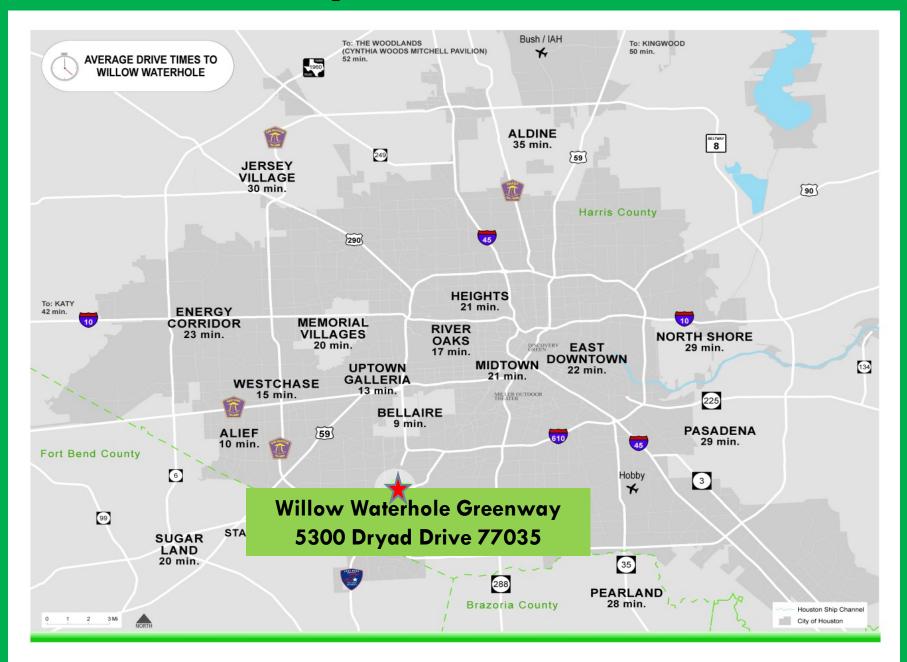
Willow Waterhole Greenway

Less Flooding.... More Greenspace

A Presentation by the Willow Waterhole Greenspace Conservancy

Metropolitan Location

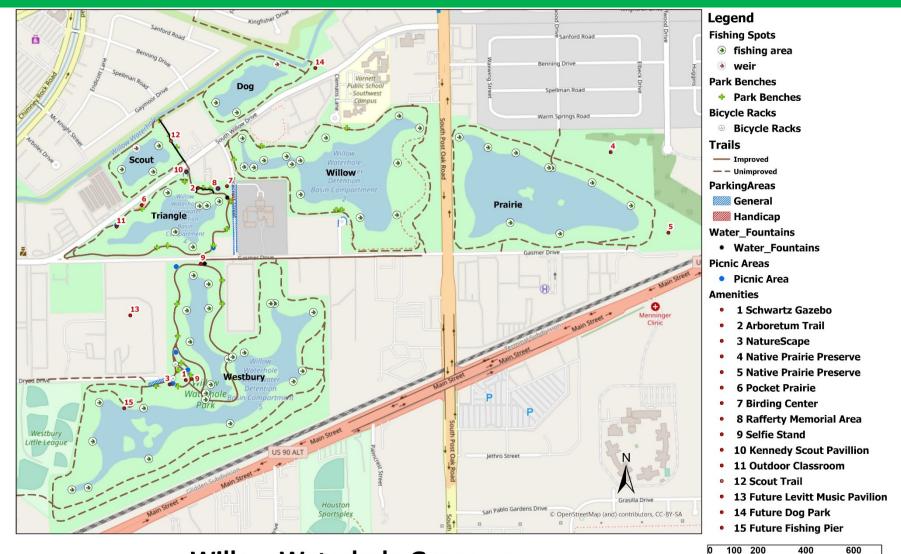


Willow Waterhole Greenway



As part of the Brays Bayou Federal Flood Damage Reduction Project (Project Brays), Harris County Flood Control District (HCFCD) purchased 291 acres that make up the Willow Waterhole Greenway and Stormwater Detention Basin Complex in Southwest Houston. Flood related construction started in 2003 and was completed in 2019, the \$75M Complex consists of six compartments ranging in size from 10 to 110 acres and holds 608M gallons of stormwater.

In 2016, HCFCD and the City of Houston Parks Department completed an interlocal agreement to allow for a portion of the complex to be operated as community greenspace. Currently 60 acres on top of bank areas are utilized in this manner.



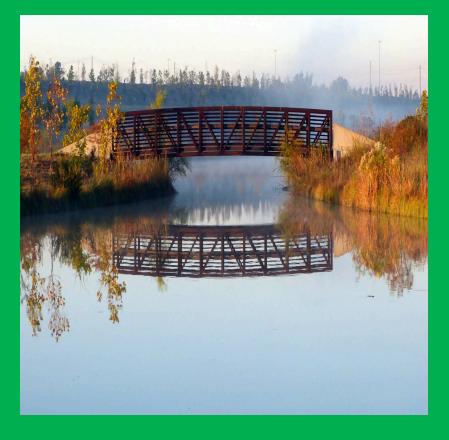
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Willow Waterhole Greenway

Willow Waterhole Greenway <u>Main Features</u>

- Lakes and Wetlands
- Birds and Fish
- Prairies and Forests
- Walking, Running, Biking Trails
- Public Amenities

Lakes and Wetlands





<u>Wetlands</u>



HCFCD maintains 12% of the property as protected wetlands per federal guidelines.



Birds of Willow Waterhole







Top five birding site in Houston area. Over 220 species of birds have been recorded thanks to the Houston Audubon monthly bird survey. (Bird pictures courtesy of Ben Hulsey)

Texas Parks and Wildlife Department

- Stocked catfish, bass, and sunfish at Westbury, Triangle, Willow, and Prairie lakes 2015-2019
- Conducted fish count study 2019







Willow Waterhole Fishing Rules

Fishing license required for persons 17 and older. Fishing not allowed in areas marked as Stormwater Treatment Wetlands. Fishing allowed off bridges, piers, culverts, and any shore area designated for fishing. Pole fishing only. Use of nets, traps, unattended lines, spears, and trawling not allowed. Abide by Leave No Trace outdoor principles.

Minimum Size and Bag Limits:

Bass - release under 14 inches, daily bag limit = 5 Catfish - release under 12 inches, daily bag limit = 25 Sunfish - no minimum length or daily bag limit Do not release any size carp or non-native fish back in water.

www.tpwd.texas.gov/regulations/outdoor-annual/fishing/general-rules-regulations

Coastal Prairie Ecosystem

The U.S. Fish and Wildlife Service and the Harris County Flood Control District have preserved 15 acres at Willow Waterhole Greenway east of South Post Oak. It was a pasture and never plowed. The Preserve retains the plant diversity of the Coastal Prairie and acts as a buffer for the endangered Texas Prairie Dawn and the threatened Houston Camphor Daisy and Texas Windmill Grass.



Texas Prairie Dawn

Houston Camphor Daisy Texas Windmill Grass

Prairie Management Area

In November 2020, Stephen Benigno, Environmental Manager at Harris County Flood Control District announced:

"The HCFCD has recently completed work in the Prairie Management Area in compliance with federal requirements to preserve endangered plant species. A project to partner with HCFCD to develop and maintain amenities as listed in the master plan can begin."

The master plan was commissioned by HCFCD and completed in early 2015 by Azakura Robinson architecture firm. Participants included governmental entities, environmental organizations, and the community



Prairie Management Area

Projects in HCFCD Azakura Robinson Master Plan

- Basin and Prairie Preserve trails
- Benches and trash receptacles along trails
- Trailheads with signage, bike racks, trash receptacles (at Windwood and Gasmer)
- Footbridge over Windwood Trailhead ditch
- Four Viewing Areas with picnic table clusters (2 along Basin and 2 in Prairie Preserve)
- Outdoor Classroom in Prairie Preserve
- Restrooms
- Parking at Gasmer Trailhead

Additional Proposed Projects

- Pedestrian Bridge over South Post Oak Road
- Trail Connection to Houston Parks Board North/South Centerpoint Easement Spine Trail
- Endangered Plant Research Center

<u>Texas Prairie Dawn</u>

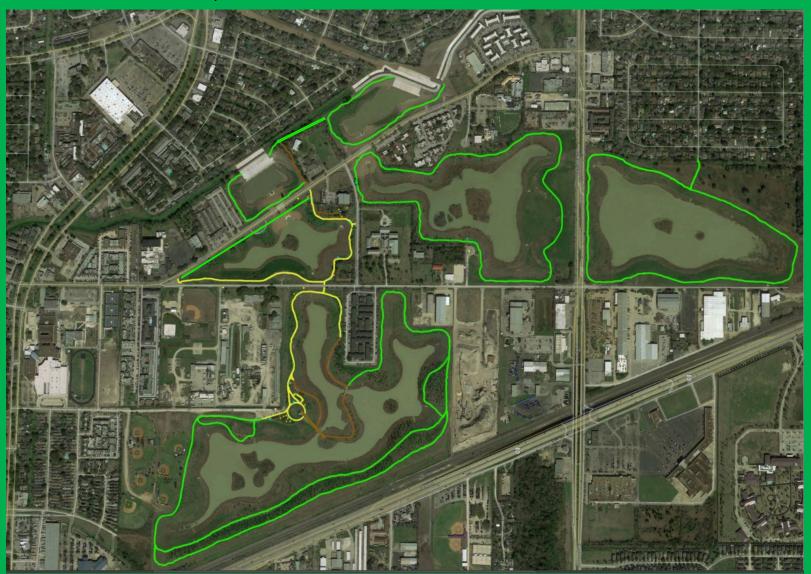
- Texas Prairie Dawn can only be detected during two to three weeks in late March to early April when it blooms and is virtually undetectable at other times.
- Found in three H-GAC counties, Fort Bend, Harris, and Waller. It only grows at the base of mima mounds, which occur only on a few soil types in the area.
- This plant is highly sensitive to habitat disturbance, and very unpredictable in terms of reproductive success.
- It can only be protected under the Endangered Species Act on government-owned land.

Greenway Trails

Concrete trails constructed with TPWD 2003 and CIAP 2017 grants

Crushed rock trails

Grass/dirt trails - future concrete or crushed rock trails



HCFCD Construction

- Completed construction of Willow Waterhole Bayou overflow structures into two lakes 2019
- Completed construction to connect all six lakes 2019
- Added 300 trees at Scout and Dog Lakes 2020
- Removal of carp fencing at Westbury and Triangle Lakes 2021
- Completion of conservation work at Native Prairie Preserve and releasing for development according to master plan 2021



Willow Waterhole Greenspace Conservancy Events 2016-2021

- Dedication of Bob Schwartz Gazebo
- Dedication of James Myers Flagpoles
- Dedication of Arboretum and Russell Schexnayder Trail
- Dedication of Bruce Krewinghaus Chimney Swift Habitat and Bird Information Kiosk
- Re-opening of Bayou Trail
- Dedication of Dabney Kennedy Scout Pavilion
- 20th Anniversary and Dedication of Naturescape Garden
- Annual MusicFest
- Holiday Snowslide, Halloween Trunk or Treat
- Five Cross Country Meets per year HISD (Westbury and Bellaire), St. Thomas Episcopal, Incarnate Word, YES Prep
- 60 Eagle/Gold Scout Projects to date
- Twenty Conservation Workdays per year

Welcome Sign - South Willow/Gasmer



Pocket Prairie Garden & Informational Signage

WILLOW WATERHOLE



PRAIRIE

Wildow Waterhole contains feminants or une critically impaired Guil Costalia Prairie ecosystem, which once stretched from Lafayette, Louisiana, to Corpus Christi, Toxas. Decimated by farming, grazing and urbanization, this endangered prairie habitoric area.

In an effort to restore the natural heritage of Willow Waterhole and bring back the prainle, Harris Country Flood Control Distric-(HCFCD) worked with the U.S. Fish and Wildlie Sorvice and received input from various entities: Toxas Parks & Wildlife Department, Coastal Praine Partnership, Houston Audubon, Houston Master Naturalists, Texas ABM University and Houston Parks and Recreation Department

The plan called for the evaluation and undesirable the removal, eradication of exotic (non-native) vegetation, prairie vegetation establishment, site management, monitoring, and maintenance. HCFCD has been monitoring the prairie since 2010 and has identified approximately 265 native prairie grasses and wildflowers.

Schwartz Gazebo





The Schwartz Gazebo at Willow Waterhole Greenway

at Willow Waterhole Greenway The Gazebo is named in honor of Bob Schwartz for his dedicated service to the community and the Willow Waterhole Greenway. Bob was a founding member of the Brays Bayou Association and Willow Waterhole Greenspace

Greenway. Bob was a Joundary memory of the Drays Layour Association may trained write the Strays Watersheet, helping in the Conservancy. He trivelessly advocated and promoted flood control projects in the Brays Watersheet, helping in the development of Project Brays and the Willow Waterhole Detention Project. His engineering background and knowledge of the area made him an invaluable advisor to the Harris County Flood Control District and other governmental authorities. The BBA's efforts helped lead to the 1988 approval of a \$250M HCFCD bond issue and the

passage by U.S. Congress of the Water Resources Development Act of 1996. This logislation allowed local authorities to handle flood control projects, greatly reducing their cost and time frame, and permitting aesthetics to be incorporated. In 1997 the BBA engaged noted landscape architect Kevin Shanley to develop a concept which would provide significant flood water detention and also serve as a natural greenspace. In 2000 Harris County Commissioner's Court authorized \$4,800 for Project Brays, which included \$75M for the Willow Waterhole Detention Project. In 2001 the BBA sponsored a new 50(c)(3) organization, the Willow Waterhole Greenspace Conservancy to act as the community steward.

A native Houstonian and a fifty-six year resident of the Marilyn Estates subdivision, Bob and his wife Miriam led the civic association for over thirty years. Bob graduated from Rice University with both bachelor's and master's degrees in electrical engineering and had a distinguished career with Schlumberger. He was awarded fourteen patents in various disciplines and led the project to bring electricity to the Willow Waterhole Greenway in 2013.





Myers Flagpoles



Arboretum and Russell's Trail



Krewinghaus Chimney Swift Habitat and Bird Information Kiosk



Bayou Trail



Conservation Workdays & Eagle Scout Projects

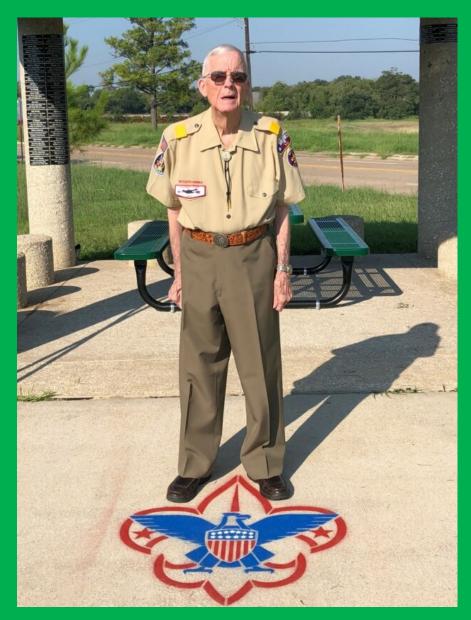








Dabney Kennedy Scout Pavilion







20th Anniversary Celebration and Grand Opening of the Naturescape Garden



Cross Country Meets







MusicFest







A Year in Review

- Launched Newsletter The Watering Hole
- New Membership Campaign (over 100)
- Creation of Naturescape Garden
- Redesign of Website
- Signage Additions (80)
- Added fourteen dump truck loads of gravel to Dryad Drive
- Added Security Cameras
- Partnership with the Texas Wildlife Rescue Center
- Harris County Precinct One announces trail investment
- BOMD issues RFQ for design of former Shell property
- Eight Gold Award and Eagle Projects
- Nine Group Conservation workdays and 220 New Trees Planted
- Ten Group Litter Pickup Days

Construction 2021 and Beyond

- Paving of Dryad Drive and Parking
- Additional Trail Construction
- Development of the Prairie Native Preserve
- Fishing, Kayaking and Environmental Sampling Pier
- Levitt Pavilion, parking, bathrooms, community center, performance theater, and storage on former Shell Property
- Purchase of derelict property Gasmer/Ricecrest
- Dog Park

Possible Plot Plan





Further Information



- www.willowwaterhole.org
- Follow Willow Waterhole Greenway on Facebook
- www.inaturalist.org/check_lists/228029-Willow-Waterhole-Greenway-Park-Check-List
- Parking and Trailheads at 5300 Dryad Drive and 11350 Ricecrest Street 77035
- Bill Burhans, WWGC President and Conservation Committee Chair; <u>burhans56@yahoo.com</u>
- Trudy Holmes, WWGC Board Member and Education Committee Chair; <u>trudy@mshatty.com</u>
- Howard Sacks, Chairman Friends of Levitt Pavilion Houston; <u>sackshow@aol.com</u>
- www.Levitthouston.org