

Addicks and Barker Reservoirs



**US Army Corps
of Engineers**
Galveston District

Welcome to Addicks and Barker reservoirs, a place where visitors can find peace and quiet in the middle of a throbbing metropolitan area. Located about 17 miles from downtown Houston, both Addicks and Barker reservoirs lie entirely within the boundaries of this growing city. In addition to the Reservoirs' flood damage reduction mission, recreation and nature observation opportunities abound through the approximately 26,000 acres of land that makes up Addicks and Barker reservoirs. Large sections of the reservoirs remain undeveloped. The visitor is welcome to come and walk through the fields or along the streams and enjoy the many opportunities that Mother Nature has to offer. We would like to remind the visitor that the majority of these reservoirs are managed as developed recreation areas or leased for cattle grazing. Rules of the management agencies and the rights of the grazing leasees must be respected. Please observe all regulations and do not disturb the livestock or damage any fences.

We hope that this brochure will answer any questions that you may have concerning Addicks and Barker reservoirs. If you do have any additional questions, please feel free to call our office at **(281) 497-0740** or write the **Addicks Field Office, U S Army Corps of Engineers, P.O. Box 218747, 1042 State Hwy 6-S, Houston, TX 77218.**

Please have a safe and enjoyable visit.

Wildlife

Wildlife abounds in both Addicks and Barker Reservoirs. A walk through the reservoirs will uncover many of the interesting, fascinating, and amusing sides of Mother Nature. Three of the major wildlife habitat types—open land, woodland, and wetland—can be found in the reservoirs. Quails, doves, rabbits, turtles and a large variety of songbirds can be seen on almost any day of the year in our open land habitat. Beautiful roseate spoonbills, cardinals and blue-birds are prevalent in the reservoirs. The reservoirs are included on the Great Texas Coastal Birding Trail. The wary observer may catch a glimpse of the many varieties of woodpeckers,

a raccoon, or even a white-tailed deer in the woodland habitat that covers much of Addicks and Barker Reservoirs. It is not unusual to see a large variety of ducks in the wetland habitat. Many types of reptiles and amphibians can also be found throughout the reservoirs, as well as many colorful wildflowers to brighten your day. Visitors are welcome to come and enjoy the forms of wildlife found throughout the reservoirs.



Facts & Figures

	ADDICKS	BARKER
Construction		
Rolled Earthen Dams		
Dates construction began	May 1946	Feb 1942
Dates construction ended	Dec 1948	Feb 1945
Dams and Outlet Works		
Elevation of dams, feet	122.7	114.7
Elevation of dams above stream bed, feet	49.6	38.7
Outlets, 5 gated box conduits		
size, width, height, and feet	8x6	9x7
size, width, height, and feet	252	190.5
Watershed		
Drainage area above dams, sq. miles	136	130
Reservoirs		
Elevations, in feet		
Bottom of outlets	71.1	73.2
Limits of government-owned land	106.1	97.3
Standard project flood	110.6	100.4
Natural ground at ends of dams	112.0	106.0
Surface area of reservoir, in acres		
Limits of government owned land	12,460	12,060
Standard project flood	15,402	13,889
Maximum pool	16,432	16,739
Storage capacity, in acre-feet		
Limits of government owned land	116,263	83,410
Standard project flood	178,556	123,000
Maximum storage capacity	200,840	209,013
Government Property		
Total amount of government-owned property, acres	13,693	12,583

All elevations are based on 1929 Datum, 1973 adjustment, National Geodetic Vertical Datum (N.G.V.D.).

BUT REMEMBER!

If you are going to shoot the wildlife, do it only with a camera. The possession of firearms and hunting is prohibited in both Addicks and Barker Reservoirs.

Recreation

Recreation opportunities are numerous throughout both Addicks and Barker Reservoirs. Since much of the reservoirs are still undeveloped there are ample opportunities



for casual walks through the woods, horseback riding, birding, nature studies, and photography. The

City of Houston, Harris County Precinct 3, and Fort Bend County all operate recreational facilities within Addicks and Barker reservoirs.

For a list of available facilities or information on contacting these operation agencies, please refer to the table at right.



Park Site/location

Addicks Reservoir

Addicks Visitors Area
Bear Creek Park

Cullen Park

Area 1 - Saums Rd. @ Barker Cypress
Area 2 - Saums Rd. @ Groschke Rd.
Area 3 - (Undeveloped) Eldridge Rd. @ Clay Rd.
Area 4 - Groschke Rd. @ West Houston Airport

Bayou Rifles Shooting Range

Barker Reservoir

Barker Visitor Area
George Bush Park

Cinco Ranch Park
5th Army Reserve
Local Training Area (LTA)

	Operating Agency	Parking	Restroom	Walking-Jogging-Biking Trail	Nature Trail	Equestrian Trail	Picnicking	Playground	Goat Course	Special Features
	1			•						fishing, exercise station
	2	•	•	•	•	•	•	•	•	lighted walking trail, war memorial, gazebo, zoo, wildlife habitat area, agricultural extension, bocce ball court, Houston Farm & Ranch*, community center, fishing, football, basketball, baseball/softball*, covered pavilions*, soccer field*, approved organized overnight camping*, exercise station, bird trail
	3	•	•				•	•		baseball/softball*, soccer field*, velodrome
	3	•	•	•	•		•	•		covered pavilions
	3									archery range*, proposed walking-jogging-biking trail
	3									baseball/softball*, covered pavilions*, maintenance facility
	4	•								shooting range*
	1	•		•			•			fishing, exercise station
	2	•	•	•	•	•	•	•		shooting range*, fishing, baseball/softball*, model airplane facility*, soccer field*, exercise station, bird trail
	5				•					Y.M.C.A. (Katy Ext.)
	1									

1 U.S. Army Corps of Engineers / Addicks Field Office / 1042 State Highway 6 South, Houston, Texas 77077 / 281-497-0740

2 Harris County, Precinct 3 / Park Administration / 3535 War Memorial Dr., Houston, Texas 77084 / 281-531-1592

3 City of Houston / Park and Recreation Dept. / 2999 South Wayside Dr., Houston, Texas 77023 / 713-845-1000

4 Buffalo Bayou Rifles, Inc. / P.O. Box 940623, Houston, Texas 77094-7623 / 281-579-7869

5 Fort Bend County / Parks and Recreation Dept. / 2725 FM 521 North, Fresno, Texas 77545 / 281-431-0131

All facilities are open to the public unless noted. No reservations necessary. (Group shelters may require reservations.)

* Facilities are operated by a concessionaire. A fee or membership may be required.

† Facilities are operated by a 3rd party agreement. Special permission is required by the operated agency indicated.

PUBLIC REMINDERS

Addicks and Barker Reservoirs are governed by federal law (*Title 36, CHAPTER III, PART 327*). These rules and regulations governing public use of water resource development projects are administered by the U.S. Army Corps of Engineers, Chief of Engineers. The following rules cited below are partial, but specifically apply to users of this project (Addicks and Barker Reservoirs). A brochure containing the complete list of rules and regulations may be obtained from the Addicks Project Office (281-497-0740).

327.2 The operation of any vehicle off established roadways is prohibited.

327.8 Hunting is prohibited.

327.13 Possession of loaded firearms, ammunition, projectile firing devices, bows and arrows, and explosives of any kind is prohibited.

327.9 Disposal (garbage, trash, rubbish, litter or waste material) is prohibited.

327.14 Destruction, injury, defacement, or removal of public property, including natural features, historical, and archaeological features, and vegetation is prohibited.

327.7 Camping is prohibited.

327.10 Fires are permitted, only if they are situated in developed campsites or picnic site areas and must be confined to grills and fireplaces.

A complete list of rules is available at the Addicks Field Office, 281-497-0740.



Reservoir Background

Location

Addicks Reservoir is situated on the north side of Interstate 10 with State Highway 6 bisecting the reservoir north to south.

Barker Reservoir is situated on the south side of Interstate 10 and west of State

Highway 6. Both reservoirs are approximately 17 miles from downtown

Houston. Barker Reservoir is located on Buffalo Bayou, approximately 50 miles from its mouth and Addicks Reservoir is located on the confluence of Bear Creek, South Mayde Creek, Langham Creek, and Horsepen Creek, tributaries of Buffalo Bayou.

Purpose

The purpose of Addicks and Barker Reservoirs is to prevent downstream flooding of Buffalo Bayou in the City of Houston. The reservoirs were authorized under the Rivers and Harbors Act of June 20, 1938, which were modified by the Flood Control Acts of August 11, 1939; September 3, 1954; and October 27, 1965.

History

Construction on Barker Dam and Reservoir began in February 1942 and was completed in February 1945 at a cost of \$4,530,000. Construction on Addicks Dam and Reservoir began in May 1946 and was completed in December 1948 at a cost of \$5,248,00.

Due to seepage, a slurry trench was placed through the top of both dams (up to 70 feet deep) in 1977 through 1979 at a cost of \$15 million. In 1986 through 1989, both dams were upgraded to comply with modern design criteria, under the "Dam Safety Assurance Program". The main embankments of the

dams were raised to achieve needed freeboard requirements. Erosion protection was then added to the lower ends of the dams to protect the overflow spillways in case of a catastrophic event. In 1999, the year of their 50th birthday, major renovations were made to the outlet works of both Addicks and Barker dams in order to update them to current standards. These modifications did not change the storage capacity of the reservoirs.

Construction

Addicks Reservoir is formed by a rolled earthen dam 61,666 feet long with a maximum height of 49.6 feet above the streambed. A 12-foot wide gravel road extends along the top of the dam. The top of the dam has a maximum elevation of 122.7 feet above the N.G.V.D. Five gated conduits, 8-feet wide by 6-feet high by 252-foot long, serve as the outlet works. The discharge passes through a 43.5-foot long spillway into a 40-foot long by 60-foot wide stilling basin.

Barker Reservoir is formed by a rolled earthen dam 71,900 feet long with a maximum height of 38.7 feet above the streambed. A 12-foot wide gravel road extends along the top of the dam. The top of the dam has a maximum elevation of 114.7 feet above the N.G.V.D. Five gated conduits, 9-feet wide by 7-feet high by 190.5 feet long, serve as the outlet works. The discharge passes through a 55.5-foot long spillway into 50-foot long by 60-foot wide stilling basin.



Operations

Under normal conditions, the gated structures at both Addicks and Barker dams are set to allow the unimpeded passage of low flow water down Buffalo Bayou. This will prevent the unnecessary impoundment of water behind the dams. If severe weather is predicted or occurring that could cause excessive flows in Buffalo Bayou down stream of the dams, the dams will be closed until the threat of flooding has passed. After the threat has passed, the dams will be opened to allow any impounded waters to pass down Buffalo Bayou – through the City of Houston – in a controlled manner until the reservoirs are once again empty. The decision on when and how much to open or close the dams is a team effort of the staff of the Galveston District, U.S. Army Corps of Engineers, including water control personnel and the staff of the Addicks Field Office. These decisions are based on data obtained from rain gauges, stream gauges, and information from various agencies including the National Weather Service.

Benefits

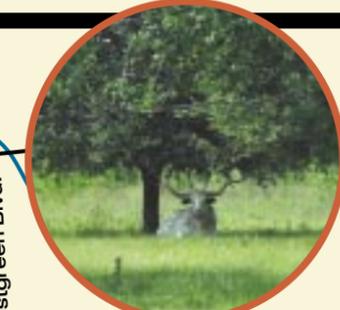
It is estimated that Addicks and Barker Reservoirs, along with other federal construction projects on Buffalo Bayou and its tributaries, will prevent average annual flood damages of \$16,372,000 to the city of Houston.



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In an extreme flood event, it may become necessary to impound flood waters behind Addicks and Barker Dams beyond the limits of government owned property to an elevation of 114.0' N.G.V.D. behind Addicks Dam and 108.0' N.G.V.D. behind Barker Dam.



Legend

Project boundary	Picnicking
Dam area	Walking/bicycling trail
Points of interest	Wildlife habitat area
City/County Parks	Golf course
Waterways	Bird watching areas
Roadways	Equestrian trails
Shooting Range	Baseball/soccer field
Y.M.C.A.	Addicks Field Office
Addicks Field Office	Alkek Velodrome

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