

# 7 - PARKS, RECREATION & OPEN SPACES



**P**arks, Recreation and Open Spaces are essential in meeting a number of community wide goals and objectives. These spaces and facilities not only enhance local quality of life through providing recreation and social opportunities but also provide benefits related to community character, economic development, mobility and the environment. Proper investment and design of public parks and open spaces can help meet multiple objectives and goals. For example, natural areas or environmental art within parks and open spaces can serve as green infrastructure that supports stormwater functions while also providing recreation opportunities for residents and visitors. Likewise, parks can incorporate event spaces or activity centers that serve to attract residents and guests to an area on a regular basis, thereby serving as an economic catalyst for surrounding businesses.

In fact, parks and other open spaces can serve a broad number functions, including:

- Passive and active recreation
- Spaces and facilities for festivals, events, and activities
- Complementary commercial activity such as vendors, bike rental, artists, or street performers
- Gathering spaces to play or simply “hang out”
- Association with Clear Creek and water-based activities

- Connection between other places, particularly linear parks, trail systems, waterways, or natural corridors
- Protection of natural areas, sensitive sites and waterways, particularly along Clear Creek
- Stormwater management and water conservation
- Tree canopy for beautification, air quality and reduction of thermal pollution
- Wildlife habitat and corridors
- Contribution to community character through design, location and purpose
- Buffer between incompatible uses
- Education, as it relates to the environment & natural sciences
- Location for artwork or landmarks
- Overflow parking using naturalized parking materials

This element includes the following:

- Summary of the City’s Parks and Open Space Master Plan (2006)
- Summary of the Trails Master Plan (2010)
- Parks and Open Space Typology
- Goals and Policies



## Other Plans & Studies

### PARKS MASTER PLAN

The City adopted a Parks Master Plan in 2006. The plan assesses the city’s needs through the year 2025 and demonstrates how resources can be used in the most efficient way to remedy deficiencies in the provision of parkland by acquiring, developing and managing land for different types of public parks that would serve all sections of the community. It also deals with the integration of private sector parks into the City’s parks system. The Plan provides:

- An overview of the city and existing parks system
- Typology of parks by size, function and facilities
- An assessment of current and future needs
- The type of parklands and facilities, the park acreage to be acquired and developed, and the location for future acquisition in order to satisfy the needs of the projected population by planning areas
- Financial requirements, potential sources of funding as well the policies and actions that will be required to support a program of successful implementation

#### Needs Assessment:

Three techniques were used to determine current and future needs in the community as related to parks, recreation opportunities and open spaces.

**Demand Based** - A survey was used to understand the residents current perception of the parks system and identify future priorities. The survey indicated concern with the lack of open space/natural areas and trails.

**Resource Based Needs** - Three aspects of the city’s physical resources were found to affect the future provision of parks and open spaces. 1) Clear Lake and Clear Creek are distinct assets in terms of riparian vegetation, habitat, and scenic beauty as well as recreational potential. Drainage easements create an additional opportunity for creating a linked trails network. 2) The City has stands of fine Live Oaks, other hard woods and coniferous trees and heavily wooded sites along Clear Creek. 3) League City has a generous supply of available land suitable for park use.

**Standard Based Needs** - A Level of Service (LOS) of 10 acres of parkland per 1,000 residents was determined to be appropriate for League City. Based on this standard the City is deficient in the provision of parks especially in the

east planning area.

Recommendations based simply upon needs include:

- Develop approximately 1,050 acres of parkland (including land acquired but not developed)
- Acquire and develop 69 acres of city wide/special parks plus develop an additional 10 acres of space already acquired
- Acquire and develop 339 acres of community parks. Develop 258 acres that have already been acquired
- Acquire and develop 265 acres of neighborhood parks/greenways/trails. Develop 188 acres that have been acquired

The Parks Master Plan further prioritized needs that include:

- Meeting the established Level of Service standards for each park type in each planning area through a park acquisition and development program that serves to increase park provision in underserved planning areas
- Development of a comprehensive citywide greenway and trail network that links parks, schools, and other major destinations
- Preservation of the city’s physical resources—its hydrologic system, its tree cover, and portions of its undeveloped lands—as the city grows, while developing appropriate passive recreational opportunities for citizens to enjoy these resources
- Expansion of the City’s active public recreational facilities so as to maintain a high level of service as the City’s population grows
- Management of storm water in a manner that provides large-scale recreational and open space benefits, particularly in the Southwest planning area



Table 9-1, Existing Parks & Recreation Facilities

Developed City Parks	Acreage
Bay Ridge Park	1.82
Big League Dreams*	13.61
Boat Ramp	1.47
City Pool	1.87
Countryside Park	68.00
Dr. Ned and Fay Dudley Clear Creek Nature Center	148.00
Helens Garden	1.47
Heritage Park	10.40
League Park	2.18
Newport	9.00
Rustic Oaks Park	35.47
Sportsplex	54.00
<b>Total</b>	<b>347.29</b>
Acquired Land for City Parks	Acreage
Bay Colony West	106.00
Kilgore Tract	28.47
Meadows	3.00
Myrtle Park (Erickson Tract)	50.91
Pine Gully Park	44.28
Eastern Regional Park	28.71
<b>Total</b>	<b>261.37</b>
Developed County Parks	Acreage
Challenger Park (Harris)	326.00
Lobit Park (Galveston)	28.00
Walter Hall Park (Galveston)	78.58
<b>Total</b>	<b>432.58</b>
Totals	Acreage
City Developed/Acquired	608.66
County Developed/Acquired	432.58
<b>Total</b>	<b>1041.24</b>

\*Big League Dreams is counted at 60% of its actual acreage-22.68 acres- due to limited periods of public access.

## TRAILS MASTER PLAN

In May 2010, the City adopted a Trails Master Plan that would expand the current trails system from 11.5 to 212 miles and include a paddle trail along Clear Creek. The Master Plan was developed based on four principles: promoting connections to schools, parks, neighborhoods, and business centers; providing an alternative way to commute and reach destinations; creating healthy recreation and exercise opportunities; and providing for athletic training.

The proposed trails system is divided into the following four themes or “areas of interest”. Each area showcases the varied plant and wildlife in the community, economic and cultural influences and athletic and sporting opportunities.

Clear Creek Connections will be located along Clear Creek along the northern edge of the city. This zone will be characterized by a strong signature trail, Clear Creek Trail that will enable citizens to connect and enjoy the waterfront of the creek. Some of the stories that will be told in this zone include early Indian settlements, wetland preservation, waterway usage and wildlife.

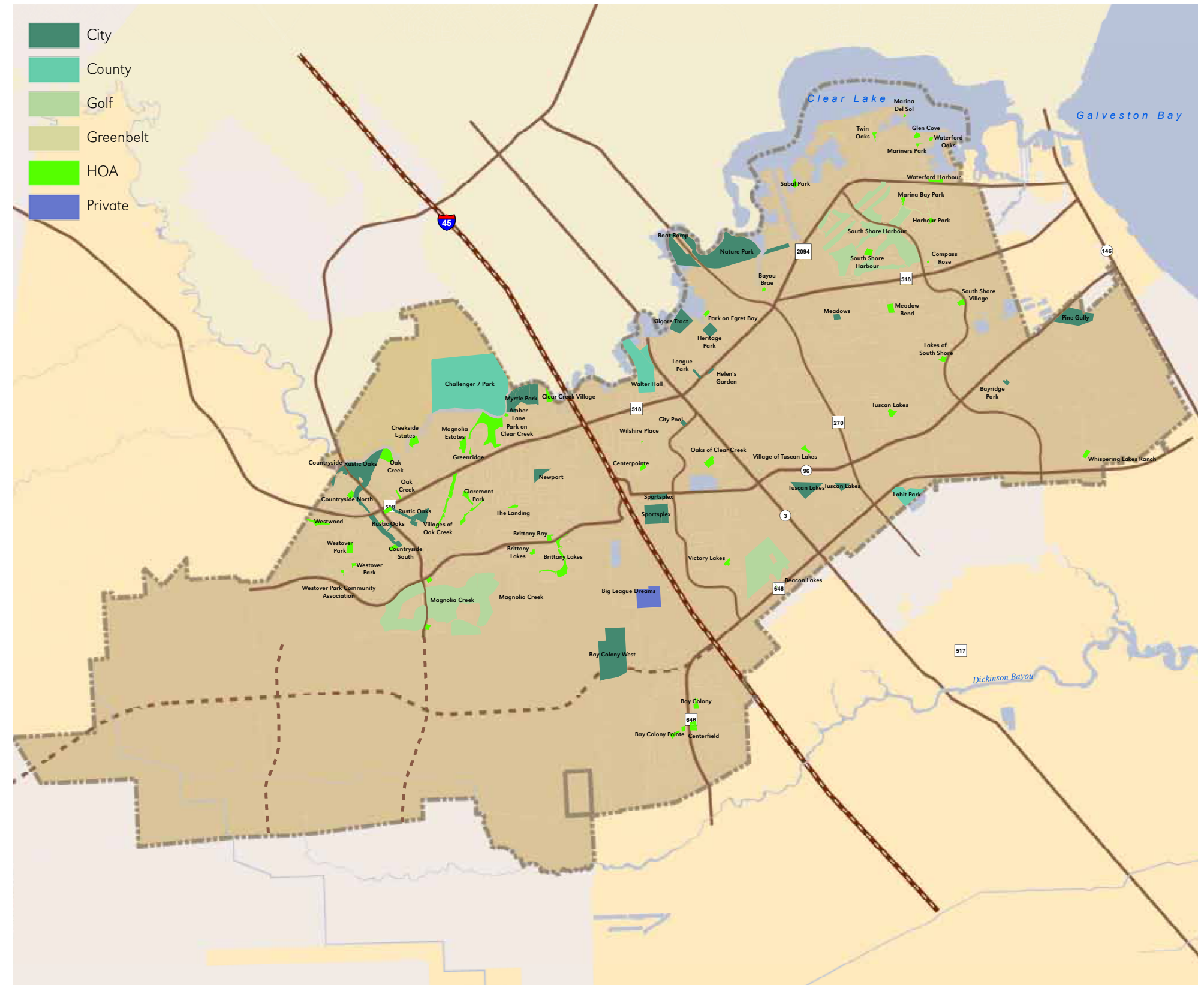
League City Heritage will be located in the heart of the city. This section of the trail system will overlap with the most historic areas of the early days of League City. The signature trail will be called the Heritage Trail and will tell stories about the early founders of the city, historic sites and museums.

The Coastal Plains zone will be located in the eastern side of the city. The signature trail will be called the Tall Grass Prairie Trail and will highlight the preservation of the tall grass prairie and migratory birds.

Texas Traditions zone will be located in the southwest area of the city which includes a largely undeveloped portion of the city. The signature trail will be named the Texas Traditions Trail, and it will be the training ground for long distance runners and bikers. When constructed it will consist of a 13-mile, off-road trail. This trail is proposed as a combination of hard trail and soft surface trail. Some of the stories that will be highlighted include those relating to the early history of cattle ranching, farming and orchards.

The trails will be constructed out of a mix of materials including concrete, decomposed granite, pavers and asphalt to accommodate the needs of varied users. They will also vary in size from 6 to 10 feet based on the type and location of the trail. Ten foot trails will be located along major thoroughfares and serve as the spine of the trails system. Eight foot trails will serve as connections to schools and parks and six foot trails will be used as connections

Figure 7-1, Existing Parks & Recreation Facilities





to neighborhoods. All trails will be separated from the roadway and located in existing city, state or county right of way, drainage or utility easements, city/county open/green space and civic places.

## Typology

The Parks and Open Space Master Plan categorizes the City’s parks and recreation facilities into five types; Regional, Citywide/Special, Community, Neighborhood and Greenway. The Comprehensive Plan expands this list to accommodate gathering and socializing spaces more common in walkable environments and urban areas, including greens/commons, squares and plazas, as well as a series of flexible open spaces that may have different functions and uses.

## PARKS

Regional Parks refer to large open space preserves often developed around a specific natural resource, amenity, or other special feature that draws visitors from an entire region. Given the open space orientation of these parks, passive recreational activities consistent with resource preservation are often the predominant use, though limited areas of active recreational facilities may be developed.

Citywide/Special Parks contain one or more unique features that attract residents, employees or guests from throughout the city because of local historic or civic value or a specific function. Citywide/special parks may include: civic and event spaces, sports complexes, swimming pools, fitness centers, community centers, senior centers, youth/teen centers, historic or cultural sites of local interest.

Community Parks provide a mixture of active and passive facilities that primarily serve residents, employees or guests within a particular section of the City. Community parks may include sports fields, basketball, tennis, or volleyball courts, open play fields, playgrounds, running tracks, walking trails and picnic areas. Community parks are generally larger than 10 acres and are often intended to serve multiple functions, including a balance between active and passive recreational uses.

Neighborhood Parks are intended to meet the most immediate recreational needs of city residents within a particular neighborhood. Neighborhood parks may include: playgrounds, picnic areas, walking trails, basketball, tennis or volley ball courts, open play fields, and practice or limited sports fields. Neighborhood parks are intended to be well integrated into residential neighborhoods and to accommodate day-to-day recreational activities,

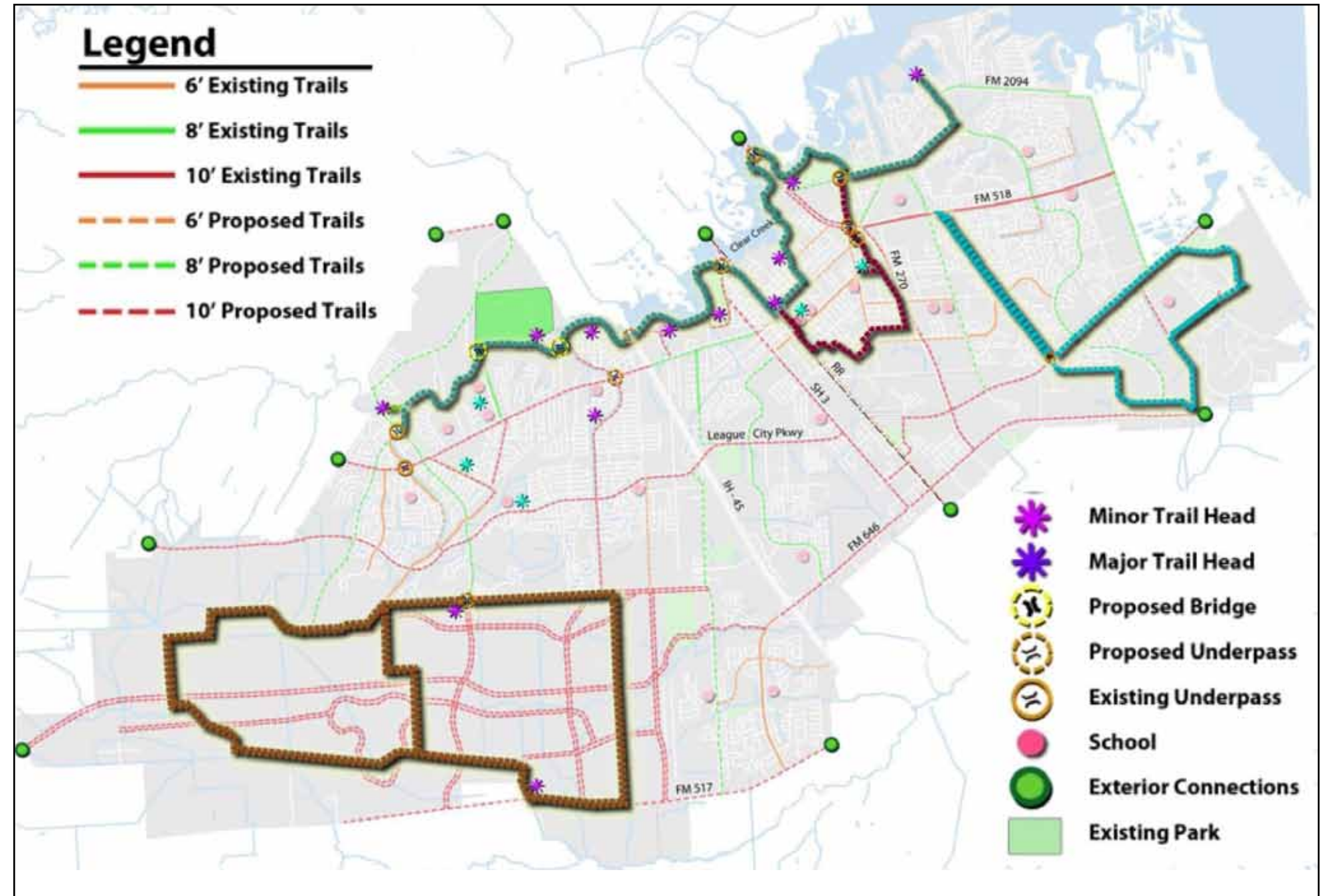


Figure 7-2, Trails Master Plan

such as unstructured sports that require more space than is available in the typical League City backyard. Neighborhood parks are intended to be reached on foot and bicycle; thus, safe pedestrian and bicycle connections, particularly for unaccompanied youth, are essential. Neighborhood parks are generally less than 10 acres but greater than 5 acres. Many of League City’s neighborhood parks are held privately by subdivision homeowner’s associations.

Greenways/Trails are linear parks designed to protect a linear resource, such as a stream or other habitat corridor, and/or provide linkage to other parks and other destinations via multi-use trails that allow pedestrian, bicycle, and other non-motorized use. Greenways/trails typically include shared use paths, interpretative elements, picnic areas, stream or drainage corridors, habitat movement corridors, limited active recreational facilities. Greenways/trails are unique park facilities in that they are also part of the transportation



network that can be designed to allow for safe non-motorized travel between homes and parks, schools, workplaces, and shops.

#### URBAN SPACES

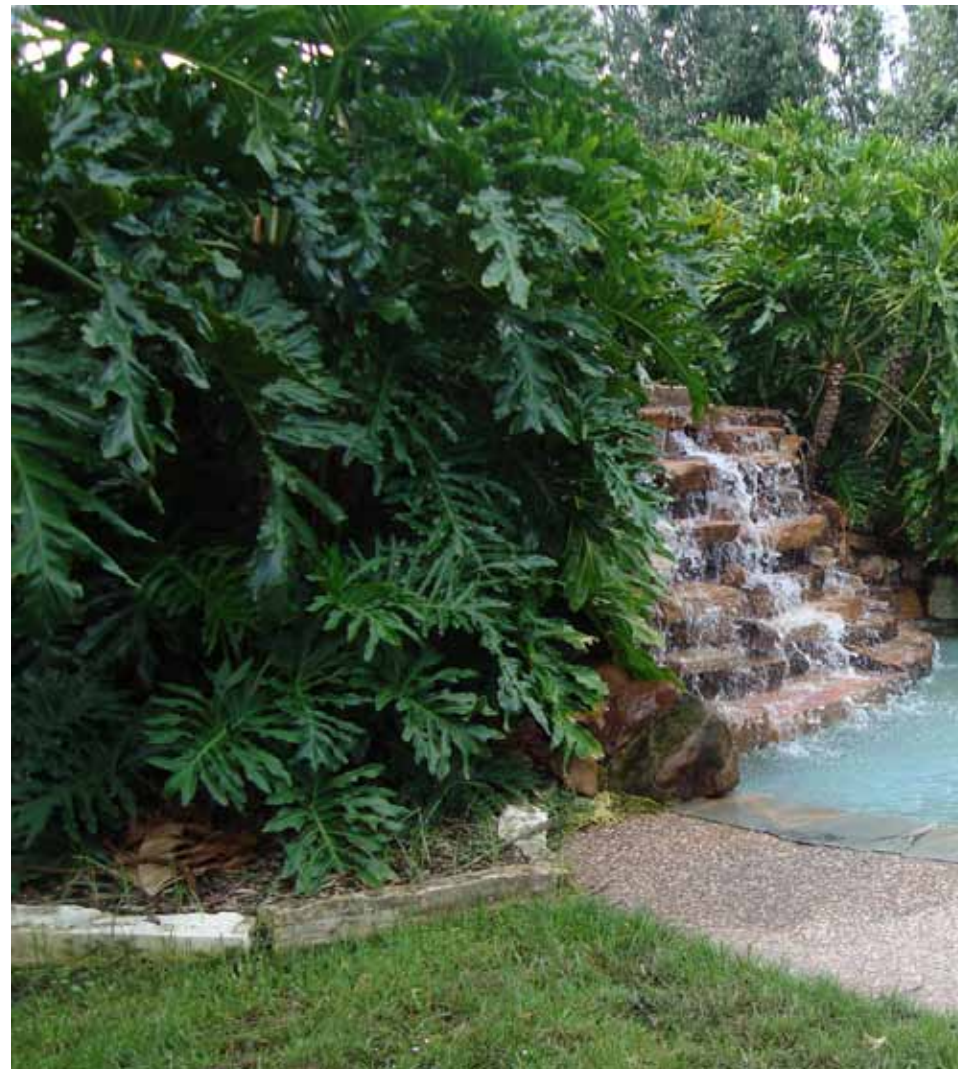
Village Greens are traditionally simple open spaces available for unstructured recreation that serve as focal points or green centers for tightly clustered development. Purposes for a village green tend to include active play space and gathering. Because they are also often a focal point of development, they may also include landscaping, artwork, monumentation or another means of establishing a landmark. Otherwise, with the exception of benches or other minimal park furniture, a village green usually consists of lawn and naturally placed trees. Direct and immediately visible access makes the green an ideal replacement for large yards. The size of a village green can range from 1/2 to 8 acres. The shape of a village green can be perfectly geometrical but more often is wandering and natural.

Squares are formal interpretations of the village green, but are typically associated with a higher level of density than a village. The square serves as a resource for unstructured recreation and civic purposes. While it remains a great place to play or gather, the more formal role of the square also makes it an attractive location for events. A square is spatially defined by surrounding building frontages, and is sometimes directly associated with a civic facility such as a county courthouse or city hall. It typically consists of paths, lawns and trees that are often formally placed and may be accompanied by a scale appropriate event facility, artwork, monumentation or another form of landmark. A square may serve as a center focal point or may be located at the intersection of important roadways. A square is highly geometrical and may be 1/2 to 5 acres in size.

Plazas are urban open spaces available for civic purposes and commercial activities. A plaza is defined by building frontages and other clear edges such as waterfront, although in less urbanized areas, a plaza can also take on less formal edges. A plaza is almost exclusively comprised of hard surfaces such as bricks or pavement. Trees and other landscaping are optional. A plaza is a relatively poor play area, but the large open space lends itself very well to major events such as festivals or markets. Monumentation, a fountain, artwork or another form of landmark is sometimes present as a social draw. Chairs or formal seating may be present, as is the possibility of one or more vendors. A plaza may be located at the intersection of important streets, but it may also be located along a single major roadway and nestled between other activities. A plaza typically has a strong geometric form and ranges in size from 1/2 to 2 acres.

#### NATURAL OPEN SPACES

Preservation Areas consist of natural areas that are fully preserved with limited access by the public and limited or no recreation opportunities. Preservation areas may include marshes, wetlands and other sensitive sites, as well as historically or culturally critical areas. Preservation areas may also include spaces set aside under conservation easement or some other protective safeguard for contribution to stormwater management, water conservation or wildlife habitat. Preservation areas typically require a minimum size of 1/2 acre to perform effectively and are almost natural in form.



### Case Study - Bellevue, Washington Merging Stormwater Features with Parks and Recreation

The City of Bellevue uses an interconnected system of natural areas and existing drainage features to manage stormwater and flooding in their community. The City's stormwater management program is designed to meet multiple objectives including flood control, improving water quality, preserving open space, and providing recreational opportunities.

In the 1970s, the City's Storm and Surface Water Utility (Utility) was formed to fund stormwater management activities. The Utility acquired land for stormwater management and flood control. Open space areas were designated for water quantity and quality control, and stream corridors and steep slopes were protected from development. The open spaces were connected via a network of neighborhood parks. To ensure that these lands offered multiple benefits to the community, the Utility installed stormwater facilities to enhance drainage and water treatment, and residents shared the costs to install recreational facilities. Subsequently, the Utility and the Parks and Community Services Department (Parks) formed a partnership in which the Utility purchased the land and built stormwater management features, and the Parks built and maintained recreational facilities at each location.

The Lakemont Stormwater Treatment Facility is an example of a joint project between the Utility and developer of the Lakemont residential and commercial development. The stormwater management features at this site include a gross pollutant trap, a grit chamber, a dry pond, and two amended sand filter traps. Recreational amenities include picnic sites, tennis courts, basketball courts, a playground, and a running track. The parking lot covers the stormwater facility, and signs educate the public about the park's function.

Source: Water Environment Research Foundation - WERF 2010, [http://www.werf.org/livablecommunities/studies\\_bell\\_wa.htm](http://www.werf.org/livablecommunities/studies_bell_wa.htm)



Table 9.2 - Predominant Parks, Urban Spaces and Open Spaces within each Character District

	Natural	Rural	Suburban	Suburban Village	Auto Dominant	Urban Low/High
<b>Park</b>						
Regional						
Citywide/Special						
Community						
Neighborhood/HOA						
Greenway/Trail						
<b>Urban Spaces</b>						
Village Greens						
Squares						
Plazas						
<b>Open Spaces</b>						
Natural Open Space						

## Goals & Policies

The following goals and policies should be used by the community to ensure that daily decisions related to parks and recreation development and open space preservation support the community’s long-term vision. The policies provide direction to create a vibrant parks and trails system that meets the varying needs of the community.

### GOALS

- ❖ A development and investment program that clearly considers the community’s green spaces and waterfront among the most marketable assets of League City.
- ❖ A coordinated system of fully functional open spaces and greenways that provide multiple benefits including preserving natural areas and ecologic systems, protecting wildlife habitat and providing land for recreation.
- ❖ A “green” network of trails, shared-use paths, sidewalks, and crosswalks that connect places and provide a convenient, exciting and safe alternative to automobile travel.
- ❖ A series of parks and recreational facilities that actively contribute to creation of “great places” or serve as attractions to an area.
- ❖ Recreational programs that expand upon current amenities and facilities including Big League Dreams, the Sportsplex, the Ned and Faye Dudley Nature Center and Clear Creek.

### POLICIES

#### Parkland Acquisition, Dedication and Fees

- When possible, acquire land in advance of demand, i.e. “land banking”.
- Utilize parks and open spaces as a means to preserve and promote natural open space and local habitat.
- Place an emphasis on acquiring land along Clear Creek when it is appropriate and the land meets the needs of Parks Master Plan, Master Trails Plan or Comprehensive Plan.
- Dedicated parkland should be fully suitable to complement and enhance the overall parks and open space network, should be clearly accessible by the public, have access to utilities (if performing a function beyond conservation), and be strategically located to serve as a link between other open spaces and parks.
- Land that is set-aside as open space through the subdivision process may be used to meet a certain percentage of the park dedication



requirements if the open space is greater than 10 acres or part of a larger system that can be protected such as a wildlife habitat, floodplain, wetland or other sensitive system.

- Partial credit should be given for park fees if a developer establishes a trail in a development that provides connectivity to the rest of the community, meets a need established in the Parks Master Plan or the Trails Master Plan, is available for public use without restriction, is suitably located, and meets the quality standards of the public parks system.
- Maximize protection and, to the extent appropriate, public use of floodplains and drainage easements for both active and passive recreation while safeguarding the requirements to manage surface water runoff.

### Park Standards & Design

- All parks should be developed according to the standards and needs identified in the Parks Master Plan and the Trails Master Plan.
- Maintain a standard of 10 acres of parkland per 1,000 persons. This includes special, community, and neighborhood parks and trails.
- Location, function and connectivity of parks and open spaces with other areas within a development should be an obvious and integral component of site design, including design of multifamily development and commercial sites. Design should indicate the role of parks and open spaces within a development as well as connection to parks resources outside of a development.
- Parks should serve as focal points with a proven purpose and functionality. Remnants from poor design as well as sites that are not clearly and carefully integrated into the surrounding area are not acceptable locations for parks, unless other factors such as preservation of sensitive areas, deem them appropriate.
- Parks and recreation areas should be located in such a manner as to be highly accessible by all residents of the area for which they are serving. No home within a subdivision or neighborhood should be beyond walking distance from a neighborhood park.
- Park design, including selected amenities, physical design and programming, should be appropriately based on the intended functions/roles of the space and relations to its users.
- Parks, particularly Community Parks, should be uniquely designed with different elements that provide for social and recreational needs of the community, but also make each location distinctive.
- Community wide location and function of parklands and facilities

should ensure equal distribution among League City residents.

- Park types, function, and amenities should reflect the intended form and character of the area.
- Integrate urban-scale parks into mixed-use developments or major employment centers as an initial requirement of site design or redevelopment.
- Actively encourage and seek out opportunities to incorporate landmarks into parks and recreation areas, including artwork, monumentation, unique landscaping, water amenities or other distinctive features.
- Artfully complement wayfinding programs or other efforts to establish visual linkages within or between places.
- Establish distinctive gathering places appropriate to the scale and intent of the park that will draw residents, employees or guests.
- Where appropriate, ensure adequate and appropriately located space and facilities to accommodate active social uses such as festivals, markets, performances, and other scheduled events.
- Require village greens, squares, neighborhood parks or similar activity centers within multifamily development, in addition to open space required for beautification or as a buffer.
- When developing parks and preserving open spaces, existing trees, vegetation, views and other amenities, should be retained.



- Utilize parks, recreation facilities and open spaces as a tool for increasing the community's tree canopy.
- Mitigate adverse impacts from park activities on surrounding neighborhoods through careful park planning, site design, management and operations.
- Where appropriate and feasible, apply better site design and low-impact development (LID) techniques in park development to reduce environmental impacts of development.
- Where feasible and practical develop partnerships with the counties, school districts and other entities for joint use and maintenance of park facilities and athletic fields.
- Encourage the use of "green" building practices in designing and developing park and recreation facilities. To the extent practical, establish a standard of LEED Silver certification for new and redeveloped facilities.
- When possible, incorporate access to the waterfront and related amenities, such as docks, paddle trail stations, fishing piers, birding stations, or other distinctive features.
- Treat waterfront as a critical viewshed and gateway into parks facilities.

### Trails and Shared Use Paths

- When practical, trails should be developed as Shared Use Paths that promote use by a variety of modes, including their possible use by golf carts or neighborhood electronic vehicles.
- Require easements for trails identified on Trails Master Plan during the subdivision process. Easements for trails should count toward meeting open space requirements.
- Utilize easements/rights way and natural drainage courses for trails and greenways and linkages between destinations.
- Utilize the floodplain for trails to create a pedestrian corridor network.
- Require trails/greenways to connect neighborhoods, major natural areas, parks, and recreation facilities, and education centers to enhance and extend the recreational experience.
- Encourage the development and design of trails that accommodate a high level of use and preserve scenic views while minimizing impacts to the environment
- The Master Trails Plan and associated improvements should be considered critical components of the Master Mobility Plan with expectation for construction by a developer similar to expectation for construction of major roadway improvements.



- The major pedestrian network should be constructed at the same time as the roadway network.
- The pedestrian network should be designed independently from the roadway network in context (and location, when appropriate) and as an integral part of site/project design.
- The pedestrian network should connect to surrounding pedestrian networks and should be designed to be naturally extended into surrounding areas as they develop.
- Utilize connectivity requirements to promote connection through trails and shared-use paths in addition to roadway connectivity.
- Internal pedestrian networks must connect to the Master Trails Network (Master Trails Plan) when possible.
- The pedestrian network should be compatible with surrounding context and purpose, yet allow for creative flexibility.
- Trails and shared use paths may be more compatible with a rural or naturalized design than incorporation of sidewalks.
- Where appropriate, a larger shared use path or trail along one side of a roadway could replace sidewalks on both sides.
- In areas where the roadway is designed to be completely multi-functional (i.e. designed in the right context and with the appropriate width, design speed, segment length, and pattern for driving, parking, walking, biking, playing such as in the Historic District) then trails and shared-use paths should be complementary and sidewalks not necessary.
- In planning and designing future transportation improvements or reconstructing existing facilities, roadway corridors should be adequately sized and designed to include bike, pedestrian and or trail facilities, as appropriate.

### Open Space

- Utilize parks and natural areas as one means of creating a buffer between incompatible uses or as a means of maintaining a “natural view shed” between developed areas.
- Bufferyards may be considered as a portion of the area needed to meet open space requirements if the bufferyard has sufficient depth, vegetation and connectivity as to be functional beyond service as a means of reducing impacts or beautification.
- If wetlands cannot be protected or preserved they should be mitigated. Mitigated wetlands should be located on site and integrated into a development’s storm water system or network of bufferyards.

- Require a protective buffer around wetlands and sensitive sites, as well as along Clear Creek.
- Where feasible and suitable provide access to open spaces for all residents.

### Stormwater

- Site storm water management facilities on parklands only when a benefit to parklands, the surrounding area and water quality is demonstrated.
- Encourage the use of vegetative swales to intercept and slow runoff. These plantings are ideal treatments within parks to mitigate impervious surfaces such as parking lots and roadways.
- Incorporate rain gardens, planting beds and shade trees into park design and development.
- Incorporate detention/retention facilities as an amenity or usable recreational facility. Detention facilities should receive partial credit toward open space requirements if creatively incorporated as an amenity or recreational facility.

### Other

- Reduce the negative impacts of recreational marinas and boating on water quality through best management practices, including Low Impact Design.
- Support private citizen initiatives to preserve natural habitat and enhance the City’s open space.
- Regularly review and modify programs and services as needed to reflect changing community values, interests, and resources.
- Prepare and fund recreation, cultural, and educational programs that draw intended populations into parks and the surrounding areas.

