



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

January 31, 2013

CESWG-PE-PR

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY; CORPS OF ENGINEERS

NOTICE OF AVAILABILITY FOR THE DRAFT ENVIRONMENTAL ASSESSMENT FOR REPAIRS TO THE OUTLET WORKS FOR ADDICKS AND BARKER RESERVOIRS DAM SAFETY MODIFICATION STUDY, FORT BEND AND HARRIS COUNTIES, TEXAS.

AGENCY: Department of the Army, U.S. Army Corps of Engineers

ACTION: Notice of Availability

SUMMARY: The U.S. Army Corps of Engineers (USACE), Galveston District announces the release of the Draft Environment Assessment (EA) for repairs to the outlet works for Addicks and Barker Reservoirs Dam Safety Modification Study, Fort Bend and Harris Counties, Texas.

DATES: The USACE, Galveston District will provide the Draft EA for review February 1 through March 2, 2013.

FOR FURTHER INFORMATION CONTACT: Questions about the proposed action and the Draft EA should be addressed to Mr. Jerry Androy (409) 766-3821. Written inquiries and comments should be sent to the USACE, Galveston District, Attn: Mr. Jerry Androy, P.O. Box 1229, Galveston, TX 77553-1229 or emails to Jerry.L.Androy@usace.army.mil.

PURPOSE: This public notice is to inform interested parties that the USACE, Galveston District has prepared a draft Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), Public Law 91-190, regulations for implementing the Procedural Provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, USACE's regulation ER 200-2-2 (Environmental Quality: Policy and Procedures for Implementation NEPA, 33 CFR 230), and other pertinent laws, regulations, and executive orders. This notice is being distributed to interested state, Federal, and local agencies, private organizations, and individuals in order to assist in collecting facts and recommendations concerning proposed repairs to the outlet works for Addicks and Barker Reservoirs in the City of Houston, Fort Bend and Harris Counties Texas.

PROJECT LOCATION: Addicks and Barker Reservoirs are located in Fort Bend and Harris Counties, Texas on the west side of the City of Houston, west of the Sam Houston Toll way and north and south of Interstate 10.

PROJECT DESCRIPTION: Addicks and Barker Reservoirs were constructed in the mid-1940's as an integral part of the Buffalo Bayou and Tributaries Project (BBTP). The BBTP reduces potential flood damages downstream along Buffalo Bayou through a combination of reservoirs, channel improvements, and detention basins. Both Addicks and Barker Reservoirs consist of earthen levees, concrete outlet works, and uncontrolled spillways. The ends of both dams are armored with roller-compacted concrete that serves as uncontrolled spillways. Addicks and Barker Reservoirs each currently have five gated conduits serving as the outlet works. The original design concept for both dams provided for four of the five outlet conduits to be uncontrolled, permitting a combined uncontrolled discharge of approximately 15,700 cubic feet per second (cfs) into Buffalo Bayou. In 1948, two of the four uncontrolled conduits were gated at each dam resulting in a reduced combined uncontrolled discharge of approximately 7,900 cfs, which was considered to be the channel capacity at that time.

The threat of flooding in the areas below the dams continued to rise with the increase in urban development in the areas surrounding the reservoirs throughout the 1940s and 1950s. In 1960, a study was prepared to consider the feasibility of gating the remaining uncontrolled conduits. As a result of that study, the remaining uncontrolled conduits on both reservoirs were gated by 1963. Normal operating procedures specify that releases from the two reservoirs, in addition to the uncontrolled runoff downstream, should not exceed 2,000 cfs as measured at the Piney Point Road gauging station, located 10.7 channel miles below Barker Reservoir. Addicks Dam has a maximum discharge capacity of 7,852 cfs and Barker Dam 8,734 cfs.

Addicks and Barker Reservoirs are designed and located to collect large amounts of precipitation during storm events and then release accumulated rainfall into Buffalo Bayou at a controlled rate. The reservoirs are normally "dry", impounding water only during storm or flood events. Under normal conditions, two of the five gates at each dam are set to allow passage of normal water flows. During storm events, all gates are closed until it is safe to release storm water downstream. The "dry" condition of the reservoirs has presented the USACE with several management opportunities, including the management of environmental and cultural resources. The reservoirs also provide the public with quality outdoor recreational experiences including opportunities for hiking, biking, playing ball, picnicking and various other opportunities.

PROPOSED WORK: At both dams, the USACE proposes the construction of new, replacement outlet structures that include an intake tower, steel lined conduits, parabolic spillway, stilling basin, cutoff wall, and downstream filter, and abandoning the existing structures in place. The new outlet structure would be located within the existing dam embankment, about 400 feet from the existing structure. A cutoff wall would be constructed beneath the outlet works and tied into the existing slurry cutoffs to prevent seepage. An engineered filter and drainage system would provide controlled discharge of seepage and retain soil particles to limit migration from the dam embankment or foundation. A new outlet channel would be excavated to connect the new structure to existing outlet channel. To limit transference of risk, discharge curves for the new outlet structure would closely duplicate the existing structure. After the new structure is completed, the existing upstream intake tower, tower bridge, and the parabolic spillway would be removed, the existing conduits would be filled with grout, a cutoff wall would be constructed through the conduits and a filter would be placed immediately downstream of the abandoned conduits. A portion of the existing outlet channels would also be filled in. An earthen cofferdam

with cutoff wall beneath the foundation would be used during construction of the new structure and would be at the same elevation as the top of the existing dam. Additionally, at Barker Reservoir, a cutoff wall would be constructed at Noble Road, to effectively cutoff seepage through the fine-grain sand foundation from the borrow site to Clodine Ditch.

COMPLIANCE WITH LAWS AND REGULATIONS: The proposed plan is being coordinated with Federal, state, and local agencies. Our initial determination is that the proposed action will not have any adverse impacts on threatened or endangered species. The following is a list of Federal, State, and local agencies with which these activities are being coordinated:

U.S. Environmental Protection Agency, Region 6
U.S. Department of Commerce
U.S. Department of the Interior
Budget and Planning Office, Office of the Governor of Texas
Texas Historical Commission
Texas Parks and Wildlife Department
Texas Commission on Environmental Quality
Texas General Land Office
The Texas Office of State-Federal Relations
Texas Department of Transportation
Texas Water Development Board
Fort Bend County Drainage District
Harris County Flood Control District
Harris County Precinct #3
Harris County Precinct #4
City of Houston

Texas Council on Environmental Quality (TCEQ) Water Quality Certification: The USACE is requesting a §404(b) (1) State Water Quality certification from TCEQ for this action. A Clean Water Act §404(b) (1) evaluation of the proposed action, provided in the Draft EA (Appendix C), describes the effects of the proposed discharges. Short-term increases in turbidity may be caused during construction activities. Best management practices would be implemented to reduce and control turbidity during construction. Water Quality Certification is being requested from the Texas Commission on Environmental Quality (TCEQ).

General Air Conformity: As required by the Clean Air Act, the EPA has promulgated rules to ensure that Federal actions conform to the appropriate State Implementation Plan (SIP). The General Conformity Rule (40 CFR Part 51, Subpart W) applies to Federal actions, within maintenance or nonattainment areas. Emissions from the construction of the recommended alternative are not considered regionally significant (Appendix D of the Draft EA). As part of the General Conformity process, the USACE is making this document available to the public for review and comment for a period of 30 days.

EVALUATION FACTORS: The decision whether to proceed with the proposed action will be based on an evaluation of the probable impacts of the proposed activity on the public interest. That decision will reflect the national concern for protection and utilization of important resources as well as public and environmental safety and economic concerns.

ENVIRONMENTAL DOCUMENTATION: A preliminary review of this proposed action indicates that an Environmental Impact Statement (EIS) is not required. This preliminary determination of an EIS requirement will be changed if information brought forth in the coordination process is of a significant nature. Based on this determination, a draft EA has been prepared. The EA assesses potential impacts to the human and natural environment that would result from the proposed action. The EA is available on the Galveston District Website at: <http://www.swg.usace.army.mil/BusinessWithUs/PlanningEnvironmentalBranch/DocumentsforPublicReview.aspx>

PUBLIC COMMENT: Persons desiring to express their views or provide information to be considered in evaluating the impact of this project are requested to mail or email their comments within 30 days of the date of this notice to:

District Engineer
U.S. Army Engineer District, Galveston
ATTN: Mr. Jerry Androy, CESWG-PE-PR
P.O. Box 1229
Galveston Texas 77553-1229
Or
Jerry.L.Androy@usace.army.mil

All comments must be post-marked or received by March 2, 2013. Any person who has an interest that may be affected by this action may request a public hearing. The request must be submitted in writing within 30 days of the date of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity. Any questions concerning the proposed action may be directed to Mr. Jerry Androy at (409) 766-3821.



Dolan Dunn
Chief, Planning, Environmental and Regulatory
Division
Galveston District