for specified types of projects (Table 6). Eligible sponsors include cities, and the master plan submission deadline is 60 days prior to the application deadline.

**Table 6. Texas Parks and Wildlife Department Outdoor Recreation Grants**

| <b>Grant Type</b>               | <b>Award Limit</b> |
|---------------------------------|--------------------|
| <b>Outdoor Recreation</b>       | \$500,000          |
| <b>Small Community</b>          | 75,000             |
| <b>Urban Outdoor Recreation</b> | 1,000,000          |
| <b>Urban Indoor Recreation</b>  | 1,000,000          |
| <b>CO-OP</b>                    | 50,000             |
| <b>Recreation Trail</b>         | 200,000            |
| <b>Boating Access</b>           | \$500,000          |

Source: Texas Parks and Wildlife Department website, <http://www.tpwd.state.tx.us/business/grants/trpa>

*Safe Routes to School Program:* The overall purpose of this program is to improve safety in and around school areas. TxDOT’s Safe Routes to School Program implemented by HB 2204 became effective in 2002 and chiefly addresses safety construction improvements. Projects can be on or off the state highway system but must be on public property and within a two-mile radius of a school; federal funds requested are limited to \$500,000, and a local funding match of 20% is required unless the project is located on the state highway system (in which case TxDOT will provide the match). This is a potential source of funding for trails and for pedestrian bridges crossing Highway 146.

**6.3.4 Federal Funding**

Federal programs offer financial aid for projects that aim to improve community infrastructure, transportation, and recreation programs. The National Recreational Trails Fund Act was part of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The National Highway System Designation Act of 1995 amended ISTEA. These laws provide major funding sources for greenways and trails (see Seabrook’s trails master plan for more detail).

*National Scenic Byways Program:* This component of ISTEA is designed to protect and enhance designated scenic roads. Money is available for planning, safety improvements, historic resource protection, and tourism signage. Some states with Scenic Byways programs have developed trail facilities in conjunction with this initiative. Seabrook has scenic roadway segments that may offer potential as designated scenic byways.

*Community Development Block Grants:* The U.S. Department of Housing and Urban Development (HUD) offers financial grants to communities for neighborhood revitalization, economic development, and improvements to community facilities and services, especially in low and moderate-income areas. Several communities have used HUD funds to develop greenways. For a time Seabrook gained access to CDBG funds as a result of 2008 hurricane damage.

*Land and Water Conservation Fund (LWCF) Grants:* Established in 1965 to provide parks and recreation opportunities close to people’s homes, this program is dedicated to recreation. It employs funds from

sale or lease of nonrenewable resources, primarily federal offshore oil and gas leases and surplus federal land sales. Communities can use LWCF grants for greenways provided they match LWCF grants with 50 percent of the project costs (in cash or services).

*Grants for Small Watersheds:* The USDA Natural Resource Conservation Service (NRCS) provides funding to state and local agencies or nonprofits to carry out watershed improvements involving less than 250,000 acres. NRCS provides financial and technical assistance to eligible projects to improve watershed protection, flood prevention, sedimentation control, public water-based fish and wildlife enhancements, and recreation planning. The NRCS requires a 50 percent local match for public recreation and fish and wildlife projects.

*Urban and Community Forestry Assistance Program:* The USDA provides small grants of up to \$10,000 to communities for the purchase of trees to plant along city streets and for greenways and parks. To qualify for this program, a community must pledge to develop a street-tree inventory, municipal tree ordinance, tree commission, and urban forestry plan. Seabrook has a tree ordinance and could readily create the other components.

*Small Business Tree Planting Program:* The Small Business Administration provides small grants of up to \$10,000 to purchase trees for planting along streets and within parks or greenways. Grants are used to develop contracts with local businesses for the plantings.

*Private Foundations and Corporate Grants:* The Foundation Directory and Foundation Grants Index ([www.fdncenter.org](http://www.fdncenter.org)) identify organizations that assist in direct funding for park projects. “Grants for Greenways” is a national listing with links to groups providing technical and financial support for greenway interests. Partnerships with utility companies can often be established; CenterPoint Energy’s “Right Tree” program is an established local candidate to approach. Launched to promote shade and also to ease power line maintenance, it presents an opportunity for utility company collaboration with both City bodies and homeowners to promote the urban forest.

*Scenic City certification:* *Scenic Texas* has identified a direct correlation between the success of a city’s economic development efforts and the visual appearance of its public spaces. (See [www.sceniccitycertification.org](http://www.sceniccitycertification.org).) Earning certification requires landscaping and tree planting programs, sign code enforcement and avoiding new billboards. Additional certification points are awarded for more than 70 other criteria, including multi-use trails, increasing the percentage of park and open space lands, parking lot landscaping and utility line management.

### **6.3.5 Other Options for Support**

*Volunteer work:* Potential sources of volunteer labor include such entities as civic groups and the Scouts. Cheyenne, Wyoming, has seen major community volunteer investment of work in its greenway system. A manual guides their activity, and through an “Adopt-a-Spot” program participants take charge of periodic trash pick-up, landscaping, pruning trailside vegetation, and developing wildlife enhancement projects (Land Plan Consultants 1997).

*Community service work:* In Seabrook, community service workers supervised by parks personnel have long constituted an important adjunct to parks staff for selected maintenance tasks.

*Conservation projects:* Small-scale grants of \$10,000 or less can be used for such activities as ecological assessment and interpretive displays and brochures. For example, the Conservation Fund’s American

Greenways Program has teamed with the DuPont Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the development of greenways. Awards are intended to leverage other money, and grant recipients are selected according to criteria including demonstrated community support. Similarly, the company REI (Recreational Equipment Incorporated) awards grants to organizations protecting and enhancing natural resources for outdoor recreation.

*Wildlife crossings:* Development of wildlife crossings is a new field, prompted sometimes by traffic concerns and sometimes by endangered species concerns, and usually connected to roadway work. Florida and California have built roadway undercrossings for threatened wildlife, and Rocky Mountain and upper Midwest states favor crossings where deer are a roadway hazard (see, e.g., [www.wildlifeandroads.org/](http://www.wildlifeandroads.org/)). Structures vary from minor culvert alteration to major installations, and they often garner good public support for reasons of vehicle safety or because residents favor maintaining wildlife.

*Views are worth money:* Viewshed preservation may be eligible for several of the grant-funding possibilities already listed. Hence a formal inventory of views may be an advisable step for Seabrook, where waterfront views are a distinguishing feature of the cityscape, contrasting with other cities. As waterfront development intensifies and views from public roadways become masked, it makes sense to retain appealing public views for the long term because of their overall effect on property values.

### **6.3.6 Shortfalls and Opportunities**

As noted, Community Development Block Grant funds are not routinely available to Seabrook but became accessible for a time in the aftermath of 2008 storm damage. Shortfalls in state and federal budgets are evident in the aftermath of nationwide recession—all funding is tight for the present. City budget cuts during 2009-2011 have reduced grant-writing capability on the City staff, creating a need for others to be on the lookout for grant opportunities and to assist in cultivating these. Note that the above implementation and cost proposals do not take account of certain risks (e.g., school ball fields that do not belong to the City but are leased and could cease to be green space).

As also noted, the costs indicated do not include projects for which grant funding is in hand or envisaged (e.g., Pine Gully restoration, Habitat Island), and various additional opportunities exist that Seabrook has not explored to date, such as CenterPoint Energy's tree planting program. For the ten-year time horizon of this plan, it makes sense to address cost-free options initially, move toward more ambitious efforts as the budget climate improves, and in the meanwhile to prepare for grant application activity by conducting fuller assessment of open space and view resources, buyout potential, and the extent of civic support for bond or sales tax funding options.

### **6.4 Crossover Potential**

Many plan components are based on multi-tasking and crossover qualities. For instance, some park and especially trail additions are possible because of roadway work; building the Habitat Island would provide a new focal attraction at the Point while also expanding surge protection; walking trails and an anchor park in Old Seabrook would help promote the zone's redevelopment.

Searching for further opportunities for projects and proposals to perform "double duty" throws other potential into focus:

*A sand source:* Pine Gully marsh and flow restoration, for which most funding is already secured, will likely generate quantities of sand that might be useful elsewhere, such as for the proposed Habitat Island (see 4.2, 4.3), grade raising at the Point after roadway elevation is completed (see *Seabrook Comprehensive Master Plan 2030*), or a protective structure offshore from the mouth of Pine Gully itself.

*A mitigation bank:* Marsh creation has succeeded near the Seabrook-Kemah bridge, and the upper Slough provides candidate area as a mitigation bank for further marsh creation (shallow water, protected from wave action). This could enhance a key local habitat component (goal 3 of this plan) without substantial City expenditure for construction or maintenance.

*New key corridors:* Once Repsdorph-Lakeside roadway work is completed in 2011-12, this and Meyer Road are both expected to become a significantly more important routes for local traffic —literally a crossover situation. Sidewalks, trails, and parkland along the two connected routes are expected to become increasingly important as well. The two roads connect two lakes (Lake Mija and Sandpit Lake); three schools (Bay Elementary, Seabrook Intermediate, Ed White Elementary); and a series of neighborhoods. Some trail segments are or will soon be in place. Others, along with a safe pedestrian bridge over Highway 146, are planned.

*County and school district partnering:* Schools and a new and larger county library provide a context for exploring how county and school district partnerships can expand and provide residents with walkable routes that are safe for children, connecting a suite of neighborhoods and facilities in the central part of the city.

(Note: Such partnerships in physical facilities would also create the potential for partnering on programs of children’s activity otherwise difficult for the City to undertake because of lack of physical facilities.)

**6.5 Percentage of City Land Area**

How do we acquire open space and park holdings as a greater percentage of city land area without expenditures far greater than the City budget can support? How would we manage twice the green space we currently have? Answers include land acquisition, but they also include changing our perspectives, establishing management partnerships for selected lands, and other contractual arrangements such as conservation easements (see 6.7). Following are estimated acreages and possible avenues for their inclusion in the city’s open space asset base.

**Table 7. Open Space Acreages Present and Proposed**

| Entity                      | Acres |
|-----------------------------|-------|
| De facto green space        |       |
| Drainage easements          | 30    |
| Rights-of-way               | 20    |
| Baseball fields             | 10    |
| Seabrook intermediate track | 5     |
| Cemetery                    | 4     |

**Table 7. (Continued)**

| <u>Entity</u>                   | <u>Acres</u> |
|---------------------------------|--------------|
| City-owned land with potential  |              |
| City yard                       | 3            |
| Sewage plant                    | 1            |
| New fire station                | 1            |
| Parks yard                      | 1            |
| Acquisitions proposed           |              |
| West Side                       | 4.5          |
| Old Seabrook                    | 1            |
| The Point                       | 0.5          |
| Contracts proposed              |              |
| Fire facility                   | 20           |
| Industrial holdings (buffer)    | 40           |
| Donation                        | 10           |
| New subdivision park set-asides | 20           |
| Total                           | 171          |

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### **6.5.1 Citywide Projections**

Adding 171 acres of green space to the not quite 200 acres already in the City park system would increase Seabrook's total to 361 acres of parks and open space, or the desired land area. Only a few acres of the total of 171 acres identified in Table 6 are slated for outright purchase. Some 70 acres consist of de facto green space, and some of these lands may offer opportunities for negotiating public access and/or habitat enhancements, such as tree and other native plantings.

Another 60 acres consist of land unlikely to be hardened: industrial buffer land and the fire training facility. Again this land may provide opportunities to contract for public access, and/or habitat enhancements, and/or conservation easements. The Girl Scout camp Casa Mare may be another candidate.

Slightly over 10 acres consist of property already owned by the City or for which direct purchases are proposed to answer the west-side parks need and to boost redevelopment in Old Seabrook and at the Point. The remaining 30 acres consist of a mix of gifts/donations and new subdivision park set-asides with subcomponents admittedly uncertain in terms of size.

Note that park space within existing subdivisions might be added but was not included in the preliminary inventory because access to it is private. New subdivision park set-asides are included on the assumption that they will likely want connection to the trails network, and that in the process of offering trail access for new residents, they will also be adding to overall trail opportunity.

### 6.5.2 Potential on City-Owned Land

Over time, City-owned land with potential to be added to the park system is likely to become available in three locations:

- *City maintenance yard* beside Highway 146—This is destined to be moved because of roadway work. One result will be City land available in the heart of the City, west of Highway 146, and adjoining the green space and tree line of the utility corridor.
- *Carothers Gardens back lot*—Office trailers and an equipment yard are not ideal uses at this waterfront garden property intended for event rentals; they call out to be moved elsewhere as soon as possible. Moving them may allow easier trail access to the Carothers property’s wooded side creek frontage.
- *Wastewater treatment plant* on Second Street—Because of the plant’s waterfront location and vulnerability to storm damage, moving this plant is a City goal of long standing (see *Seabrook Comprehensive Master Plan 2030*). Once it moves, part of the old plant may remain a collection point and lift station, but some of the grounds may become available to expand the well-used Second Street Park and its publicly accessible waterfront, with good potential for kayak launch facilities.

Acres of these City-owned properties are small, but all three are in prime locations for addressing several plan goals: west-side and Old Seabrook park space, and best use of an existing park.

Some 70 acres consist of de facto green space, and some of these lands may offer opportunities for negotiating public access and/or habitat enhancements, such as tree and other native plantings. Another 60 acres consist of land unlikely to be hardened: industrial buffer land and the fire training facility. Again this land may provide opportunities to contract for public access, and/or habitat enhancements, and/or conservation easements. The Girl Scout camp Casa Mare may be another candidate.

Slightly over 10 acres consist of property already owned by the City or for which direct purchases are proposed to answer the west-side parks need and to boost redevelopment in Old Seabrook and at the Point. The remaining 37 acres consist of a mix of gifts/donations, new subdivision park set-asides, and flood buyouts, with subcomponents admittedly uncertain in terms of size.

Some caveats apply to flood buyouts. City officials who investigated properties after Hurricane Ike for buyout potential noted several limiting factors besides funding: (1) spotty distribution of flooded properties; (2) the narrow lots on which many badly damaged older structures stood; and (3) the high value of waterfront homes damaged. Nevertheless, lack of funds for the City match portion of such purchases was the main barrier. Further, the “404” buyout dollars are not always available from FEMA (federal funds can be exhausted in years of several disasters); officials may be reluctant to write properties off the tax base forever; and reserving cash is a challenge when budgets are tight.

Note that park space within existing subdivisions might be added but was not included in the preliminary inventory because access to it is private. New subdivision park set-asides are included on the assumption that they will likely want connection to the trails network, and that in the process of offering trail access for new residents, they will also be adding to overall trail opportunity.

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Acres of these City-owned properties are small, but all three are in prime locations for addressing several plan goals: west-side and Old Seabrook park space, and best use of an existing park.

### 6.6 The Bond Referendum Option

Experience in 2007 suggests that an open space bond initiative may be an option to consider. The Carothers land purchased via a bond initiative was a candidate for park expansion by referendum because of its long boundary with Pine Gully Park, its strategic buffering position, and its potential as an event venue. Voter support materialized in the form of a higher polling turnout than in elections either before or after the bond vote.

An open space bond initiative need not be tied to a particular property. It can also be a method of acquiring funds for purchase of unspecified parcels for the parks and open space network. Systematic surveying of public opinion on the topic is advisable before this option is attempted.

A number of cities have conducted successful long-term open space acquisitions programs using referendum initiatives. Two examples are San Juan Capistrano, California, and Pima County, Arizona, (<http://www.sanjuancapistrano.org/index.aspx?page=78>; <http://www.pima.gov/cmo/sdcp/intro.html>). Such programs have typically been launched through citizen initiatives, eventually resulting in city or county officials coming to support and help promote and guide the activity, because such measures tend to be popular with voters.



**Figure 13. Eggs of the giant spine-headed bug (*Acanthocephala declivis*) hatching on a window. Adults look large and alarming but don't bite or do anything nasty. They feed by sucking sap from oaks.**

### **6.7 Conservation Easements**

Cities, counties, and private landowners around the nation have in recent years begun using conservation easement agreements as a means to preserve wetlands and open space. These are legal instruments providing use restrictions that travel with the land deed—when properties are sold, components are protected as specified by the owner undertaking the easement. When owners are willing, wetlands and other types of natural areas can thus be protected without the cost of a land purchase and with built-in long-term monitoring. The incentive for owners is property tax benefits.

Seabrook's connected northern parks amount to well over 100 acres in the hands of a single owner and suggest themselves as a candidate for an overall conservation easement to protect their natural values in perpetuity. Lands are usually required to be 20 acres or more in size, but smaller entities warrant investigation for conservation easement potential for special features or when adjacent to designated natural areas. For more on the topic, see *Conservation Easements: A Guide for Texas Landowners* (2005) and *The Conservation Easement Handbook* (2003).

According to the experience of the Galveston Bay Foundation (the trustee for several such easements, and already partnering with the city on other projects), less protective mechanisms such as deed restrictions do not provide enough guarantees that the property will be maintained in a natural condition or protected from development. The purpose of a conservation easement is to ensure that the landowner adheres to a management plan and is actively working to preserve the conservation values of the property.

Additional matters under discussion during plan development include operations, signage, and outdoor classrooms. One outdoor classroom project is under way at Bay Elementary School, and a simpler outdoor classroom has been proposed for Hester Park, using boulders for seating. Signage has been discussed for Great Texas Coastal Birding Trail sites, for identification of wildlife, and for including QR codes on informational signs, to direct users to appropriate websites. Operational issues that warrant further consideration during the ten-year period covered by this plan are the need for a parks director when budget permits this, and the power of partnering with schools on programs of activity for children.

## 7.0 CONCLUSIONS

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Residents take pride in Seabrook’s natural qualities and hold a positive view of its parks and trails. Elected officials and City staff and volunteers are likewise proud of a parks and trails network that attracts much use and much favorable comment. Recommendations in this plan are aimed at best use of existing parks, improving waterfront access, and a commitment to conservation and maintaining open space alongside population growth. Beautification proposals include long-term habitat value. Plan implementation can assure excellence in Seabrook’s park and open space assets for years to come.

Primary constraints are budgetary. Additional cautionary notes include:

- *Tax base:* Various studies underscore that well-conceived green space pays for itself by raising property values and thus tax revenue (Appendix F). Officials with budget responsibility may nevertheless be reluctant to designate green space, fearing negative impacts on revenue.
- *Waterfront:* Finding creative formulas for respectful public use of the waterfront is a challenge. Some waterfront owners are understandably reluctant to support actions increasing public access to nearby shoreline areas.
- *The Point:* Private ownership of most of the shore of the Point has effectively held new development at ransom for decades. A narrow idle strip along the Seabrook-Kemah Channel is among factors preventing business from locating there. The inaccessible shore is a source of frustration without clear prospects for resolution.
- *Highway 146:* As outlined in the *Seabrook Hike and Bike Trails Master Plan (2010)*, trail crossings of Highway 146 are desirable to link west side residents to large east side parks via hike and bike trail access. TxDOT’s proposed roadway redevelopment, although creating potential trail crossing opportunities, also creates uncertainty and may do so for several years.
- *Repsdorff Road:* A dedicated county right-of-way for Repsdorff Road reaches the Clear Lake shoreline south of NASA Parkway. The likely future of this portion of the right-of-way is unclear. It is a view asset and offers potential for public waterfront access where residential development is quite dense, but here too, uncertainty applies.
- *High-density:* Officially required setbacks for high-rise or higher-density residential development on the city’s waterfront can potentially result in more open and publicly accessible sections of waterfront ; such projects nevertheless face some community unease.

Worth noting is that several of the city's larger parks were acquired from owners who wanted to see green space conserved. Seabrook residents owe a debt of gratitude to families whose property became major city parks—the Meadors (Meador Park); the Hesters (Hester Garden Park), the Kellett and Maas families (Pine Gully Park); and the Carothers/ Dickson/Grisebaum family (Carothers Gardens).

Gifts are an ideal means of acquiring desirable public lands. A possible further candidate may be Todd family property along the upper Slough, for which the City funded land survey activity intended for park designation; negotiations delayed by several factors may in due course resume, with the objective of establishing what was tentatively termed the Commodore Tod Wetland Park. Perhaps other families in the community who would like lands they love to stay green may consider gifting or bargain sale.

Park expansion implies increases in staff and operational costs. Community opinion involving the waterfront, trails, parks, and natural space makes it clear that these assets are valued. This in turn suggests exploring more secure funding sources to support such assets. For example it may be appropriate to research whether residents would favor a dedicated revenue stream, such as a percentage of sales tax, to support open space and parks for community enjoyment in the long term.

Many people move to Seabrook partly for its defining features of leafy landscapes and proximity to the water. Prospective and existing residents can see that explicit civic attention is devoted to these assets. Parkland is also resilient, as Hurricane Ike storm damage revealed. Where structures are at a minimum, few special measures are needed to restore park functioning even after destructive storms.

Trails were the topic drawing the greatest number of comments in the online survey about this plan—almost twice as many comments as on any other topic. Connectivity is crucial for trail users, just as corridors are important for wildlife moving between habitat cores. Migratory bird species need coastal stop-off points when crossing the Gulf of Mexico. With continued thoughtful management of parks and open space, the hallmark of success will be for the residents of Seabrook to continue enjoying water views, flashy butterflies, migrating songbirds, and the calls of the osprey, pileated woodpecker and screech owl, far into the future.

## Appendix A. Public Opinion Surveys

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All surveys described here are available from the City of Seabrook. See also Appendix E.

### **1998: Parks, Recreation and Open Space Master Plan**

This plan prepared by Clark Condon Associates contains an extensive parks-related survey (464 responses, 23% response rate). The final 30 pages provide the questions, tabulated responses, and all additional comments received.

From the plan’s conclusion: “A random survey of the citizens of Seabrook concluded that 72% of those surveyed support additional parks and recreational facilities. The greatest priorities based on the surveys were trails and natural areas. . . . The greatest need within the existing parks system is the acquisition and development of park facilities in the western portion of the city.”

In answer to “Recreational facilities to be added (first priority),” respondents’ top three wish list items were:

|                            |              |
|----------------------------|--------------|
| Pedestrian trails          | 19% in favor |
| Natural areas              | 11%          |
| Indoor athletic facilities | 9%           |

All other items rated 8% in favor or fewer. Picnic facilities drew only 1% in favor.

### **2004: City of Seabrook Community Survey**

The city’s community development director surveyed 500 Seabrook voters by mail (325 responses, 65% response rate). Topics ranged from police and fire service to land use and street lighting. Results were published without a formal conclusion, but answers regarding property tax (items 43-53) and resource preservation (items 65-70) were illuminating about parks and open space.

**On resource preservation**, respondents showed a high preference for natural qualities in the city. They had a choice of two positive answers (agree/strongly agree) and three negative answers (disagree/strongly disagree/no opinion).

| Item                                                                     | Agree | Disagree/ No opinion |
|--------------------------------------------------------------------------|-------|----------------------|
| The City should protect the natural environment from damaging activities | 306   | 20                   |
| I feel recreational opportunity in Seabrook is valuable to the community | 296   | 21                   |
| Wildlife habitat along the shoreline and bayous should be preserved      | 292   | 24                   |
| Open (natural) space in the city should be preserved                     | 260   | 51                   |

| Item                                                            | Agree | Disagree/ No opinion |
|-----------------------------------------------------------------|-------|----------------------|
| The City should provide access to bodies of water to the public | 234   | 82                   |

**On property tax** (“I would be willing to have my property taxes increased in order to . . .”), respondents gave yes/no answers to ten items. The majority opposed a property tax increase for eight items. They supported a tax increase only for “hiring one or more full-time fire fighters” (184 yes; 83 no; 39 no opinion) and “to preserve environmentally sensitive areas” (153 yes; 108 no; 48 no opinion).

### 2009 Master Plan Commission Postcard Survey

A postcard survey went out in late 2009 to all households on the Seabrook water billing list (total responses and response rate unknown). Respondents were asked to identify key city assets and challenges, and a full tabulation of responses is given in the appendix to the *Seabrook Comprehensive Master Plan 2030* (2009). The top three assets identified were parks and trails, the waterfront, and small town charm. These three stood out way above the rest. Scores ranked as follows:

#### Assets

|                                      |     |                                          |
|--------------------------------------|-----|------------------------------------------|
| Parks, trails and pool               | 159 | (total 194 comments on parks/open space) |
| Proximity and access to bay and lake | 153 | (total 212 comments on waterfront)       |
| Small town charm                     | 142 | (total 282 comments on charm)            |
| Schools                              | 55  |                                          |
| Police and fire departments          | 45  |                                          |
| Location                             | 37  |                                          |
| Waterfront views/attractions         | 34  |                                          |
| The people                           | 30  |                                          |
| Low crime rate                       | 23  |                                          |
| Wildlife and natural areas           | 20  |                                          |
| Proximity to Houston/Galveston       | 20  |                                          |

## Appendix B. Seabrook Parks and Their Acreage

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| Seabrook Parks and Facilities                                | Amenities                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Baybrook Park<br>4221 Todville Rd.                           | Restrooms, Tennis Courts, Basketball Courts, Picnic tables, Playground                                                                                                                                                                                                      |
| Bayside Park<br>1000 2nd St.                                 | Waterfront area, Gazebo Benches                                                                                                                                                                                                                                             |
| Boat Ramp<br>Underneath Seabrook Bridge                      | Pier, 2 lane boat ramp                                                                                                                                                                                                                                                      |
| Brummerhop Park 2520<br>Repsdorph                            | 7 acres, Playground equipment, covered picnic shelters, barbeque grills, 2 horseshoe pits, volleyball court, exercise equipment, basketball court, wetlands observation deck, restroom, drinking fountain.                                                                  |
| City Hall grounds<br>1700 First St                           | Picnic table, 4 benches, granite trails connecting to the Hike & Bike System.                                                                                                                                                                                               |
| City Pool/Miramar Park<br>1109 Hammer St.<br>281-474-3620    | Water park with 30' water slide, 2 pools, volleyball, restrooms, showers, concession stand, swim team.                                                                                                                                                                      |
| Community House<br>1210 Anders                               | Civic Meeting facilities with kitchen and stage area. Historic building, hardwood floors throughout.                                                                                                                                                                        |
| Drusilla Carothers Coastal<br>Gardens<br>502 Pine Gully Road | 8.5 acres, bay shore to creek side in length, adjoining Pine Gully Park, with main house and casita for event rental, pleasing gardens, and wooded section                                                                                                                  |
| Friendship Park<br>4622 Park Rd.                             | 10 acres, 3 soccer fields, 1 backstop, playground, picnic tables, BBQ grills, restrooms, concession stand, basketball court, drinking fountains.                                                                                                                            |
| Hester Garden Park<br>3029 Todville Rd.                      | 8.65 acres, wooded area, partial wetland, pond, trails, pay phone.<br><i>*ON TEXAS PARKS &amp; WILDLIFE BIRDING TRAIL.</i>                                                                                                                                                  |
| McHale Park<br>400 Todville Rd. & waterfront                 | Observation deck for bird watching, benches.<br><i>*ON TEXAS PARKS &amp; WILDLIFE BIRDING TRAIL.</i>                                                                                                                                                                        |
| Miramar Park<br>1900 Meyer Rd.                               | 5 acres, 30' X 30' covered pavilion w/electricity, 6 picnic tables, benches, BBQ, water faucet, playground equipment.                                                                                                                                                       |
| Mohrhausen Park<br>110 Second St                             | Covered seating area, table with benches, flowing fountain, flower garden area, granite trails connecting to Hike & Bike System.                                                                                                                                            |
| Pine Gully Park<br>605 Pine Gully Rd.                        | 52.27 acres, 1000' fishing pier on Galveston Bay, Karankawa Indian camp site, wetlands, wooded area, nature trails, restrooms, picnic tables, BBQ grills, playgrounds. Open dawn until dusk. <i>Daily passes available at park or season passes available at City Hall.</i> |
| Rex Meador Park<br>2100 Meyer Rd.                            | 21 acres, covered pavilion w/electricity, basketball courts, trails, BBQ grill, sand volleyball court, 2 baseball backstops, aluminum bleachers, restrooms, water fountains. SKATEBOARD PARK. Adjacent to Public Library.                                                   |
| Seabrook Wildlife Refuge &<br>Park<br>700 Red Bluff Rd.      | 50+ acres, primitive nature site providing trails for bird watching and observing other wildlife in their natural habitat. Small parking space available. Several benches.                                                                                                  |
| Robinson Park<br>702 Red Bluff Rd.                           | 19.7 acres, wooded area, hiking trails, foot bridge, wetlands, gazebo, benches, parking. <i>ON THE TEXAS PARKS &amp; WILDLIFE BIRDING TRAIL.</i>                                                                                                                            |
| Wildwood Park<br>2200 Oceanview Drive                        | .47 acres, open area, bayou, wetlands, picnic tables, BBQ grills, bench, basketball goal, playground.                                                                                                                                                                       |

## Appendix C. Park Fees

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### ADMISSION

Fees apply for visiting the Seabrook swimming pool and Pine Gully Park. An annual family or individual park pass is a cost-effective alternative for frequent users. Privileged rates apply at the pool for children and elders.

### RENTALS

City properties that can be rented for functions are:

- Community House
- Drusilla Carothers Coastal Gardens
- Meador Park Pavilion
- Miramar Park Pavilion
- Robinson Park Gazebo
- Second Street Gazebo
- Swimming Pool Complex Party Room
- Swimming Pool Complex Pavilion

### REGULATIONS

Current rules governing the use of these public facilities are available on the City website, as are the required deposits and fees. Note:

- Special regulations apply for functions at which alcohol is to be served.
- Most fees and rental rates are lower for residents than for nonresidents.
- Some rental rates are lower for service, civic, and other nonprofit groups than for private functions.

## Appendix D: Texas Parks Acreage per 1,000 Population

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(Source: Texas Parks and Wildlife Department, 2005 *Land and Water Resources Conservation and Recreation Plan*)

| <b>Park Acres per 1,000 Ranked for Cities Over 100,000</b> |                                  |                        |                              |
|------------------------------------------------------------|----------------------------------|------------------------|------------------------------|
| <b>City</b>                                                | <b>Acres per 1000 Population</b> | <b>City Population</b> | <b>Total City Park Acres</b> |
| <i>Houston</i>                                             | 10.30                            | 1,953,631              | 20,107.83                    |
| <i>Dallas</i>                                              | 19.70                            | 1,188,580              | 23,378.63                    |
| <i>San Antonio</i>                                         | 7.90                             | 1,144,646              | 9,064.05                     |
| <i>Austin</i>                                              | 37.20                            | 656,562                | 24,408.10                    |
| <i>El Paso</i>                                             | 5.10                             | 563,662                | 2,891.98                     |
| <i>Fort Worth</i>                                          | 21.10                            | 534,694                | 11,302.91                    |
| <i>Arlington</i>                                           | 10.00                            | 332,969                | 3,328.46                     |
| <i>Corpus Christi</i>                                      | 8.00                             | 277,454                | 2,210.07                     |
| <i>Plano</i>                                               | 15.80                            | 222,030                | 3,505.86                     |
| <i>Garland</i>                                             | 10.00                            | 215,768                | 2,153.10                     |
| <i>Lubbock</i>                                             | 17.80                            | 199,564                | 3,546.13                     |
| <i>Irving</i>                                              | 9.00                             | 191,615                | 1,733.15                     |
| <i>Laredo</i>                                              | 0.90                             | 176,576                | 164.15                       |
| <i>Amarillo</i>                                            | 15.00                            | 173,627                | 2,601.72                     |
| <i>Pasadena</i>                                            | 1.20                             | 141,674                | 172.37                       |
| <i>Brownsville</i>                                         | 7.00                             | 139,722                | 984.94                       |
| <i>Grand Prairie</i>                                       | 43.10                            | 127,427                | 5,494.94                     |
| <i>Mesquite</i>                                            | 15.30                            | 124,523                | 1,907.99                     |
| <i>Abilene</i>                                             | 5.80                             | 115,930                | 675.81                       |
| <i>Beaumont</i>                                            | 20.30                            | 113,866                | 2,307.38                     |
| <i>Waco</i>                                                | 49.10                            | 113,726                | 5,586.99                     |
| <i>Carrollton</i>                                          | 23.10                            | 109,576                | 2,532.38                     |
| <i>McAllen</i>                                             | 1.20                             | 106,414                | 129.42                       |
| <i>Wichita Falls</i>                                       | 18.30                            | 104,197                | 1,902.13                     |

The opportunity for Texans to access local recreational lands is dependent upon local priorities, established needs and the financial ability of the community to provide access. Of the 388 cities in Texas reporting local parkland acreages to TPWD:

- 133, or 38 percent, have less than 10 acres of local parks per 1,000 population
- 90, or 23 percent, have between 10 and 25 acres of local parks per 1,000 population
- 32, or 8 percent, have between 25 and 100 acres of local parks per 1,000 population
- 6, or 1.5 percent, have over 100 acres of local parks per 1,000 population

**Large cities:** The TPWD study found that cities of over 100,000 have a broad range of local outdoor recreational opportunities:

- The mean acres per 1,000 for cities over 100,000 population is 15.5 acres.
- Cities with the most acres per 1,000 people are Waco (49+ acres), followed by Grand Prairie, Austin, Carrollton and Fort Worth (21 acres each).
- Of the most populous cities, Austin has the highest acreage per 1,000 (37 acres) and San Antonio has the lowest (7.9 acres).
- Cities with fewest acres per 1,000 people are Laredo (0.9 acres), followed by Pasadena and McAllen (1.2 acres each).

**Medium cities:** For cities with populations between 20,000 and 100,000, the TPWD study found varying degrees of service across the state:

- The mean acres per 1,000 for cities between 20,000 and 100,000 population is 11.4 acres.
- Cities with the most acres per 1,000 people are Pearland (36.8 acres) followed by Allen, Paris, Longview and Frisco.
- Cities with the fewest local park acreages per 1,000 people are Socorro (0.1 acres) followed by Pharr, Big Spring, San Juan and Benbrook.

**Small cities:** In communities with fewer than 20,000 people, circumstances vary even more sharply:

- The mean acres per 1,000 for cities under 20,000 population is 15.6 acres.
- Communities with the highest acreages per 1,000 people include Normangee (697 acres), followed by Sunset Valley, Crawford, Sweetwater, Star Harbor, Spur, and Bandera (75 acres).
- Communities with the lowest acreages per 1,000 are West University Place and Bellaire (0.2 acres) followed by La Joya, Salado, Barrett, Sachse, Richmond, and Port Neches (0.4 acres).

## Appendix E. Comments on Draft Plan, 2010

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A complete draft of this plan was circulated for public review during June and July 2010. The draft plan was announced in the City’s monthly newsletter (electronic and print versions), with an invitation to all residents to read the plan on the City website and answer an online survey. Those lacking Internet access were invited to request a hard copy. The survey consisted of nine questions and the option to provide additional comments. Questions and results are presented later in this appendix.

Although sources of feedback are not named here, there were no anonymous comments. All who provided responses are identified in the City records.

Because the plan was prepared by volunteers and not parks consultants, comments and critique were also specifically requested from a suite of people of appropriate background, such as parks professionals and representatives of conservation organizations; note that some of these reviewers are not residents of Seabrook. Others approached for feedback because of their demonstrated interest in parks included current and former City officials and committee volunteers, such as on the Planning and Zoning Commission and the former Parks Board and Wetlands Board. Some of these specially invited reviewers answered the online survey. Others submitted separate comments, which follow.

### INVITED COMMENTS

#### *[Agency representative]*

I applaud all those who worked so diligently on this document. It is quite comprehensive and most impressive. It is very refreshing and heartening to see a community that is working hard to preserve and enhance its ecological heritage. As pressure from urbanization continues at an alarming rate, preserving, conserving and creating natural areas will be the best solution to maintaining a buffer—in the literal and figurative sense. I do not believe a community can ever have “too much” green space.

The concept of connectivity within the community and the region is an excellent point and will benefit all, even those who are not typically “outdoor” types. From a wildlife habitat point of view, this connectivity becomes crucial as wildlife (especially the species that cannot fly) need their own corridors, or route, or “highways” as it were, to be able to find food, water, shelter, space, and places to raise young. Migratory species need stopping off points in close proximity to each other in order for these species to fuel before crossing the Gulf of Mexico or to refuel on their return trip to their nesting grounds.

As natural areas are preserved or set aside for green space, every effort should be made to make the area wildlife “friendly” rather than static, passive spaces. The preservation of native plant species or the addition of such, especially in understory locations, will be very important to help support wildlife. When public safety is not an issue, understory vegetation, provided it is native, should be left intact.

I lend my support to this Master Plan and send all involved my congratulations and best wishes.

**[Committee volunteer]**

Very well organized, thought out, and documented. I certainly hope it is supported by Council and that we do, in the near future, have a bond issue to support the plan.

**[Committee volunteer]**

Our City needs to establish a “*public face*” that will attract new residents, as well as commercial business. The eventual demise of SH146 business activity, plus associated severe reduction in tax revenue, should elevate the urgency to implement much of this with prioritized emphasis in vicinity to both Seabrook “Old Town” and the Point. Whether it is Old Town Alexandria, Virginia, and its attractive face, or the San Antonio River Walk, in an economic sense, the investments made there were well worth the expenditures. . . . This prioritized emphasis might already exist.

- Without extensive background in open space and parks development, I believe the nine goals and most associated recommendations to be rational.
- Relative to *existing parks*, I believe immediate emphasis should be placed on Goals 4 – 6.
- Relative to *sustaining local wildlife*, I fully concur with Goal 3. This will, in my view, lend to an enhanced “public face.” When my wife’s and my family and friends visit from their city environments (DC, Boston, Moscow), they are ecstatic seeing nearby deer, possum, and raccoon plus blue jays, cardinals, monk parakeets, sparrows, humming birds, and other birds in our backyard.
- I am against the proposed 1% temporary increase in sales tax. I’d propose a .5% or less and make it permanent. Probably would cause public uproar either way, but might pass at a lower level.

In summary, let’s get on with establishing a “public face” to attract both residential and commercial development. Relative to this specific Open Space/Parks Master Plan, I recommend emphasizing Goals 3–6 as highest priority.

**[Committee volunteer]**

My main concern is removing property from the tax base, and I have several questions:

1. Are the baseball fields on Meyer Road considered as part of the planned expansion of green space to 10% of City land area? They make up a large area, and they bear a sign naming our county commissioner. If this is county land, we can assume it will remain green and should be included in the projected expansion to 10%.
2. Is the projected population expansion given in the plan realistic? At present our population is down because we have lost residences and residents. Construction activity is down too, and many homes are for sale. The population growth that underpins the plan may not be as positive as we are expecting.
3. Can stub roads ending at the waterfront really serve any purpose as public land? They are only 50 feet wide, which makes them too narrow to be useful for public access. Looking at the dollars, I question whether it is economically feasible to do anything much with them. With their current uncertain status (officially public yet effectively private), they are actually perceived as devaluing the adjoining waterfront homes, although it’s not clear whether this is true. If, instead, they were sold into private hands, they could contribute positively to the city’s tax base.

4. Does high-rise or high-density development offer us some open space opportunities? Our ordinances require greater setbacks for these than for other kinds of development, meaning much more designated open space around them. Such development can potentially provide good waterfront pedestrian access and views because of the required setbacks.
5. Have we examined the waterfront access opportunity that Repsdorph Road represents? It is a county road that reaches all the way to the Clear Lake waterfront. The end segment is not currently in use as a roadway and in fact is fenced. It may offer us some interesting options.
6. Can't the City do something with the 25-foot private strip of land fronting the Seabrook-Kemah Channel? That strip is too narrow to be developed into anything much, but as public waterfront it would be an ideal focus for redevelopment at the Point.
7. Can we work with TxDOT to achieve a trail connection across Highway 146, tying the two sides of Seabrook together? I would love to see that connection happen. With the timing of the highway work so uncertain, it seems wiser to try to connect the trails now than to have to wait for the highway work.

***[Committee volunteer]***

The Seabrook Open Space plan is really great. People went to a lot of work and did a wonderful job. I do have a few suggestions for improvement.

- There is considerable governmental interest (read major funding) in conservation, preservation & restoration of wetlands. However, there is very little mention in Seabrook's Plan of the critically important wetlands. I would like to see a goal of conservation and preservation of our valuable wetlands. As a minimum revise Goal 8 to include "wetlands".
- Section 2.3 Carothers Plan Goals lists restore wetlands. It should be revised to include "preserve" and restore.
- There is no mention of conservation easements as a means to acquire wetlands & park land. This a popular acquisition technique for public use of land at little or no cost.
- There is no mention of promoting the receipt of gifts of desirable Wetlands /park land as a means of acquiring property. The pending gifts of the Tod property in the upper slough , and the creation of the "Commodore Tod Wetland Park" which has been partially funded by Council should be mentioned
- There is no mention of the *Seabrook Slough Restoration Plan & Ecotourism Initiative*. This study was sponsored by the city and the HGAC includes ideas for parks & trails.
- There is no mention of the historic middens in Pine Gully Park. Something needs to be done to restore/preserve them.

***[Parks consultant]***

The draft Seabrook Open Space and Parks Master Plan appears to be a carefully considered document. Following the plan will undoubtedly help keep Seabrook in the forefront of communities with a high quality of life for its residents and attractiveness for future growth.

In general, I would concur with the comments/suggestions made by [the above reviewer]. I would also suggest that it would be useful to give some thought and description to what is meant by the terms "open space" and "green space." How these terms are used in general parlance varies widely – from

simple undeveloped land to manicured lawns and gardens to land left “wild” (without conscious human intervention but often with invasions of non-native species brought to our region by humans or wildlife) to healthy ecosystems. Clarifying the intent up front could save headaches and even conflicts later on.

**[Official]**

Please forward my concerns that the EDC is not adequately funding trail maintenance. Historically we have allocated at least \$25,000 annually for trail maintenance and expansion. Before the EDC spends thousands of dollars on a sign to the Point, the trail program needs to be sufficiently funded.

**[Official]**

Pine Gully restoration warrants more emphasis. I recommend placing this as no. 1 or 2 on the action items list in the Implementation section.

**[Official]**

After Hurricane Ike, even if the City had had funds to participate in federally assisted flood buyouts, this might not have been very useful in terms of park acquisitions. Although the main limiting factor was certainly lack of funds for the City match portion of such purchases, there are other limiting factors: spotty distribution of flooded properties; narrow lots on which many badly damaged older structures stood; and the high value of waterfront homes that were the main ones damaged.

**[Official]**

*Incentives to preserve views, section 5.2:* What specific “tax benefits” are you proposing? Is this an incentive, an exaction or earmarked tax revenue? Looking at the multitude of narrow lots Seabrook has and the impacts of Ike, I imagine most will forgo an incentive to safeguard their property. That has been my experience with incentives unless they are a substantial and long-term benefit. [Incentives to retain wooded lands] may have a better chance, but developing a contract for trees “in perpetuity” obligates future owners. I believe this could only be accomplished through the acquisition of easements or real property and will require funding for the purchase of either.

*Flood buyouts, section 5.9:* The 404 program is not always available from FEMA following any particular disaster. After years where there are several disasters funding for this program sometimes gets exhausted. . . . The key is having the cash available and being willing to write the properties off the tax base forever. The large majority of properties available under this program (with willing sellers) will be in older small-lot subdivisions. Reserving cash for this program will be a challenge.

*City facilities as green space, section 6.5.2:* [It is unclear why the Open Space Committee] would need to involve themselves in the site selection for a new Public Works yard. [Regarding] use of the current wastewater treatment plant following its possible relocation . . . the current location will still serve as a collection point and lift station for any future wastewater treatment plant. Allowing the public to access the site and its required equipment would be very unwise.

*Budget, section 6.2:* [The] estimate of costs is missing the increased staff, capital equipment and other annual costs that will be required to maintain an additional 177 acres of public land . . . personnel costs, trucks, tractors, weed-eaters, nursery supplies, sprayers, etc. . . . Perhaps your survey could contain a question related to the public’s willingness to bear increased taxes to pay for more trails and parks.

***[Conservation organization]***

The Galveston Bay Foundation (GBF) would like to compliment the Seabrook Open Space, Beautification and Preservation Committee for its outstanding work on the draft Seabrook Open Space and Parks Master Plan. GBF feels that such a plan, if implemented, has the potential to provide the citizens of Seabrook and the wider Galveston Bay area increased access to our wonderful estuary.

The plan will also advance our common goals, as the mission of GBF, a 501(c)(3) non-profit organization founded in 1987, is to preserve, protect, and enhance the natural resources of the Galveston Bay estuarine system and its tributaries for present users and for posterity. We would like to offer the following comments in support of elements of the document particularly important to us, but also to improve an already outstanding plan.

While there are many things to like about your draft plan, we would like to highlight a few items:

1. GBF applauds the committee's position that natural qualities of parks and open space should be at the forefront of planning criteria, as revealed in Seabrook resident opinion surveys. We also highly value the statement that "not everyone uses parks, but everyone benefits from them."
2. GBF commends the plan's nine goals that respond your citizens' call to preserve and expand natural open spaces and access opportunities, shifting emphasis from built amenities to retaining land in a more natural condition. The concomitant reduction in mowing of non-native grasses and other maintenance landscaping will also improve habitat while lowering costs.
3. GBF commends the plan's goal to double the land area in parks and open space from 5% to 10% by 2040, while keeping the necessary budget increases at a modest level.
4. GBF appreciates this plan builds on and incorporates existing efforts and initiatives, thereby leveraging limited resources. These efforts include, but are not limited to, GBF's own Seabrook Habitat Island Feasibility Study, Pine Gully restoration, the Carothers Garden master plan, hike and bike trail planning, and the re-development of Seabrook's working waterfront that celebrates not only the environment and recreation, but also on the critically important commercial fishery in Galveston Bay.

GBF makes the following recommendations to further improve the draft plan:

1. The plan should promote wetlands preservation, restoration, or creation in relation to the nine goals as much as possible, as grant funding for these activities is available. For example, goals 1, 2, 3, 7, and 8 could be improved by adding a wetland habitat component language, for access (e.g. via low-impact boardwalk), views, wildlife conditions, acquisition, and conservation, respectively.
2. In regards to wetlands preservation or restoration, whether to increase Seabrook's viewsheds (e.g. section 5.2) or for purely habitat reasons (e.g. section 5.3), the plan should specifically recommend the use of conservation easements for the protection of these wetlands in perpetuity. GBF has found that lesser protective mechanisms, such as deed restrictions, do not provide enough guarantees that the property will be protected from future development nor maintained as well as they should, e.g. precluding invasive plant species. GBF recommends that that the conservation easement should not be both monitored and managed by the same entity; the purpose of the conservation easement is to ensure that the landowner (or its manager) is adhering to the management plan and is actively working to preserve the conservation values of the property.
3. In section 4.5 The Urban Forest and Native Species, GBF recommends that in addition to the Texas Coastal Watershed Program, the Native Plant Society of Texas – Houston Chapter, be added as a key source of tree/shrub/plant recommendations. NPSOT is an outstanding advocate for the use of native plants in landscapes as well as a having wealth of knowledge on the subject.

## ANALYSIS OF JULY 2010 SURVEY RESULTS

The 2010 survey results are in line with those in earlier community surveys. As the following table shows, a majority of more than 75% of respondents favored expanding the trail system, preserving more natural areas, and expanding access to the waterfront. More than half supported holding a bond vote to accomplish the goals in the open space plan. The majority were residents, had read the plan, and said they used the parks "often." About one third favored more sports fields and playgrounds. Fewer than one quarter thought Seabrook had enough parks and trails.

## ONLINE SURVEY QUESTIONS AND RESULTS

| QUESTIONS 0-8                                                                                                  | YES | NO | Don't Know | Non-     |          |       |       |
|----------------------------------------------------------------------------------------------------------------|-----|----|------------|----------|----------|-------|-------|
|                                                                                                                |     |    |            | Resident | Resident | TOTAL |       |
| Have you read the draft Open Space and Parks Master Plan?*                                                     | 53  | 9  | 5          | 55       | 11       | 66    |       |
| 1. Should we expand the city trails system?                                                                    | 55  | 8  | 5          |          |          | 68    |       |
| 2. Do we need more city-operated sports fields?                                                                | 26  | 31 | 11         |          |          | 68    |       |
| 3. Should we preserve more natural space?                                                                      | 55  | 7  | 6          |          |          | 68    |       |
| 4. Do you feel we need better public access to the waterfront?                                                 | 51  | 10 | 7          |          |          | 68    |       |
| 5. Should we build more playgrounds?                                                                           | 23  | 30 | 15         |          |          | 68    |       |
| 6. Should we hold a bond vote to accomplish all of the goals outlined in the Open Space and Parks Master Plan? | 40  | 8  | 20         |          |          | 68    |       |
| 7. Do you feel that Seabrook has enough parks and trails?                                                      | 13  | 49 | 6          |          |          | 68    |       |
|                                                                                                                |     |    |            | Often    | Seldom   | Never | TOTAL |
| 8. How often do you use the city's parks and trails?                                                           | 48  | 18 | 2          |          |          | 68    |       |

\* Six individuals responded before the question "Have You Read The draft Open Space and Parks Master Plan?" was posted.

Three more responses received after the survey deadline (on paper, from residents who had not read the plan), brought the final total to 71. All three favored expanding trails and preserving more natural space, bringing those totals to 58 out of 71.

Comments from the online survey follow. They were generally positive, with requests and suggestions. The breakdown of topics is:

|                                  |    |
|----------------------------------|----|
| Trails: suggestions, requests    | 18 |
| Waterfront: access, views, beach | 11 |
| Softball: facilities requested   | 10 |
| Enhance and beautify parks       | 4  |
| Disc golf: expand                | 3  |
| Limit nonresidents               | 3  |
| Negative on parks costs          | 3  |

## ONLINE SURVEY COMMENTS IN FULL

1. Carothers was/is a waste of money.
2. We need to hold a bond vote for the police department. The PD needs more, up to date, and newer equipment, including patrol cars.
3. Thanks for all of your hard work. Please work hard to maintain our waterfront views and to connect all of the trails together. We live on Todville, but we drive to the park around the corner to use our bikes because riding on Todville with little ones is NOT SAFE!! Try it sometime.
4. My negative answer to question 4 means that I don't favor building boardwalks to access sloughs...I do favor building kayak launch at Pine Gully and I want to maintain open views at stub roads. I'd also like the city to acquire the 3 ac. parcel with large trees on Red Bluff Rd.

5. The reason I love Seabrook is its parks and trails. I value the trails the most.
6. Minor concern - if something were put up on the trails to prevent 4x4 access, i.e. posts that only allowed narrow passage. Would this be a problem for bikes that are pulling children trailers? I have a double trailer that I tow with my bike and I've seen others on the trail with a double as well. Hopefully the dimensions would allow these while preventing 4x4's if this course of action was taken.
7. I run on the trail but to get back to my house in Lake Cove it is dangerous.... People don't like runners on the roads like Todville and esp. E. Meyer.
8. My family with two small children uses many of the area's parks and recreation area's on a regular basis. I would love to see a beach/swimming area in Seabrook. We have to drive to nearby El Jardin or La Porte beach parks for any kind of natural swimming location. Also I would absolutely love a walking trail system that connects the neighborhoods.
9. City needs better public works and police equipment (cars)
10. It would be nice to possibly have the current bike trails paved and widened that way I road bike could be used. There are very little shoulders to ride and it becomes dangerous at times to ride a road bike on our city roads
11. I am an avid disc golfer who loves playing the Miramar Park course. The course has a great community of local disc golfers who meet to play rounds of disc golf. We would love to see more holes at the course and would be happy to volunteer the effort to put the new holes in.
12. I would love to see some beach access for Seabrook residents to not only view the water but enjoy being in the water without a boat. I recently discovered that La Porte has opened a small sandy beach at Sylvan Beach Park. While crowded it is still closer than driving to Galveston to enjoy sun and sand.
13. Connecting to the hike and bike trail on red bluff is really important to me.
14. I play a lot of disc golf at the Miramar Disc Golf course and would like to see that expanded to 12 holes.
15. I would rather some of the water access and parks have limited use by non-residents. I also feel that there should be something done to address the invasive species (plants/animals) in the area.
16. We don't need to build new parks we just need to upgrade and beautify the ones we have. We definitely need waterfront access. We have a lot of wasted waterfront that could generate revenues and income
17. I use the parks and trails on probably an every-other-week basis. Not Often, but also not Seldom.
18. You can never have too many parks and trails! Seabrook is in an exceptional location by the bay and should take full advantage of its natural setting. Linking the current trails and expanding the trail system would be wonderful. Seabrook truly has the best trail system in all of Clear Lake and is used by many non-residents.
19. Open space and trails are the best way to better the quality of life with little cost beyond, purchase and little maintenance. This also brings in friendly guests to the city that visit businesses.
20. Trail along Repsdorph Rd should be a high priority. There is no shoulder on this road but pedestrians are using it. This is very dangerous!
21. I especially like the idea of connecting the east side of 146 to the west side of 146 on Meyer and Red Bluff.
22. More girls' softball fields please!!!
23. I want the parks to be used by our residents. I think a fee for anyone not a Seabrook resident would be in order. Also limit the number of non residents at the parks at any one time.
24. Would recommend a cleanup of the waterfront. We have enough fresh seafood stores. They are messy. Need a nice bay front park.

25. The parks and trails attracted us to Seabrook. We do need to form a volunteer parks maintenance group to help preserve these great parks and trails
26. A bike-accessible trail that runs from 146 to Armand Bayou along Red Bluff Road would be wonderful.
27. Hi, for a small city, Seabrook has a tremendous amount of parks. I believe there is no need for more. The trail system, however, doesn't need expanding, it needs better maintenance. For instance, the heavily traveled section along Todville Road is too narrow, not well lighted and collects water after heavy rains. I suggest that trail lights be added, the trail widened so two bikes can pass each other without one having to get on the grass, and the elevation of the trail heightened to avoid the large water puddles that form after big rains. Let's just make what we have better! Also, one of the reasons I moved to Seabrook seven years ago is because one can still see the night sky here. That night sky is quickly disappearing into an orange haze with the container terminal nearby and Seabrook street lights shining upward. I suggest that Seabrook install streetlights and trail lighting that do not point towards the sky. There is such a streetlight. I just don't know what they are called. Thanks.
28. I believe that obtaining a small park on the east side of Todville road between Meyer Road and Second Street should be the top priority. Developing the point may be helpful commercially, but would not benefit the residents of Miramar and Harbor Cove as far as access to the waterfront.
29. (1) Need more TPWD at Pine Gully. (2) Continue to expand/increase use fees. Residents should pay 0 fees. (3) Who owns/controls the boat Ramp and parking? Cars take up the majority of slots specified for vehicles with trailers.
30. I really feel that Seabrook has plenty of parks and green space already. There just needs to be money spent to upgrade and enhance these areas. Most of the park areas are essentially wasted spaces due to a lack of development and enhancement. Spend the money and build some ball fields... softball, football, soccer, etc. Club sports in the Bay Area are huge and Seabrook would be a VERY desirable location to hold events or host teams if the facilities existed. Right now revenue from such things is going to our neighbors in La Porte, League City, Baytown, and Deer Park. We certainly don't need facilities that match the scale of the ones in those communities, but to have no options to rival with does not serve our beautiful city well. Seabrook should be a destination for families BECAUSE of our green space. If we don't use the space to our advantage by development and enhancement, however, we will likely remain one of the best kept secrets along the Bay.
31. We need fast-pitch softball fields
32. I believe there would be a great benefit to developing more ball fields in Seabrook. You already have popular baseball fields designated for Bayside Little League. It would be great to designate softball fields for girls in your area who enjoy the sport.
33. Need fast pitch softball fields and batting cage to offer home base for Seabrook teams.
34. Would like to see more sporting facilities. In specific softball facilities with batting cages. Would like to see more biking and hiking trails within the area to take advantage of the natural areas.
35. Why doesn't Seabrook have softball fields? Even batting cages for the boys and girls? Sports are a good thing. It keeps the kids off the streets and out of trouble. Why not do something for the girls. Why are there baseball fields but no softball fields? Did you know that there are softball teams based out of Seabrook? But they have no place to practice.
36. Make the grass fields a softball field with dirt infield and have gated in batting cages.
37. I think there needs to be a girl's softball park with a batting cage. Our girls that represent the city of Seabrook need a practice place they can call home.
38. Take the less used parks and turn it into a "softball complex" giving the girls access to practice fields as well. Baseball is not the same as Softball. Girls play year round even in Winter. I didn't realize all the amenities Seabrook has to offer, and only came to realize this since my child plays softball for a

Seabrook team. Not all players are from the same city as the named team. Thus creating exposure to your city. Turn the indoor facility into a Batting cage for both sports. Boys seem to get all the luxury when they hardly play, it's time someone starts to notice the potential that softball has to offer. Parents spend money when they come to tournaments for food, shopping and lodging.

39. The Master Plan was well thought out and very comprehensive. Many great suggestions that should be acted upon
40. I would *use* [sic] them more if there were more.
41. A city is only as inviting as its park system is beautiful!! Parks are so important to life. Kids/families need parks. We love riding our bikes on the trails. Looking forward to a trail that goes by my subdivision...Lk Pt Forest.
42. What is the point of building new city-operated sports fields when you don't build the programs for the children. It is just like everything else in this city, there is nothing for the children or families that actually interests them. We have to go outside of the city to do everything and that includes joining sports leagues.
43. Will the Repsdorph expansion reduce the Brummerhop size? When does construction on Repsdorph begin? 146?
44. I live off one of the tees for the disk golf. I enjoy birds and wildlife in the park area. Also enjoy watching the disk golfers.
45. Making the 146 connection from Red Bluff to Todville safe for cyclists, runners, etc. is important. It is very dangerous to cross Red bluff at 146. If this was constructed soon, townfolk would have better access to downtown without having to drive a car. We could use our bikes to go to Kroger, town office, etc. The draft plan looks terrific! Please implement!
46. Public access to the waterfront should not be at existing parks, the "point", and south area of the city. The point should be developed.
47. We need a waterfront park & public boat launch on Clear Lake. Much like the one down NASA road near the east side of the bridge near Space Center Blvd. If adjacent property were made available to developers for shops and restaurants, it could be quite the attraction for residents and tourists alike.
48. I especially love and appreciate the effort and consideration toward the citizens of Seabrook concerning family quality. The parks are fabulous, the trails and waterfront areas are perfect. I am so grateful for the opportunity to be a member of this community, and will do whatever needed to help in the future development of the nature plan. My children are grown, but have benefited greatly because of the parks and trails systems.

## Appendix F: Financial Benefits of Open Space

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### **Saving Land Lowers Taxes: Economic Benefits of Open Space and Your Local Tax Rate**

*Robert Levite*

*(LCT Newsletter, <http://www.littletonconservationtrust.org/newsletters/LCTspring2004.pdf>)*

Recent studies show, without exception, that residential development costs a town more money in terms of added services (schools, police, sewer and the like) than the property provides the town in real estate taxes. Although a community's purchase of open space removes that property from the tax rolls, over a short period of time, the property surrounding the preserved property (not just the abutting property) grows in value.

Natural open space and trails, in return, are attractive to potential homebuyers, resulting in quicker turnover of these homes. Put this together with a study done for the real estate industry by American Lives, Inc., which found that the presence of quiet, open space, nature and bike trails and gardens were essential characteristics that home buyers are looking for, and you have a winning combination.

Two recent studies have analyzed the cost of community services in a number of towns in Massachusetts, Connecticut, New York, Rhode Island and Virginia. From these two studies, we can extract seven Massachusetts towns that were part of both studies. What we find is that, with respect to housing, for every \$1.00 in tax money that a residence brings into a town, it costs the town, on average, \$1.10 to provide services to that residence (in Connecticut, it costs \$1.14 and in Rhode Island, it costs \$1.20). In effect, residential property operates at a loss for the town. Once a piece of open space is developed into residential housing, the town is faced with increased costs that outpace the added taxes from the new housing.

If preserved, the land raises home values, increasing the tax base without increasing the taxes. Despite the fact that the removal of the open space from the tax rolls causes a small amount of a town's taxes to be proportionately shared by the remaining properties, over a short period the increase in valuation of nearby properties to the preserved land more than compensates for the loss of taxes when the property is removed from the tax rolls. Effectively, the preservation of open space slowly permits a community to stabilize its tax rate by lessening the new impacts and increasing the per-property value of existing properties.

Though many town residents look to commercial/industrial expansion as a panacea for this problem, towns must beware that they do not create their own trap. It is true that commercial/industrial properties, by themselves, do not drain a town from a tax perspective. However, new commercial/industrial spurs residential growth, requires greater services for the population increase, requires greater infrastructure capabilities, increases traffic, crime, pollution and noise, and contributes to the loss of community character and identity. All the ramifications point to additional tax problems.

This scenario does not mean that a community should forgo all residential development and buy up every piece of open space. It does mean that a community needs to balance its residential growth with a good mix of open space preservation and commercial/industrial expansion. This balancing requires proper planning and zoning, and can be done with a perspective that will allow communities to continue to grow while maintaining a stable tax rate.

Resources: "Nation's Housing - Quiet Communities, Open Natural Spaces Top Housing Draws", San Francisco Chronicle, January 8, 1995, and "Cost of Community Services in Southern New England", Southern New England Forest Consortium, Inc. (conducted by Commonwealth Research Group, Inc.) Sept., 1995 and "Does Farmland Protection Pay?" American Farmland Trust, June 1992.

## Appendix G. Sensory Design

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(Summarized from Sensory Trust, U.K., 2010, <http://www.sensorytrust.org.uk>)

### Designing for sensory interest

Landscapes can offer a wide range of sensory experiences to people with disabilities. Concentration of different experiences is what gives sensory designs their identity. Multisensory design entails specific focus on touch (texture), smell, and sound as well as visual elements, usually with components such as a post-and-rope guidance system and Braille signage for blind people and offering smooth passage for wheelchairs.

Enjoyment of such a garden is not, of course, restricted to people with disabilities. When planning for sensory interest there are three basic options:

- *Sensory garden*: Concentrating a wide range of sensory experiences
- *Sensory trail*: Similar to the sensory garden but including more movement
- *Enriching the overall landscape*: Sensory components as an overall wide-scale theme

Historically many sensory gardens were focused on people with visual impairments, but effective visual design makes such a project also appealing to everyone. Successful design requires imaginative approaches and “stage managing.” Examples are feeders to concentrate birds; provision of sculpture intended for touching; planting trees very near a path so that the bark can be felt; or retaining lower tree branches to enable children to climb them. Sensations focus on the five senses but can also extend beyond them to include, for example gravity, temperature, change, space and enclosure.

### Looking

*Color*— This a major factor (flowers, leaves, bark, berries, lichens and mosses, a complete spectrum of color with changes through the seasons)—but not the only one.

*Patterns, mood, and atmosphere*—Hard materials can richness of color and texture (stone, brick, gravel, slate) or mosaic patterns (murals, paving, pebbles). Patterns may be regular (e.g., brickwork, fencing) or irregular (e.g., pine cones, bark variations).

*Shape*—Most objects can be used although many natural materials are quite complex shapes. For simple, Distinctive shapes are legion in leaves, fruits, flowers, stems, paving, and plant containers.

*Movement*—This can be combined with sound, as in mobiles, chimes, or moving sculpture.

### Speaking to Other Senses

*Listening*—Natural sounds abound, and some sensory designs also include radical departures such as “sound fences” activated by dragging a stick along a series of lengths of tubing or piping, just for fun.

*Touching*—Options include providing for sensation of rough surfaces, ridged texture, shapes, weight, temperature (sun-warmed, cold-shaded), wet and dry, or contrasting densities.

*Smelling*—Most attention has been given to plants with scented flowers, but there are other possibilities to consider, such as “activated scents” released when leaves are crushed, strong-smelling culinary herbs (e.g., rosemary, peppermint and apple mint, lemon thyme, curry plant), or the smell of pond water, wood shavings, cut grass, or wet soil.

## Texas Examples

A prime Texas example is in South Texas Botanical Gardens and Nature Center at Corpus Christi, which has a sensory garden and “artscape” as part of a 180-acre property that also includes orchid, plumeria and rose gardens, wetlands, mesquite forest, and arid and butterfly gardens (<http://www.txcoastalbend.org /index.php/corpus-christi-tx.html>).

Odessa has a Barrier Free Progressive Park, sponsored by the downtown Lioness Club and designed to meet the needs of disabled children with two play areas for different age groups, a sensory garden for visually challenged children, and talking tubes to communicate around the park (<http://www.sellingodessa.com/content/article.html/2457362>).

Sensory trails have also been created at Texas Wildscape Farm near Dallas- Fort Worth, used for student field trips and tied to curriculum requirements ([http://www.wildvision.info/texas\\_wildscape\\_farm.htm](http://www.wildvision.info/texas_wildscape_farm.htm)) and at YMCA Camp Grady Spruce on Possum Kingdom Lake, west of Dallas, and there are several centers with sensory projects.

Since a sensory garden/trail is a more intensive style of landscape than in more naturalistic parks, one possible location for is City Hall grounds—where a sensory garden could supply ornamental features for everyone to enjoy, in a context with good security for installations. In Seabrook another possible location is Meador Park, close to a major neighborhood and the library. Grant funding, volunteer labor, and support from civic organizations are often forthcoming for projects designed to serve disabled people.

The experience of League City is illustrative. In early 2010, specifically with disabled children in mind, League City approved creation of a “boundless playground” accessible to all. The estimated cost is \$472,000 for a 10,000-square-foot amenity with more than 4,000 square feet of rubber safety surfacing, a musical activity center, and modules for different age groups (Meeks 2010). As of April 2010 the city had committed \$236,000. A nonprofit organization created to seek contributions had received \$3,000 from CVS, \$500 from American Legion Post 554, \$50,000 through Boundless Playgrounds Inc., and \$3,450 from individual donors; grants of \$27,000 were still expected, and additional grant applications were in process (Meeks 2010).

Given availability of grant money, an option to consider is playground conversion for use by disabled children when current equipment needs replacement. Or, given League City’s proximity, it may be wiser for Seabrook to complement rather than duplicate the League City plan. A sensory garden or trail would be an appropriate complement in serving disabled adults as well as children.

## Sources

Joseph Cornell. *Listening to Nature*. Exley Publications, 1987.

Patricia Elliott. *The Garden and the Handicapped Child*. London: Disabled Living Foundation, 1978.

Malcolm Emery. *Promoting Nature in Cities and Towns*. London: Croom Helm, 1986.

R. Genders. *Scented Flora of the World: An Encyclopedia*. Granada Publishing, Mayflower, 1978.

## Appendix H

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### Birds of Seabrook Species List

The sequence and nomenclature of this list are in accordance with the American Ornithologists Union Check-list of North American Birds (7th Ed. 1998). **Special Thanks to:** Paula Kennedy and George Regmund of Armand Bayou Nature Center, Dwight Peake of Houston Audubon Society, Nick Block, Sterling Heller, Jo Redden, Brenda and Tom Lightfoot for assistance in developing this list.

(\*) - Sighting not unexpected in this area, but is not yet confirmed.

(r) - Rare (sighting is rare but Seabrook is not far from their normal range).

(a) - Accidental (sighting of these species is considered very rare).

Common Loon  
Least Grebe  
Pied-billed Grebe  
Horned Grebe  
Eared Grebe  
American White Pelican  
Brown Pelican  
Neotropic Cormorant  
Double-crested Cormorant  
Anhinga  
Magnificent Frigatebird (r)  
American Bittern (r)  
Least Bittern (r)\*  
Great Blue Heron  
Great Egret  
Snowy Egret  
Little Blue Heron  
Tricolored Heron  
Reddish Egret (r)  
Cattle Egret  
Green Heron

Black-crowned Night-Heron  
Yellow-crowned Night-Heron  
White Ibis  
White-faced Ibis \*  
Roseate Spoonbill  
Black Vulture  
Turkey Vulture  
Greater-white Fronted Goose  
Snow Goose  
Ross's Goose  
Canada Goose  
Wood Duck  
Gadwall  
American Wigeon  
Mallard  
Mottled Duck  
Blue-winged Teal  
Cinnamon Teal (r)\*  
Northern Shoveler  
Northern Pintail  
Green-winged Teal  
Canvasback  
Redhead  
Ring-necked Duck  
Greater Scaup  
Lesser Scaup  
Oldsquaw (r)\*  
Bufflehead  
Common Goldeneye  
Hooded Merganser  
Common Merganser  
Red-breasted Merganser  
Ruddy Duck  
Osprey  
Swallow-tailed Kite (r)  
White-tailed Kite  
Mississippi Kite  
Bald Eagle (a)\*  
Northern Harrier  
Sharp-shinned Hawk  
Cooper's Hawk  
Red-shouldered Hawk  
Broad-winged Hawk  
Swainson's Hawk  
White-tailed Hawk \*  
Red-tailed Hawk  
Crested Caracara \*  
American Kestrel  
Merlin  
Peregrine Falcon \*  
Wild Turkey (r)  
Northern Bobwhite  
Clapper Rail  
King Rail  
Virginia Rail \*  
Sora \*

Purple Gallinule \*  
Common Moorhen  
American Coot  
Sandhill Crane  
Black-bellied Plover  
Snowy Plover \*  
Wilson's Plover \*  
Semipalmated Plover  
Piping Plover \*  
Killdeer  
American Oystercatcher  
Black-necked Stilt  
Greater Yellowlegs  
Lesser Yellowlegs  
Solitary Sandpiper  
Willet  
Spotted Sandpiper  
Whimbrel  
Long-billed Curlew  
Marbled Godwit \*  
Ruddy Turnstone  
Red Knot \*  
Sanderling  
Semipalmated Sandpiper \*  
Western Sandpiper  
Least Sandpiper  
White-rumped Sandpiper \*  
Baird's Sandpiper \*  
Pectoral Sandpiper \*  
Dunlin  
Short-billed Dowitcher  
Long-billed Dowitcher  
Common Snipe  
American Woodcock  
Laughing Gull  
Franklin's Gull \*  
Bonaparte's Gull  
Ring-billed Gull  
Mew Gull  
Herring Gull  
Great Black-backed Gull (a)\*  
Gull-billed Tern \*  
Caspian Tern  
Royal Tern  
Sandwich Tern  
Common Tern  
Forster's Tern  
Least Tern  
Black Tern  
Black Skimmer  
Rock Dove  
White-winged Dove \*  
Mourning Dove  
Inca Dove  
Common Ground Dove  
Monk Parakeet

Black-billed Cuckoo *	Carolina Chickadee	Ovenbird
Yellow-billed Cuckoo *	Tufted Titmouse	Northern Waterthrush
Groove-billed Ani (r)*	Red-breasted Nuthatch *	Louisiana Waterthrush
Barn Owl	White-breasted Nuthatch (r)	Kentucky Warbler
Eastern Screech Owl	Brown Creeper	Connecticut Warbler (a)
Great Horned Owl	Carolina Wren	Mourning Warbler
Barred Owl	House Wren	Common Yellowthroat
Common Nighthawk	Winter Wren *	Hooded Warbler
Chuck-will's-widow	Sedge Wren	Wilson's Warbler
Whip-poor-will *	Marsh Wren	Canada Warbler
Chimney Swift	Golden-crowned Kinglet	Yellow-breasted Chat
Belted Kingfisher	Ruby-crowned Kinglet	Tanagers
Broad-billed Hummingbird	Blue-gray Gnatcatcher	Summer Tanager
(a)*	Eastern Bluebird	Scarlet Tanager
Buff-bellied Hummingbird (a)	Veery	Eastern Towhee
Ruby-throated Hummingbird	Gray-cheeked Thrush	Chipping Sparrow
Black-chinned Hummingbird	Swainson's Thrush	Field Sparrow
(r)*	Hermit Thrush	Vesper Sparrow *
Broad-tailed Hummingbird (a)	Wood Thrush	Lark Sparrow *
Rufous Hummingbird	American Robin	Lark Bunting (r)*
Red-headed Woodpecker (r)	Gray Catbird	Savannah Sparrow
Red-bellied Woodpecker	Northern Mockingbird	Grasshopper Sparrow *
Yellow-bellied Sapsucker	Brown Thrasher	Le Conte's Sparrow
Downy Woodpecker	European Starling	Nelson's Sharp-tailed
Hairy Woodpecker (r)	American Pipit	Sparrow (r)*
Northern Flicker	Sprague's Pipit *	Fox Sparrow (r)*
Pileated Woodpecker	Waxwings	Song Sparrow
Olive-sided Flycatcher *	Cedar Waxwing	Lincoln's Sparrow
Eastern Wood-Pewee	Blue-winged Warbler	Swamp Sparrow
Yellow-bellied Flycatcher *	Golden-winged Warbler	White-throated Sparrow
Acadian Flycatcher	Tennessee Warbler	Harris Sparrow (r)*
Willow Flycatcher *	Orange-crowned Warbler	White-crowned Sparrow
Least Flycatcher *	Nashville Warbler	Dark-eyed Junco
Eastern Phoebe	Northern Parula	Northern Cardinal
Vermillion Flycatcher (r)*	Yellow Warbler	Rose-breasted Grosbeak
Great Crested Flycatcher	Chestnut-sided Warbler	Blue Grosbeak
Western Kingbird (r)	Magnolia Warbler	Indigo Bunting
Eastern Kingbird	Cape May Warbler (r)*	Painted Bunting
Scissor-tailed Flycatcher	Yellow-rumped Warbler	Dickcissel
Loggerhead Shrike	Black-throated Gray Warbler	Bobolink
White-eyed Vireo	(a)*	Red-winged Blackbird
Yellow-throated Vireo	Black-throated Green	Eastern Meadowlark
Blue-headed Vireo	Warbler	Brewer's Blackbird
Warbling Vireo	Blackburnian Warbler	Common Grackle
Philadelphia Vireo	Yellow-throated Warbler	Great-tailed Grackle
Red-eyed Vireo	Pine Warbler	Brown-headed Cowbird
Blue Jay	Palm Warbler	Orchard Oriole
American Crow	Prairie Warbler (a)	Baltimore Oriole
Horned Lark *	Bay-breasted Warbler	Bullock's Oriole (a)
Purple Martin	Blackpoll Warbler *	Purple Finch (r)
Tree Swallow	Cerulean Warbler	House Finch *
Northern Rough-winged	Black-and-white Warbler	Pine Siskin
Swallow	American Redstart	American Goldfinch
Bank Swallow	Prothonotary Warbler	Evening Grosbeak (a)*
Barn Swallow	Worm-eating Warbler	House Sparrow
Cliff Swallow	Swainson's Warbler	

# Appendix I. Seabrook Wildlife List



A wildlife inventory in Seabrook, begun by Michael Hunt in August 1991, was compiled 20 years later as a brochure jointly sponsored by the Seabrook Ecotourism Committee and Wetlands Advisory Board. For birds, see Appendix H.

## Mammals

- Armadillo (*Dasyus novemcinctus*)
- Bottlenose dolphin (*Tursiops truncatus*)
- Whitetail (*Odocoileus virginianus*)
- Mice
- Nutria (*Myocastor coypus*)
- Opossum (*Didelphis marsupialis*)
- Feral pig (*Sus scrofa*)
- Marsh hare (*Sylvilagus palustris*)
- Raccoon (*Procyon lotor*)
- Rats
- Eastern fox squirrel (*Sciurus niger*)
- Eastern gray squirrel (*Sciurus carolinensis*)

## Amphibians

- Texas toad
- Bullfrog (*Rana catesbeiana*)
- Tree frog

## Reptiles

- American alligator
- Mediterranean gecko
- Giant anole
- Green anole
- Cuban anole (?)
- Cottonmouth, water moccasin (*Agkistrodon piscivorus*)
- Gulf salt marsh snake (*Nerodia fasciata*)
- Pygmy rattlesnake
- Copperhead
- Turtles
- Shellfish
- Blue crab
- Fiddler crab
- Stone crab
- Hermit crab
- Grass shrimp
- Brown shrimp
- Oyster

## Fish

- Blue catfish (*Ictalurus furcatus*)

- Sea catfish or hardhead catfish (*Arius felis*)
- Flounder
- Gulf killifish (*Fundulus similis*)
- Rainwater killifish (*Lucania parva*)
- Sheepshead minnow (*Cyprinodon variegatus*)
- Mud minnow
- Gulf menhaden (*Brevoortia patronus*)
- Mosquitofish (*Gambusia affinis*)
- Striped mullet (*Mugil cephalus*)
- White mullet (*Mugil curema*)
- Sailfin molly (*Poecilia latipinna*)
- Bighead sea robin (*Prionotus tribulus*)
- Sheepshead (*Archosargus probatocephalus*)
- Tidewater silverside (*Menidia beryllina*)

## Butterflies and Moths

- Eastern black swallowtail butterfly
- Eastern tiger swallowtail butterfly
- Monarch butterfly
- Queen butterfly
- Luna moth

## Caterpillars

- Luna moth
- Monarch
- Tent caterpillar
- Tomato hornworm
- Woolly bear

## Other Insects

- Rose aphid (*Macrosiphum* spp.)
- Black carpenter ant (*Camponotus pennsylvanicus*)
- Fire ant (*Soenopsis geminata*)
- Red ant (*Formica* spp.)
- Bumblebee
- Honeybee
- Eastern eyed click beetle
- Ladybug beetle
- Two-spotted ladybug beetle (black with red spots)
- Grand Western cicada (*Tibicen dorsata*)
- America cockroach

German cockroach  
Field cricket  
Darter  
Dragon fly  
Earwig  
Crane fly  
House fly  
Green lacewing  
Green stink bug  
Mantid  
Praying mantis

Mosquito  
Northern walkingstick  
Scarlet-and-green leafhopper  
Silverfish

**Spiders**

Brown recluse spider *Loxosceles reclusa*  
Crablike spiny orb weaver spider (*Gasteracantha  
elipsoides*)  
Golden spider  
Wolf spider

## Appendix J. Seabrook Tree Ordinance

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In an effort to preserve “significant” trees, provisions of the City Code include requiring a permit for tree removal, incentives for maintaining large trees, and disincentives for removing them. Maintaining trees greater than 6 inches in diameter at a height of four feet earns landscaping credit, while retaining those greater than 16 inches diameter earns monetary credit. To review all tree-related requirements in the City Code, go to the Building Department section of the city website and click to “Search the City Code of Ordinances on MuniCode.” (Detail as of May 2010 was at [http://library7.municode.com/default-test/home.htm?infobase=14097&doc\\_action=whatsnew](http://library7.municode.com/default-test/home.htm?infobase=14097&doc_action=whatsnew).)

Note that under the applicable definitions, the ordinance concerns only trees on specified sections of a property:

*Qualified tree list* means a list of acceptable trees approved by the city (below).

*Qualifying trees* must be preserved “in a designated landscape reserve, in a designated common park or open space, in front of the minimum required front setback line or in front of the actual front line of a proposed primary building. *Trees located in other areas shall not be considered qualifying and shall not incur either credits or debits.*

### Sec. 30-39. Qualified tree list.

| Common Name                         | Botanical Name               |
|-------------------------------------|------------------------------|
| American Elm                        | <i>Ulmus americana</i>       |
| American Holly                      | <i>Ilex opaca</i>            |
| American Hornbeam                   | <i>Carpinus caroliniana</i>  |
| American Sycamore                   | <i>Platanus occidentalis</i> |
| Anacua/Sandpaper Tree               | <i>Ehretia anacua</i>        |
| Arrow-wood Viburnum                 | <i>Viburnum dentatum</i>     |
| Bald Cypress                        | <i>Taxodium distichum</i>    |
| Black Hickory                       | <i>Carya texana</i>          |
| Black Walnut                        | <i>Juglans nigra</i>         |
| Bur Oak                             | <i>Quercus macrocarpa</i>    |
| Callery Pear/Bradford               | <i>Pyrus calleryana</i>      |
| Canary Island Date Palm (palm tree) | <i>Phoenix canariensis</i>   |
| Carolina Buckthorn                  | <i>Rhamnus caroliniana</i>   |
| Cedar Elm                           | <i>Ulmus crassifolia</i>     |
| Chalk Maple                         | <i>Acer Leucoderne</i>       |
| Cherry Laurel                       | <i>Prunus caroliniana</i>    |

|                              |                                   |
|------------------------------|-----------------------------------|
| Chinese Elm                  | <i>Ulmus parvifolia</i>           |
| Chinese Pistache             | <i>Pistacia chinensis</i>         |
| Chinquapin Oak               | <i>Quercus muhlenbergii</i>       |
| Common Crapemyrtle           | <i>Lagerstroemia indica</i>       |
| Common Fig                   | <i>Ficus carica</i>               |
| Common Persimmon             | <i>Diospyros virginiana</i>       |
| Drummond Red Maple           | <i>Ace rubrum var. drummondii</i> |
| Eastern Red Cedar            | <i>Juniperus virginiana</i>       |
| Eastern Redbud               | <i>Circus canadensis</i>          |
| Edible Date Palm (palm tree) | <i>Phoenix dactylifera</i>        |
| Eve's Necklace               | <i>Sophora affinis</i>            |
| Green Ash                    | <i>Fraxinus pennsylvanica</i>     |
| Honey Locust                 | <i>Gleditsia triacanthos</i>      |
| Huisache                     | <i>Acacia farnesiana</i>          |
| Live Oak                     | <i>Quercus virginiana</i>         |

|                                   |                                |
|-----------------------------------|--------------------------------|
| Loquat                            | <i>Eriobotrya japonica</i>     |
| Mascarene Island Palm (palm tree) | <i>Hyophorbe verschaffelti</i> |
| Mexican Buckeye                   | <i>Ungnadia speciosa</i>       |
| Mexican Fan Palm (palm tree)      | <i>Washingtonia robusta</i>    |
| Mexican plum                      | <i>Prunus mexicana</i>         |
| Nuttall Oak                       | <i>Quercus nuttallii</i>       |
| Ornamental Holly                  | <i>Ilex</i> spp.               |
| Overcup Oak                       | <i>Quercus lyrata</i>          |
| Paloverde                         | <i>Parkinsonia aculeata</i>    |
| Parsley Hawthorn                  | <i>Crataegus marshallii</i>    |
| Pecan                             | <i>Carya illinoensis</i>       |
| Possumhaw Holly                   | <i>Ilex decidua</i>            |
| Post Oak                          | <i>Quercus stellata</i>        |
| Red Bay                           | <i>Persea barbonia</i>         |
| River Birch                       | <i>Betula nigra</i>            |
| Rough-leaf Dogwood                | <i>Cornus drummondii</i>       |
| Rusty Blackshaw Viburnum          | <i>Viburnum rufidulum</i>      |
| Sassafras                         | <i>Sassafras albidum</i>       |
| Scarlet (red) Buckeye             | <i>Aesculus pavia</i>          |
| Shagbark Hickory                  | <i>Carya ovata</i>             |
| Shumard Red Oak                   | <i>Quercus shumardii</i>       |
| Snowbell                          | <i>Styrax americana</i>        |
| Southern Magnolia                 | <i>Magnolia grandiflora</i>    |
| Swamp Chestnut Oak                | <i>Quercus michauxii</i>       |

|                                    |                                    |
|------------------------------------|------------------------------------|
| Sweet Bay Magnolia                 | <i>Magnolia virginiana</i>         |
| Sweetgum                           | <i>Liquidambar styraciflua</i>     |
| Texas Mountain Laurel              | <i>Sophora secundiflora</i>        |
| Texas Persimmon                    | <i>Diospyros virginiana</i> (male) |
| Texas Pistache                     | <i>Pistacia texana</i>             |
| Texas Redbud                       | <i>Cercis canadensis texensis</i>  |
| Texas Sabal Palm (palm tree)       | <i>Texana sabal</i>                |
| Tulip-Tree                         | <i>Liriodendron tulipifera</i>     |
| Washington Robust Palm (palm tree) | <i>Washingtonia robusta</i>        |
| Water Hickory                      | <i>Carya aquatica</i>              |
| Water Oak                          | <i>Quercus nigra</i>               |
| Water Tupelo                       | <i>Nyssa aquatica</i>              |
| Wax Myrtle                         | <i>Myrica cerifera</i>             |
| Western Soapberry                  | <i>Sapindus drummondii</i>         |
| White Ash                          | <i>Fraxinus americana</i>          |
| White Oak                          | <i>Quercus alba</i>                |
| Willow Oak                         | <i>Quercus phellos</i>             |
| Winged Elm                         | <i>Ulmus alata</i>                 |
| Woollybucket Bumelia               | <i>Bumelia lanuginosa</i>          |
| Wright Acacia                      | <i>Acacia wrightii</i>             |
| Yaupon Holly                       | <i>Ilex vomitoria</i>              |

(Code 1996, § 30-224; Ord. No. 98-30, att. A, 11-17-1998; Ord. No. 2001-15, § 1, 5-15-2001; Ord. No. 2005-12, § 2, 5-3-2005)

## Appendix K: Slough Restoration Plan Summary

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Excerpted from *Seabrook Slough Restoration Plan and Ecotourism Initiative* (September 2002)

### Project Goal

- Create diverse wetlands within Seabrook Slough to restore productivity and provide an ecotourism asset.
- Identify funding sources and provide an action plan for implementation.
- Enhance adjacent property values by creating an aesthetic asset.

### Approach

- The Houston Galveston Area Council of Government (H-GAC) obtained a Texas Coastal Management Program (TCMP) grant from the Texas General Land Office (TGLO) to cover the cost of this effort.
- Information was assembled on past/current conditions in the Slough, including historical aerials, an August 2002 survey, prior studies, etc.
- A stakeholder involvement effort targeted adjacent landowners, public, resource agencies, City (Council, Administrative, Parks Board, Wetland and Ecotourism Committees) to discuss approach and obtain guidance.
- A number of alternatives were formulated, analyzed, and subjected to public review and scrutiny.
- A draft report was presented for comments and appropriately modified.

### Recommended Site

The alternatives analysis coupled with stakeholder involvement and existing conditions resulted in the recommendation of one alternative as shown above. The recommended alternative is comprised of three units – north, south, and adjacent to the wastewater treatment plant – totaling approximately 9.5 acres. The project would include open water, low marsh through high marsh, and uplands with fresh/brackish water ponds to attract birds.

It has been assumed for conceptual purposes that the marsh will be constructed in four phases. The recommended alternative includes a public access boardwalk (gated to control the hours of access) and educational signs. . . . The proposed alternative lies on property that is submerged, but owned primarily by the Seabrook Land Company with a small portion owned by Ardy E. Blakley, Jr. Some type of arrangement to use the land must be worked out including possible fee simple acquisition, long-term lease, conservation easement, or other applicable mechanism.

The potential cost of constructing this habitat is between \$425,000 and \$480,000 for the first phase and between \$1,090,000 and \$1,235,000 for the entire project (all three phases). The costs depend heavily on the source of fill material being used to construct the wetlands – whether material can be dredged nearby or needs to be trucked in to the site. Savings could be realized by constructing the project all at one time and/or using volunteer material and labor where available. Several potential sources for funding exist, some of which include the Texas General Land Office (CEPRA, CMP, and CIAP programs), Texas Parks and Wildlife Department, and U.S. Fish and Wildlife Service (CWPPRA program).

Permits would be required from the US Army Corps of Engineers, Texas Parks and Wildlife, and the Texas General Land Office and coordination with several other state and federal agencies would be required.

#### Recommended Implementation Steps

1. City formally adopts a restoration plan.
2. Reach agreement with Seabrook Land Co. to use submerged lands.
3. Contact potential funding entities to determine interest and estimated levels of financial participation.
4. Obtain site specific geotechnical data to determine if dredged rather than trucked-in material can be used and revise budget accordingly.
5. Prepare and submit formal funding requests.

#### Upon funding:

6. survey; 7. permit; 8. design; and 9. build the habitat sites.

## Appendix L. Guidelines for Donations and Memorials

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The purpose of these guidelines is to encourage donations and at the same time manage aesthetic impacts and advise donors regarding maintenance costs. Public facilities are expected to be the result of careful planning and quality construction and to be maintained to a standard safe for users and acceptable to the community. These guidelines apply to all donations including but not limited to park benches, bicycle racks, picnic tables, public art, monuments, drinking fountains, and other types of park and trail accessories. They apply to purchased equipment, installation techniques, donation acknowledgments, decoration, and long-term care of all donations. They do not apply to buildings or land.

EXISTING DONATIONS (installed prior to adoption of this policy)

*Appearance and Aesthetics:* Decoration, ornamentation, and adornment of donated elements must not interfere with routine maintenance. Nothing shall be hung from or tied to trees. Decorations that may be allowed on a temporary basis for a limited time should not interfere with the use of nearby public space, nor represent a hazard. The donor shall remove any temporary decorations within a reasonable amount of time.

*Materials:* Donors are encouraged to utilize natural materials in the construction, and prior approval of landscaping must be obtained from the Public Works Department.

*Maintenance:* Donated park elements become City property. Maintenance of donor-installed landscaping at donation sites is the responsibility of the donor. All landscaped sites must be maintained weed-free and debris-free. Donors should request direct supervision by City staff during application of pesticides, fertilizers, or herbicides. Donations are to be maintained by the City during their reasonable life span.

STANDARDS FOR NEW DONATIONS (made after the adoption of this policy)

*Acquisition or Purchase:* The City and the community have an interest in ensuring that park elements are of high quality in style, appearance, durability and ease of maintenance. City staff will be responsible for the purchase and installation of all park elements.

*Appearance and Aesthetics:* Park elements and/or their associated donation acknowledgments should reflect the character of the park or facility. All park elements will be installed in such a manner that they will not substantially change the character of a facility or its intended use.

*Maintenance and Repair:* Donated park elements must be of high quality to ensure a long life and be resistant to the elements, wear and tear, and vandalism. Donated park elements and/or their associated donation acknowledgment become City property. Accordingly, the City has the duty to maintain the donation for the expected life cycle of the donation. If current information is on file, the donor will be informed and given the opportunity to take further action at the expiration of the item's original life cycle. Use of durable recycled materials is encouraged.

*Cost:* The City will assess, at the time of purchase, a charge sufficient to cover anticipated ongoing maintenance of donated park elements during their expected life. This includes the full cost for the

purchase, installation, and maintenance during the expected life cycle of donated park elements. The City should be consulted for the current fee schedule.

#### PROCEDURE FOR MAKING A DONATION

*Application:* The donor must contact the Public Works Department to determine whether a donation may be accepted. If so, the level and cost of maintenance required for the donated property will be determined by the City. At the end of the life-cycle term, the donor may choose to extend the life-cycle term by paying for the current value of a new donation and its associated maintenance cost. Applications are available through the Public Works Department, and completed applications and payment will be submitted to that department for review and processing.

#### CRITERIA FOR ACCEPTANCE

*Park Plan:* To accept donation of a park element for a specific park facility, a park plan must exist showing the available locations for park elements. If the plan does not identify a particular park element proposed for donation, the City may accept the donation under certain conditions. Under this circumstance the donation must (1) meet a true need of the facility, (2) not interfere with the intended current or future use of the facility, and (3) not require the relocation of other equipment or infrastructure to accommodate the donation.

*Donation Acknowledgements/Memorial Plaques:* Standard sizes of 5 x 7 or 2 x 18 inches and plaques in bronze or steel are preferred. Donation acknowledgment plaques must be approved by a City official to ensure tastefulness, quality and durability. In bench applications, the acknowledgment can also be routed into the seat back. In tree installations, the donation acknowledgment can be installed in a flush-mounted concrete pad.

*Notification:* It shall be the responsibility of the donor to provide the Public Works Department with a current address for purposes of notification regarding the donation. For the purposes of notification the City will send a certified letter to the donor, notifying the donor of changes related to the status of the donation (e.g., a need to remove, relocate, or comply with conditions set forth in this policy).

*Items:* Park benches, bicycle racks, picnic tables, drinking fountains, and playground components may be sited in locations approved by the City in accordance with an available site plan. Items donated must be products approved by the City. These items become City property at time of purchase. Landscaping and plant selection for park facilities is critical due to the coastal environment. Accordingly, the size and species of trees donated shall be limited to those determined by the City. Trees will be accepted only when arrangements are made for irrigation while they become established. The City may accept donations other than those expressly listed in these guidelines, subject to review by City officials.

*Monuments:* Upright monuments or monuments resembling those typically found in cemeteries may only be installed with city approval.

*Signs:* Interpretive signs may be installed describing the history, geology, environment, and flora and fauna. Signs shall be of materials that are of high quality, vandal resistant, and able to withstand environmental conditions; of a size in keeping with the character of the site; and of a design meeting requirements for access to the disabled. Interpretive signs shall be designed in such a manner as to be consistent with other interpretive signs on the site.

*Installation:* Installation of donated park elements, including the donor acknowledgement/memorial plaques, will be completed by City personnel. The City reserves the right to remove and/or relocate donated park elements and their associated donation acknowledgments/memorial plaques if they interfere with site safety, maintenance or construction activities.

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