



**US Army Corps  
of Engineers®  
Galveston District  
Regulatory Division**

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**Special Public Notice  
Notice of Intent to Prepare an  
Environmental Impact Statement  
Harris Reservoir Expansion Project  
9 April 2020**

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**Intent to Prepare an Environmental Impact Statement and Public Scoping Meeting  
for Dow Chemical Company's Harris Reservoir Expansion Project, Brazoria  
County, Texas (Department of the Army Permit SWG-2016-01027)**

**PURPOSE OF PUBLIC NOTICE:** To inform you that the U.S. Army Corps of Engineers, Galveston District (Corps) has published a Notice of Intent to prepare an Environmental Impact Statement (EIS), for which you might be interested, in the federal register. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. The Notice of Intent may be found at: <https://www.federalregister.gov/documents/2020/04/07/2020-07315/intent-to-prepare-an-environmental-impact-statement-and-public-scoping-meeting-for-dow-chemical>

**BACKGROUND:** The Corps has received a permit application for a U.S. Department of the Army (DA) permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act from Dow Chemical Company (Dow) (SWG-2016-01027) for the Harris Reservoir Expansion Project (proposed Project). The proposed Project site is located between the Brazos River and Oyster Creek approximately 8 miles northwest of the city of Angleton, in Brazoria County, Texas. The primary federal involvement associated with the proposed action is the discharge of dredged or fill material into waters of the United States (U.S.), and the construction of structures and/or work that may affect navigable waters. Federal authorizations for the proposed Project would constitute a "major federal action." Based on the potential impacts, both individually and cumulatively, the Corps intends to prepare an EIS in compliance with the National Environmental Policy Act (NEPA) to render a final decision on the permit application. The Corps' decision will be to issue, issue with modification, or deny a DA permit for the proposed action. The EIS will assess the potential social, economic, and environmental impacts of the construction and operation of the proposed Project, and is intended to be sufficient in scope to address federal, state, and local requirements; environmental and socioeconomic issues concerning the proposed action; and permit reviews.

**SCOPING PROCESS/PUBLIC INVOLVEMENT:** The Corps invites all affected federal, state, and local agencies, affected Native American Tribes, other interested parties, and the general public to participate in the NEPA process during development of the EIS. The purpose of the public scoping process is to provide information to the public, narrow the scope of analysis to significant environmental issues, serve as a mechanism to solicit agency and public input on alternatives and issues of concern, and ensure full and open participation in scoping for the Draft EIS. To ensure that all of the issues related to this proposed Project are addressed, the Corps will conduct public scoping meeting(s) in which agencies, organizations, and members of the general public are invited to present comments or suggestions with regard to the range of actions, alternatives, and potential impacts to be considered in the EIS. The scoping meeting will begin with an informal open house including a presentation of the proposed action and a description of the NEPA process. These will be held in person, or virtually, as determined by the Agency. Comments will be accepted for 14 days following the scoping meeting. Displays and other forms of information about the proposed action will be available, and the Corps and Dow personnel will be present at the informal session to discuss the proposed Project and the EIS Process. The Corps invites comments on the proposed scope and content of the EIS from all interested parties. Verbal transcribers will be available at the scoping meeting to accept verbal comments. A time limit will be imposed on verbal comments. Written comments may be submitted prior, during, or up to 14 days after the scoping meeting. The specific dates, times, and locations of the meetings will be published in press releases, special public notices and on the Corps' project website: <https://www.swg.usace.army.mil/Business-With-Us/Regulatory/Special-Projects-Environmental-Impact-Statements/>

**ADDRESSES:** Written comments regarding the proposed EIS scope should be addressed to Mr. Jayson Hudson, USACE, Galveston District, Regulatory Division, P.O. Box 1229, Galveston, Texas 77553-1229. Individuals who would like to electronically provide comments should contact Mr. Hudson by electronic mail at: [SWG201601027@usace.army.mil](mailto:SWG201601027@usace.army.mil). Emailed comments, including attachments, should be provided in .doc, .docx, .pdf or .txt formats.

**FOR FURTHER INFORMATION CONTACT:** For information about this project, to be included on the mailing list for future updates and meeting announcements, or to receive a copy of the Draft EIS when it is issued, contact Mr. Jayson Hudson, at the Corps at (409) 766-3108, the email address [SWG201601027@usace.army.mil](mailto:SWG201601027@usace.army.mil), or the address provided above.

**PROJECT INFORMATION:** The Corps Galveston District intends to prepare an EIS for the proposed Harris Reservoir Expansion Project located in Brazoria County, Texas. The proposed Project would include the construction of a 1,929-acre impoundment with a nominal storage capacity of 50,000 acre-foot, an intake and pump station to divert Dow's existing surface water rights from the Brazos River, an outlet to Oyster Creek, and an emergency spillway. The proposed Project would also include floodplain enhancements on Oyster Creek, stream restoration, and temporary construction staging and laydown areas. As part of the DA permit application process, a public notice was issued on 2 March 2018. The purpose of the public notice was to initiate an early public scoping process to solicit comments and information from the public as well as state and federal agencies to better enable us to make a reasonable decision on factors affecting the public interest. All comments received to date, including those provided for review during the public notice comment period, will be considered by the Galveston District during EIS preparation.

1. Project Background: The proposed Project would consist of the following:

Component 1: Construction of an approximately 50,000-acre-foot off-channel impoundment reservoir would be located directly upstream and adjacent to the existing Harris Reservoir, referred to as the Harris Reservoir Expansion. The proposed reservoir would cover approximately 2,000 acres and would include a pumped intake station on the Brazos River and gravity outfall to Oyster Creek via a new bypass channel that would be constructed. The proposed reservoir would operate with the existing Harris and Brazoria Reservoirs in a manner similar to current operations. During periods of drought, the proposed reservoir would be exhausted first, followed by the existing Harris Reservoir, and then the Brazoria Reservoir. As with current operations, emergency releases would occur because of severe weather, such as tropical storms and hurricanes with wind speeds that can overtop the embankments.

Component 2: As part of the proposed Project, Oyster Creek restoration is planned under three projects (referred to as Projects 1, 2, and 3) to enhance the flood capacity and to provide riparian restoration and enhancements. Stream restoration projects comprise bankfull benching, 100-foot buffer preservation, and buffer re-establishment out to 200 feet. Project 1 is located on a 3,600-linear-foot unnamed tributary to Oyster Creek, and Project 2 is located on a 12,860-linear-foot segment of Oyster Creek. Project 3, located on an 11,200-linear-foot segment of Oyster Creek, would serve as a receiving channel conveying overflows from Oyster Creek during high flows by providing additional hydraulic conveyance capacity in the floodplain, and would provide additional flood storage capacity by receiving backwater from Oyster Creek at the downstream end of Project 3 during flood events.

Planning: In response to public concerns on potential impacts to floodplains and hydrology raised during the 2018 Public Notice scoping period, Dow prepared the following studies:

i) A geomorphic assessment of Oyster Creek that applied Rosgen Stream Classification Levels I, II, and III. The assessment was used to develop the proposed Oyster Creek enhancement prescriptions.

ii) A Level I and II stream condition assessment to determine the functions and values for wetlands and waters of the U.S. that would be affected as a result of reservoir and associated facility placement.

iii) A hydrology and hydraulic modeling report using HEC-HMS, Riverware™, and HEC-RAS models. HEC-HMS provides hydrologic modeling, Riverware™ provides reservoir operational modeling, and HEC-RAS provides hydraulic modeling. The modeling and analysis focused on drought conditions during the life of the proposed Project.

iv) Planning-level floodplain analysis and modeling for areas downstream of the proposed Project to confirm the floodplain storage changes that would occur if the proposed Project is implemented.

v) An updated interim hydrogeomorphic functional assessment to determine the functional capacities of wetlands and waters of the U.S. within the proposed Project site.

vi) Other planning studies, including a Phase I Environmental Site Assessment.

Mitigation: Since the public notice was issued, additional wetland delineation work was conducted in September 2019 that included preparation of a functional assessment and stream assessment referred to above. The Corps verified that wetland delineation on 10 October 2019. A conceptual mitigation plan was submitted with the Section 404 Permit application in 2018 to address compensation of unavoidable impacts to waters of the U.S. The conceptual mitigation plan will be revised based on the verified wetland delineation and results of the functional assessment and stream assessments and as part of the EIS development.

2. Location: The project site is located between the Brazos River and Oyster Creek approximately eight miles northwest of the city of Angleton and abuts the Brazos River. The project can be located on the U.S.G.S. quadrangle map titled: OTEY, Texas.

3. Purpose and Need: The purpose of the proposed Project is to utilize Dow's existing run-of-river water rights from the Brazos River to improve reliability during extended drought conditions for the existing water supply system that serves Dow's Texas Operations in Freeport as well as other industrial, community and potable water users that rely on Dow's water supply. Based on modeling, Dow estimates that a total of 78,000 acre-foot of water storage capacity is necessary to provide Texas Commission on Environmental Quality's recommended 180 days of drought resilience. The current

combined storage capacity in the existing Brazoria and Harris reservoirs is approximately 29,000 acre-foot. Therefore, Dow will need to develop the Harris Reservoir Expansion to provide an additional storage capacity of at least 49,000 acre-foot to provide a reliable water supply during drought.

4. Alternatives: An evaluation of alternatives to Dow's preferred alternative initially being considered includes a No Action alternative; alternatives that would avoid, minimize, and compensate for impacts to the environment within the proposed Project footprint; alternatives that would avoid, minimize, and compensate for impacts to the environment outside the footprint; alternatives using alternative practices; and other reasonable alternatives that will be developed through the proposed Project scoping process, which may also meet the identified purpose and need.

5. Public Involvement: The purpose of the public scoping process is used to determine relevant issues that will influence the scope of the environmental analysis and EIS alternatives. General concerns in the following categories have been identified to date: waters of the U.S. including wetlands, water quality, sedimentation and erosion, hydrology and flood hazards, water rights, wildlife and aquatic species, migratory birds, threatened and endangered species, invasive species, air quality, environmental justice, socioeconomic environment, archaeological and cultural resources, navigation and recreational resources, hazardous waste and materials, public health and safety, downstream and off-site impacts, and cumulative impacts. All parties who express interest will be given an opportunity to participate in the process.

6. Coordination: The proposed action is being coordinated with a number of federal, state, regional, and local agencies, including the U.S. Environmental Protection Agency (a cooperating agency under NEPA), U.S. Fish and Wildlife Service, U.S. National Marine Fisheries Service, Texas Commission on Environmental Quality, Texas General Land Office, and Texas Parks and Wildlife Department.

7. Availability of Draft EIS and Scoping: The draft EIS is estimated to be available for public review and comment no sooner than the spring of 2021. At that time a 45-day public review period will be provided for individuals and agencies to review and comment on the DEIS.

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