

ATTACHMENT D-11  
PUBLIC INVOLVEMENT

*June 2016 Notice of Intent*  
*July 2016 Public Scoping Meeting Report*  
*February 2018 Notice of Availability*  
*DIFR-EIS Public Meeting Report*

## D. Communications

The Defense Health Agency will post the TRICARE Prime access to care standards on the TRICARE.mil Web site and execute a strategic communication plan to educate beneficiaries enrolled in TRICARE Prime about the access to care standards.

Dated: June 17, 2016.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

[FR Doc. 2016-14786 Filed 6-21-16; 8:45 am]

**BILLING CODE 5001-06-P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Public Notice of Intent for Studies and Initial Scoping Meeting for Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks Feasibility Study

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

**ACTION:** Notice of intent and public scoping meeting.

**SUMMARY:** This notice provides a summary of the ongoing feasibility study activities for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) Feasibility Study and solicit public input regarding the study. The objective of the feasibility study is to investigate and recommend solutions to improve traffic safety and navigation efficiencies at the confluence of the GIWW with the BRFG and CRL. The GIWW BRFG/CRL Feasibility Study will identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays. The non-Federal sponsor for the project is the Texas Department of Transportation (TXDOT).

**DATES:** The Galveston District will hold the Initial Public Scoping Meeting for the Feasibility Phase of the study on July 12, 2016 from 6:00–8:00 p.m.

**ADDRESSES:** The meeting will be held at the West Columbia Civic Center, 516 E. Brazos Ave. (State Highway 35), West Columbia, TX 77486.

**FOR FURTHER INFORMATION CONTACT:** Franchelle Craft, (409) 766–3187.

**SUPPLEMENTARY INFORMATION:**

*Study Background.* In 2000, the Galveston District completed a reconnaissance study to assess the feasibility of modifying the configurations of the BRFG and CRL to reduce traffic accidents and delays. The

study resulted in the determination that there was Federal interest in continuing to the feasibility phase of the study. Funding for the feasibility phase of the study was approved in Fiscal Year 2016. Recognizing the hydrologic connectivity of the GIWW system, the decision was made to conduct the assessment of the BRFG and CRL separately and combine the results into one integrated feasibility report.

Navigation along the GIWW is constrained at the confluence with the BRFG and the CRL resulting in the following conditions:

- Inadequate channel and crossing widths for modern vessels;
- Outdated floodgate construction and width in the floodgate chambers at the Brazos River;
- Outdated lock construction at the Colorado River leading to mechanical failure;
- Shutdown of operations during high water periods presenting a significant security concern;
- Increased hydrology (river flows due to flood events) impacting navigation traffic;
- Increased operations and maintenance costs to prevent marine buildup on mechanical elements of the structures;
- Increased sedimentation at the mouth of the rivers;
- Shoreline erosion.

The Feasibility Study will assess the conditions identified above and develop specific measures/alternatives that can be combined or used as standalone actions to address the problems at each location.

*Study Process.* During the feasibility phase, detailed engineering, hydrology, economic analysis, and environmental studies are performed. The goal of the feasibility phase is to find the most cost-effective solution that responds to the problems identified above while protecting the Nation's environment. The final feasibility report documents the study results and findings, the selection process of the recommended alternative, and the costs and benefits of the recommended plan. The feasibility study ends when the report is submitted to Congress for authorization.

*Study Status.* The Feasibility study will reevaluate the proposed alternatives identified in the 2000 Reconnaissance Study to determine the feasibility of undertaking modifications to the Brazos and Colorado river crossings, as well as identify changes to the floodgate and lock structures at each location that are economically and environmentally justified. There is a need to reduce navigation impacts and costly waterborne traffic delays that are

a result of aging infrastructure and inadequate channel dimensions for modern vessels. Alternatives to be evaluated in the feasibility phase include:

- Moving the gates away from the river;
- Widening the gates;
- Reconfiguring the guide wall to lessen the angle to the GIWW;
- Straightening the crossing at the Brazos and Colorado Rivers;
- Lock modifications (construction of new locks);
- Removal of floodgates; and/or;
- Some combination of these and other measures.

*Meeting.* The Galveston District will hold the Initial Public Scoping Meeting for the Feasibility Phase on July 12, 2016 from 6:00–8:00 p.m. at the West Columbia Civic Center. The purpose of the meeting will be to inform the community about the proposed navigation modification project, present how the study will be conducted, solicit public input regarding the initial scope of potential issues/alternatives to be addressed, and identify those issues/alternatives that should be analyzed further, or eliminated, based on their significance and effects on the environment. The information from the public meeting will be used in the development of an Environmental Impact Statement in compliance with the National Environmental Policy Act (NEPA) requirements. This notice serves as an invitation for the public to attend. The public will be provided an opportunity for questions and comments.

We are soliciting comments/concerns on the opportunities to improve navigation along the GIWW at the Brazos and Colorado Rivers, the identification of resources that may occur within the study area, and other social, economic, and environmental concerns.

All interested parties are invited to provide input to this study. Please send your comments or questions regarding this notice or mailing list updates to USACE SWG, 2000 Ft. Point Rd., Galveston, TX 77550. Written input can also be submitted and is requested by August 11, 2016. If we can provide further information, contact the project manager, Ms. Franchelle Craft, by phone at (409) 766–3187 or by email at [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil).

**Eric W. Verwers,**

*Director, Regional Planning and Environmental Center.*

[FR Doc. 2016-14694 Filed 6-21-16; 8:45 am]

**BILLING CODE 3720-58-P**

# **Public Scoping Meeting Summary Report**

## **Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks Feasibility Study**

### **Public Scoping Meeting**

Tuesday, July 12, 2016

6:00 p.m. to 8:00 p.m.

West Columbia Civic Center

516 E. Brazos Ave. (State Highway 35)

West Columbia, Texas 77486

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**Gulf Intracoastal Waterway  
Brazos River Floodgates and Colorado River Locks  
Feasibility Study**

**1.0 Project Description**

The U.S. Army Corps of Engineers (USACE) Galveston District is leading a Feasibility Study, including preparation of an Environmental Impact Statement (EIS), for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates (BRFG) and Colorado River Locks (CRL). The Feasibility Study is intended to investigate and recommend solutions to improve safety and navigation efficiency on the GIWW at these two locations. The Feasibility Study will identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays.

The USACE is leading the development of the Feasibility Study and the EIS preparation in collaboration with the non-Federal sponsor, the Texas Department of Transportation (TxDOT). The assessments of the BRFG and the CRL will be conducted separately and concurrently, and the results will be combined into one integrated Feasibility Report (FR) and EIS.

In June 2016, a *Notice of Intent for Studies and Initial Scoping Meeting for Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks Feasibility Study* was published in the Federal Register. This report describes the public scoping meeting that was held on July 12, 2016, including an overview of the meeting (Section 2.0) and a summary of public comments (Section 3.0).

**2.0 Public Scoping Meeting Overview**

**Meeting Date:** Tuesday, July 12, 2016

**Meeting Location:** West Columbia Civic Center  
516 E. Brazos Ave. (State Highway 35)  
West Columbia, Texas 77486

**Meeting Purpose:** To inform the public and stakeholders about the GIWW BRFG and CRL Feasibility Study, and to obtain their comments and concerns.

**Meeting Format:** The meeting was conducted in an open house format between 6:00 p.m. and 8:00 p.m. Mr. Rob Thomas, Chief of the Project Management Branch at the USACE Galveston District, opened the meeting by explaining the purpose of the meeting and introducing members of the USACE's Project Development Team (PDT) who were present at the meeting and available to answer questions. Mr. Matt Mahoney, TxDOT Project Manager, then introduced members of the TxDOT team who were present at the meeting and available to answer questions. Mr. Simon DeSoto, Lock Master for the CRL, and Mr. Robert George, Assistant Lock Master for the BRFG, then presented summaries of the history and problems at the CRL and BRFG, respectively.

Following the introductory remarks, the meeting proceeded in an open house format. Informational exhibits were on display and members of the PDT, including USACE and TxDOT staff and consultants, were available to answer questions and review project elements with the public. The exhibits provided information such as a general project overview and purpose of the public scoping meeting, a description of the BRFG and CRL and their locations, a discussion of identified problems, objectives, key considerations and potential measures, a general feasibility overview of the study/National Environmental Policy Act (NEPA) process, and information regarding how the public could participate in this Feasibility Study and process. A powerpoint presentation with the same information was also played in a loop for members of the public to watch.

A copy of the powerpoint presentation is included in **Appendix A** of this report. Copies of the informational displays are included in **Appendix B** of this report.

**Attendance:** The Public Scoping Meeting was attended by a total of 56 people. Attendees included representatives of U.S. Fish & Wildlife Service, Brazoria County, City of West Columbia, Ports of Freeport and Bay City, Gulf Intracoastal Canal Association, Dow Chemical, and Friends of the San Bernard River, as well as landowners and interested members of the public. Below is a summary of the people that attended the Public Scoping Meeting by category:

- Members of the Public – 41
- USACE Personnel – 7
- TxDOT Personnel – 2
- TxDOT Team Consultants – 5
- Media – 1

Sign-in sheets are included in **Appendix C**. Note that not all USACE and TxDOT staff and consultants, signed in on the sign-in sheets.

**Meeting Notice**

**Publications:** *Federal Register*                      Wednesday, June 22, 2016 (**Appendix D**)

**Media Releases,  
News Articles, and**

**Social Media Posts:** *USACE News Release*      News Release Issued, Wednesday, June 29, 2016  
*USACE News Release*      News Release Issued, Thursday, June 30, 2016  
*Defense Video*                      News Release Posted, Wednesday, June 29, 2016  
*Imagery Distribution System (DVIDS)*  
*Facebook*                              News Release Posted, Thursday, June 29, 2016  
*Pinterest*                              DVIDS Post, Thursday, June 29, 2016  
*Bay City Sentinel*                      News Article, Thursday, July 7, 2016

Copies of media, news articles, and social media posts are included in **Appendix E**.

**Meeting Summary:** The Public Scoping Meeting allowed members of the public to review project elements with members of the PDT, ask questions, and obtain information regarding the proposed project Feasibility Study. Copies of an informational pamphlet and comment form distributed at the meeting are included in **Appendix F**. Photographs taken during the meeting are included in **Appendix G**.

### **3.0 Summary of Public Input – Written Comments or Questions Received**

The following summarizes the written comments or questions received either during the Public Scoping Meeting or the Public Comment Period. Copies of written comments and questions are included in **Appendix H**.

#### Public Scoping Meeting Public Input

Seven individual written comments and/or questions were received during the Public Scoping Meeting (**Appendix H**).

#### Public Comment Period Public Input

Four additional comments were received during the public comment period (**Appendix H**). The comments were submitted by a user of the BRFG and CRL and members of the Friends of the San Bernard River.

### **4.0 Conclusion**

The USACE and TxDOT staff reviewed all public comments and/or questions received in response to the July 12, 2016 Public Scoping Meeting, and those submitted during the public comment period. The public comments received will be incorporated into the project record and will be considered as project development continues.

Appendix A  
PowerPoint Presentation



# GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

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**Public Scoping Meeting  
July 12, 2016**

West Columbia Civic Center  
516 E. Brazos Avenue (State Highway 35)  
West Columbia, TX 77486



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*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*



# Welcome

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Slide 2 of 17

- Please sign in before you leave.
- This presentation includes:
  - A general project overview
  - Description of the Brazos River Floodgates and Colorado River Locks
  - Identified problems, objectives, and constraints
  - General feasibility study process
- Representatives from the Project Development Team are available to answer questions that you may have tonight.



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# Project Overview

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Slide 3 of 17

- The U.S. Army Corps of Engineers (USACE) Galveston District is leading a feasibility study to:
  - Investigate and recommend solutions to improve safety and navigation efficiency on the Gulf Intracoastal Waterway (GIWW) at the Brazos River Floodgates and the Colorado River Locks
  - Identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays
- The non-Federal sponsor for the project is the Texas Department of Transportation (TxDOT).



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# Purpose of Public Scoping Meeting

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Slide 4 of 17

- Inform the public about the proposed project
- Describe the feasibility study and National Environmental Policy Act (NEPA) process
- Seek input on environmental concerns, local conditions and constraints, and alternative ways to meet the project purpose
- Define how you can be involved in the NEPA process
- Information gathered through public scoping will be used in the development of an Environmental Impact Statement (EIS) in compliance with NEPA requirements.



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# Project Location

Slide 5 of 17

## Brazos River Floodgates

Located where the GIWW intersects with the Brazos River southwest of the city of Freeport in Brazoria County, Texas

Located 40 miles northeast of the Colorado River Locks

## Colorado River Locks

Located where the GIWW intersects with the Colorado River at the city of Matagorda in Matagorda County, Texas

Located 40 miles southwest of the Brazos River Floodgates

There are no ports between the Brazos River Floodgates and the Colorado River Locks.



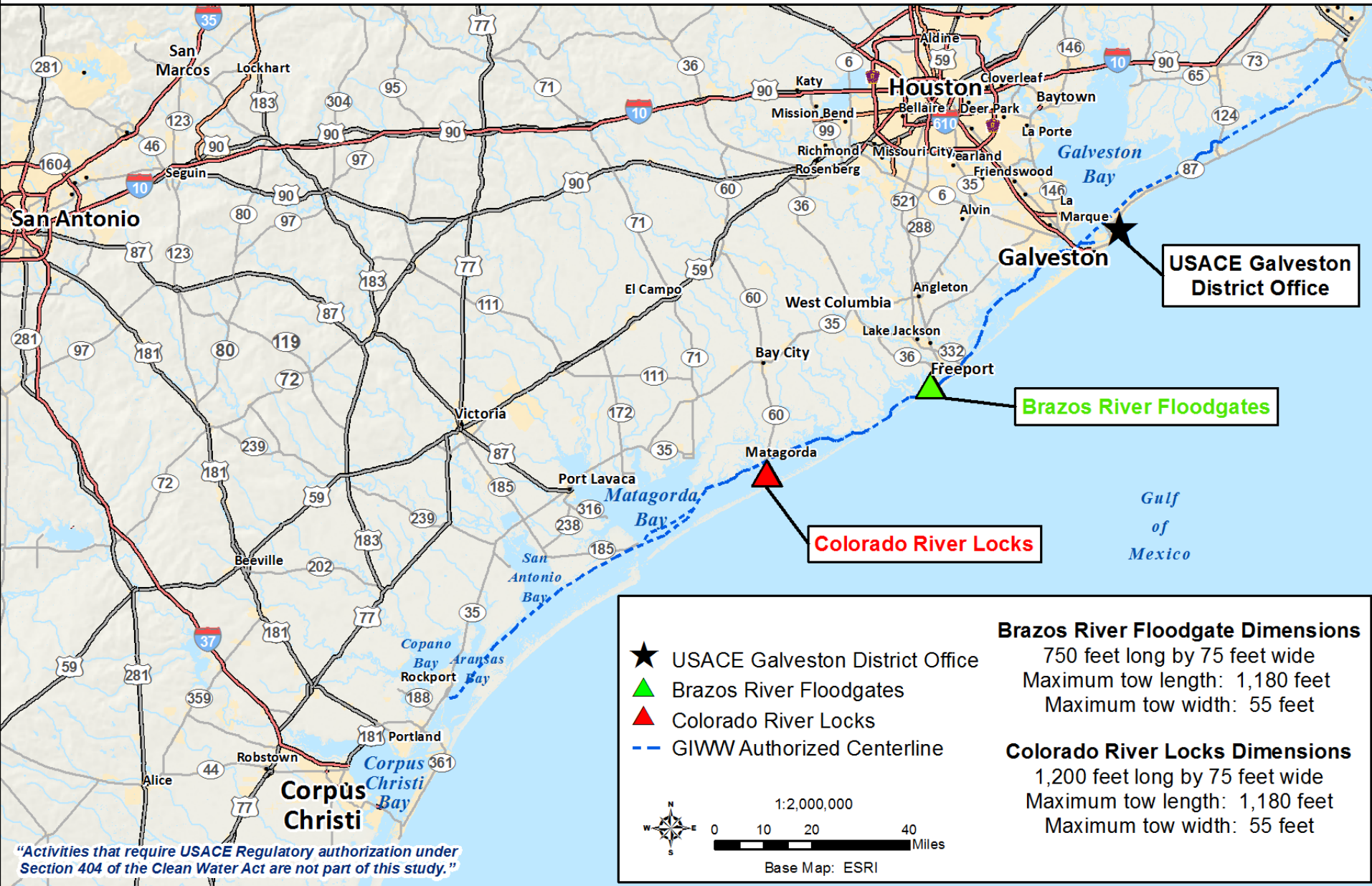
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# PROJECT LOCATION



# Brazos River Floodgates

Slide 7 of 17



- Constructed in September 1943
- Dimensions: 750 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 55 feet
- Prevent excessive tidal action and silting in the GIWW
- Average 38 tows/day transit



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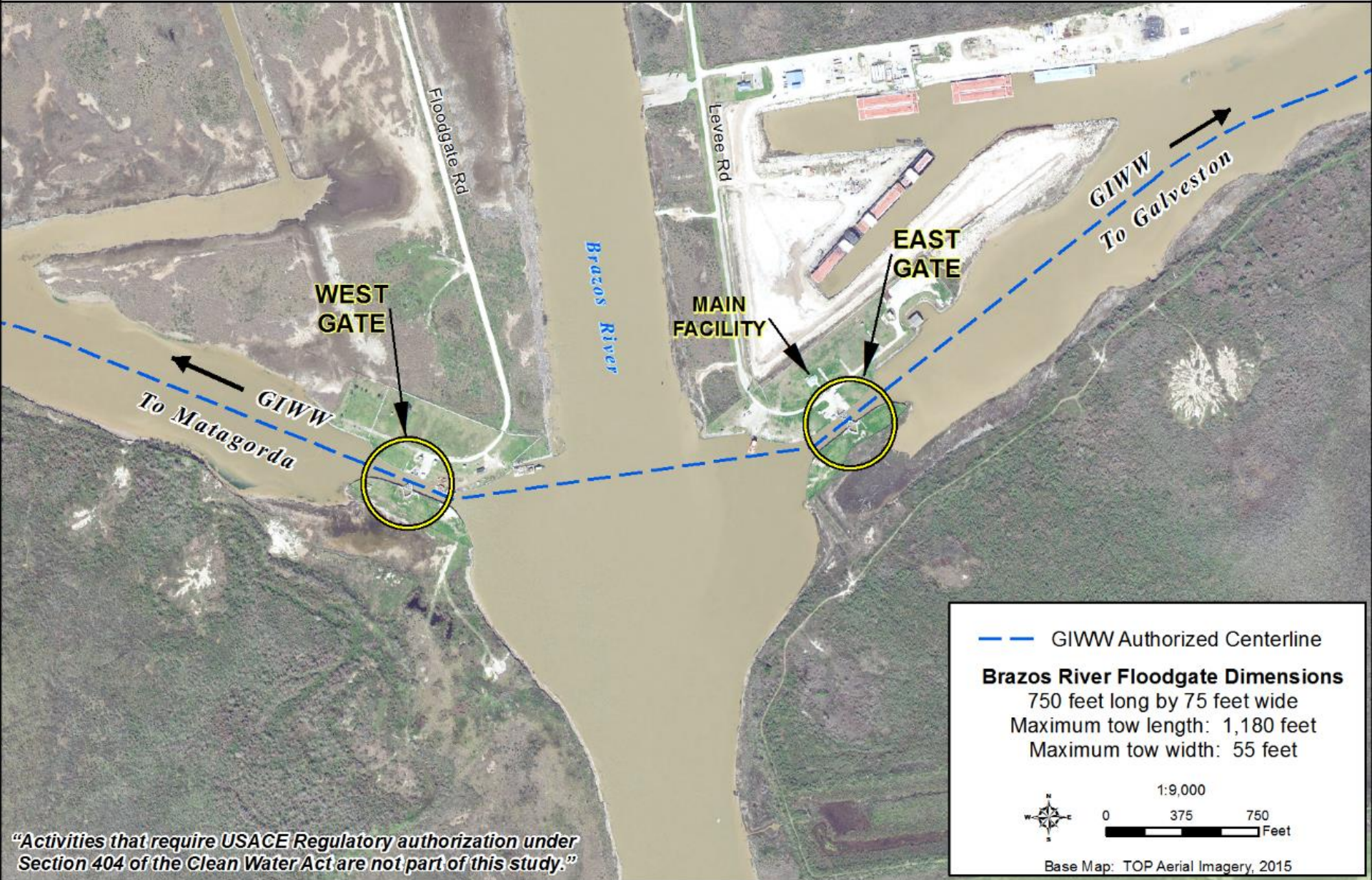
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# BRAZOS RIVER FLOODGATES



— — GIWW Authorized Centerline

**Brazos River Floodgate Dimensions**  
 750 feet long by 75 feet wide  
 Maximum tow length: 1,180 feet  
 Maximum tow width: 55 feet

1:9,000

0 375 750 Feet

Base Map: TOP Aerial Imagery, 2015

*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*



# Colorado River Locks

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- 1<sup>st</sup> Operating Navigation Lock in Texas: May 1951
- Dimensions: 1,200 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 55 feet
- Prevent excessive tidal action and silting in the GIWW
- Average 38 tows/day transit



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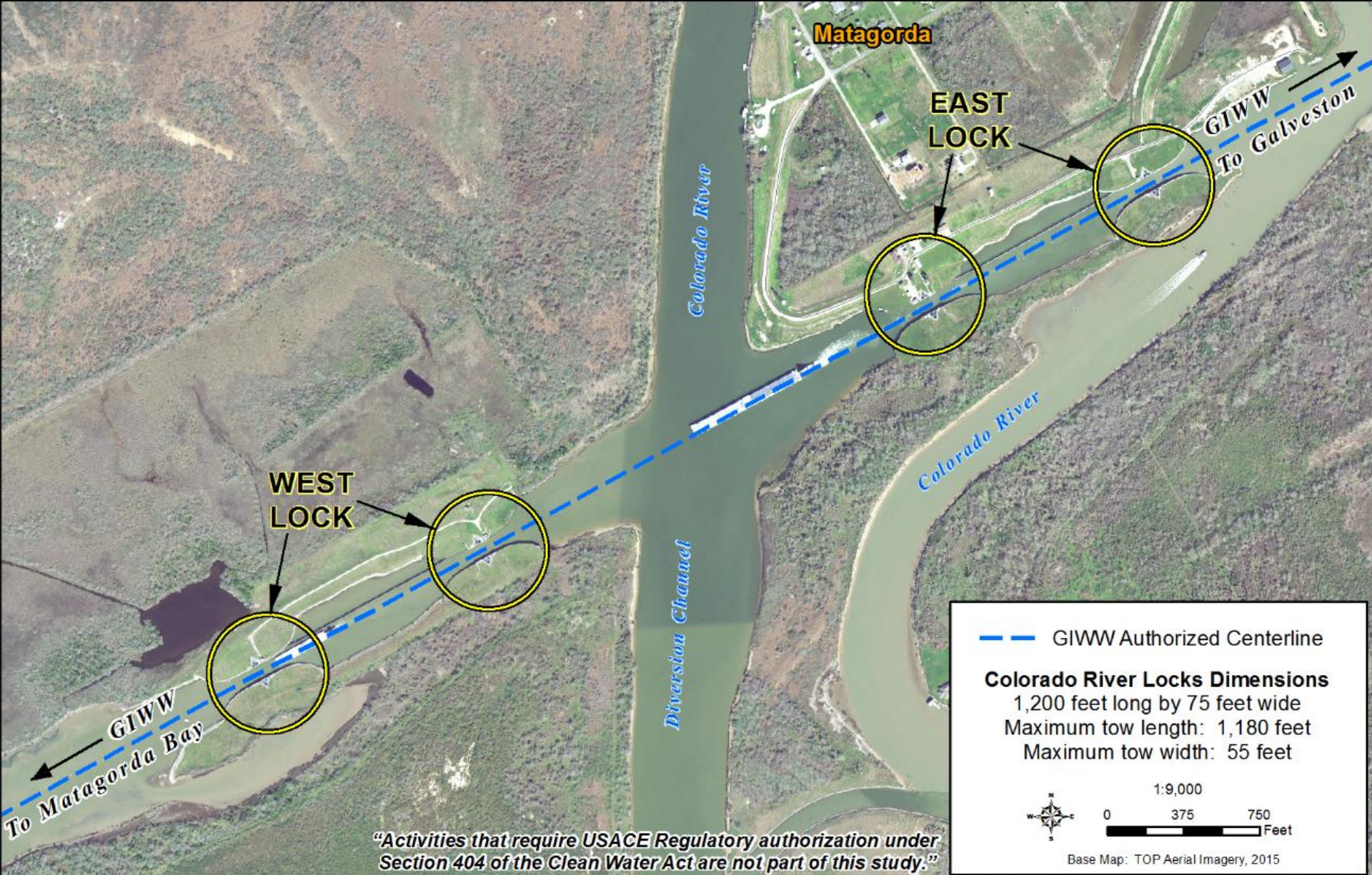
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# COLORADO RIVER LOCKS



— GIWW Authorized Centerline

**Colorado River Locks Dimensions**  
 1,200 feet long by 75 feet wide  
 Maximum tow length: 1,180 feet  
 Maximum tow width: 55 feet

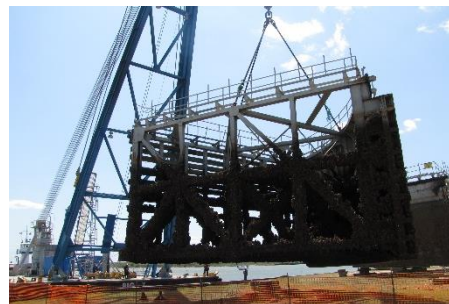


*"Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study."*

Base Map: TOP Aerial Imagery, 2015

# Identified Problems

Slide 11 of 17



- Inadequate channel width/crossings for modern vessels
- Outdated floodgate construction and width in floodgate chambers
- Outdated lock construction at Colorado River leads to mechanical failure, presents security concerns
- High river flows due to flood events impact traffic navigation
- Marine buildup on mechanical equipment leads to increased O&M cost
- Sedimentation increases at mouth of rivers
- Shoreline erosion



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# Study Objectives

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Slide 12 of 17

- Improve/modernize critical infrastructure at the floodgates/locks
- Reduce operational delays of structures that contribute to economic impacts to navigation industry
- Improve navigation in channel/crossings
- Minimize environmental impacts
- Reduce risks to life, health, and safety of shipping crews



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Texas  
Department  
of Transportation

# Key Considerations

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Slide 13 of 17

- Navigation/Transportation
  - Impacts to navigation during construction
  - Nearby roadway bridges
  
- Existing Federal Projects
  - Flood-protection levees
  - Dredged material placement areas
  - Increased silting in navigation channels
  
- Energy and Mineral Resources
  - Bryan Mound Strategic Petroleum Reserve
  - Existing pipelines/wells



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# Key Considerations

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- Environmental
  - Wetlands and other local habitats
  - Floodplains
  - Wildlife refuges/management areas and recreation areas
  - Ongoing ecological recovery in West Matagorda Bay
  - Protected wildlife, marine mammals, fisheries
  - Cultural and historic resources
  - Changes in salinity, bank erosion, sedimentation/shoaling
- Land Requirements
- Other – ***Seeking Public Input***



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# Potential Measures

## Brazos River Floodgates

- Remove floodgates and dredge channel
- Relocate gates further from river
- Widen gates/structure lift
- Create guide wall on river side (lessen angle)
- Straighten crossings
- Construct lock system
- Assess effects of flows from San Bernard River (west of floodgates)
- Raise walls/gates/adjoining levee to match Colorado River Locks

## Colorado River Locks

- Relocate locks further from river
- Widen locks
- Move intersection of bypass channel east
- Build gate at the dam to serve as water control structure
- Modify operation at dam to allow for split flow through old channels to Gulf
- Restore/replace southwest point
- Modify scheduled maintenance
- Create openings/outlets to reduce flow/currents through locks



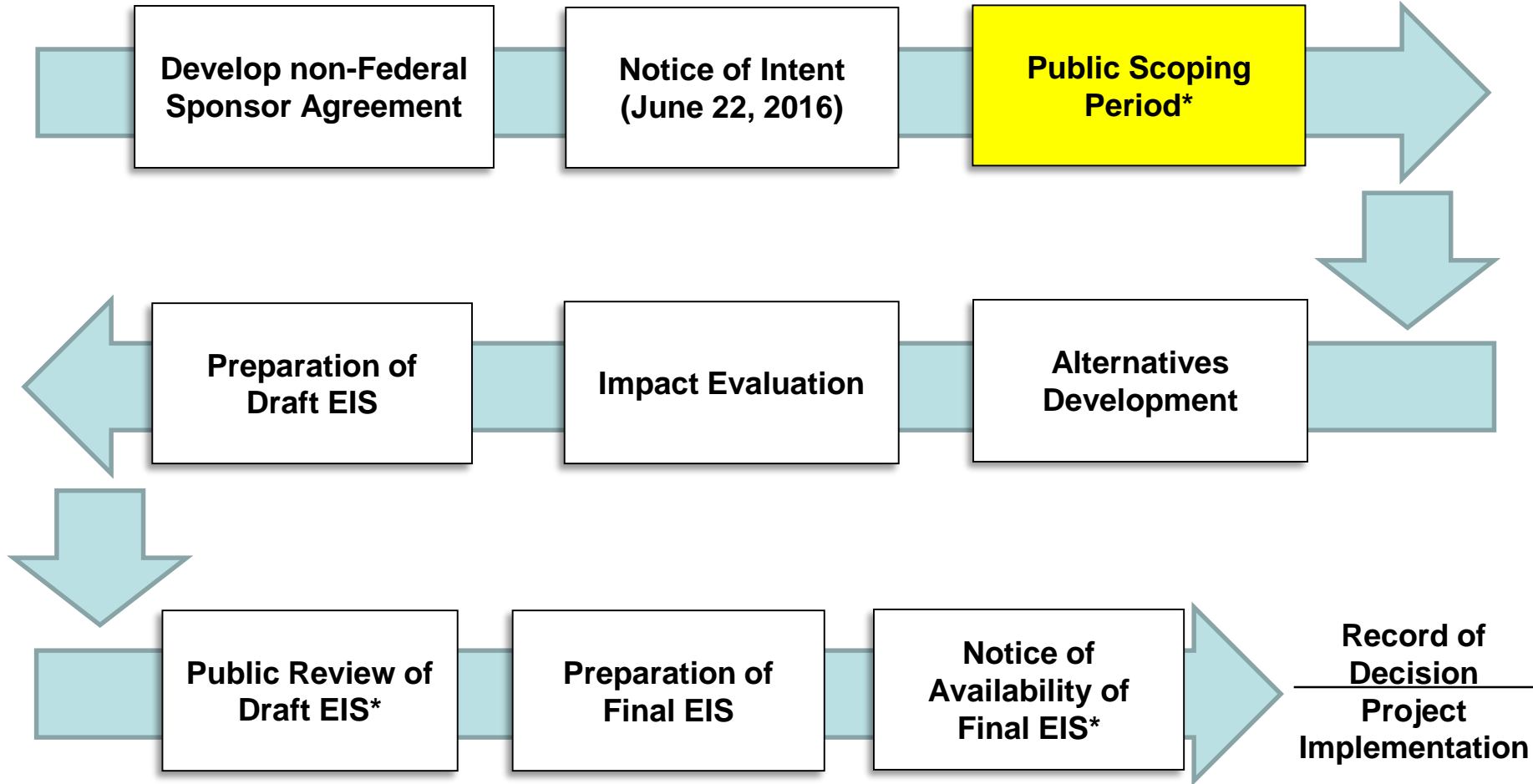
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# Overview of Feasibility Study/NEPA Process

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\* Opportunities for public comment



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# How Can You Participate?

Slide 17 of 17

- Review information on display boards and handouts
- Ask the USACE and TxDOT Representatives questions
- Please provide written comments by August 11, 2016:
  - Place comment cards in the comment box tonight
  - Email comments to: **franchelle.e.craft@usace.army.mil**
  - Mail comments to:

**U.S. Army Corps of Engineers, Galveston District  
Attn: Ms. Franchelle Craft  
2000 Fort Point Road  
Galveston, TX 77550**



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Appendix B  
Meeting Displays

# GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

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**Public Scoping Meeting  
July 12, 2016**

West Columbia Civic Center  
516 E. Brazos Avenue (State Highway 35)  
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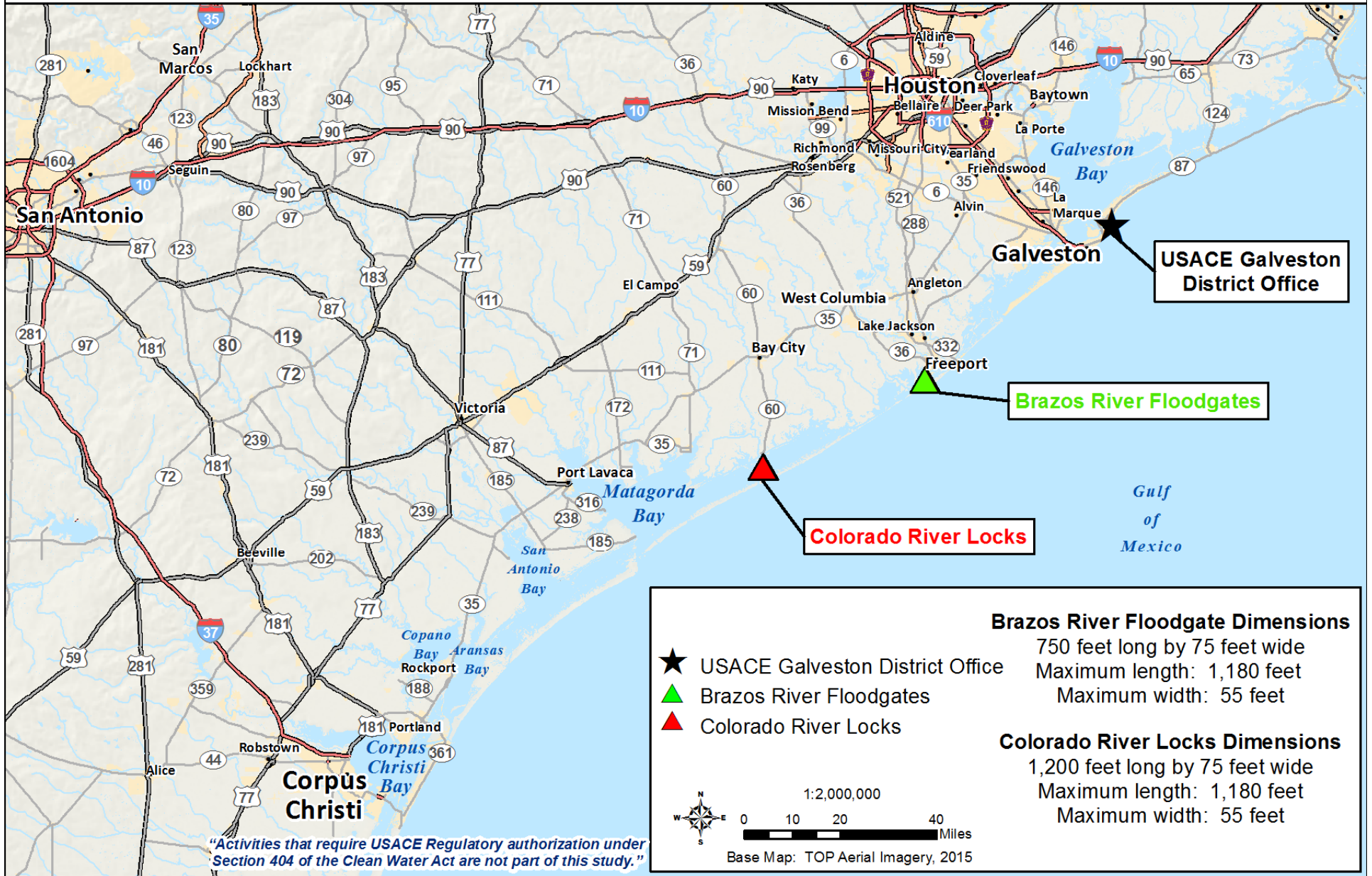
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# PROJECT LOCATION



# Project Overview

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- The U.S. Army Corps of Engineers (USACE) Galveston District is leading a feasibility study to:
  - Investigate and recommend solutions to improve safety and navigation efficiency on the Gulf Intracoastal Waterway (GIWW) at the Brazos River Floodgates and the Colorado River Locks
  - Identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays
- The non-Federal sponsor for the project is the Texas Department of Transportation (TxDOT).



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# Purpose of Public Scoping Meeting

---

- Inform the public about the proposed project
- Describe the feasibility study and National Environmental Policy Act (NEPA) process
- Seek input on environmental concerns, local conditions and constraints, and alternative ways to meet the project purpose
- Define how you can be involved in the NEPA process
- Information gathered through public scoping will be used in the development of an Environmental Impact Statement (EIS) in compliance with NEPA requirements.



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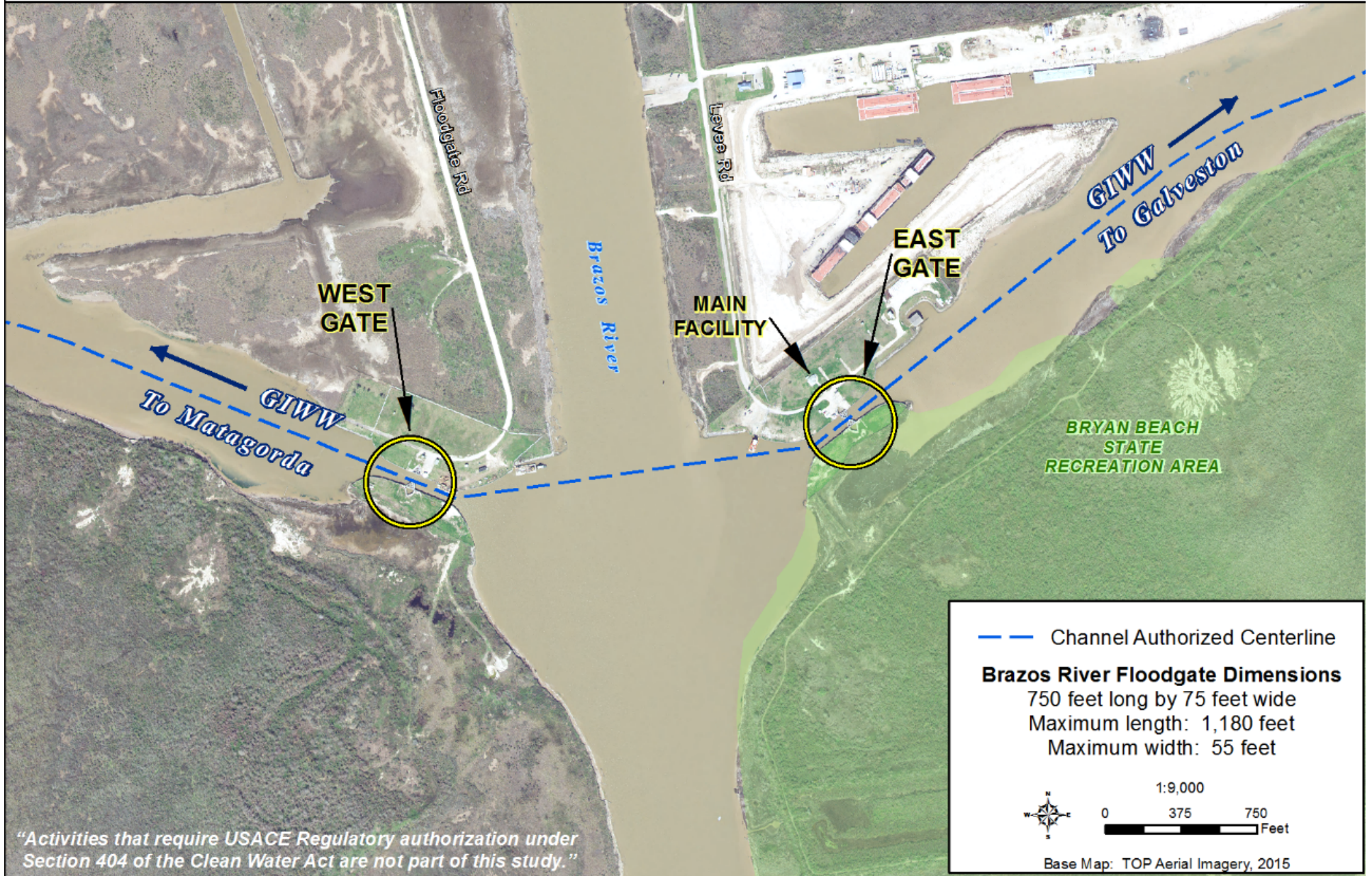
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# BRAZOS RIVER FLOODGATES



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# Brazos River Floodgates

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- Constructed in September 1943
- Dimensions: 750 feet long by 75 feet wide
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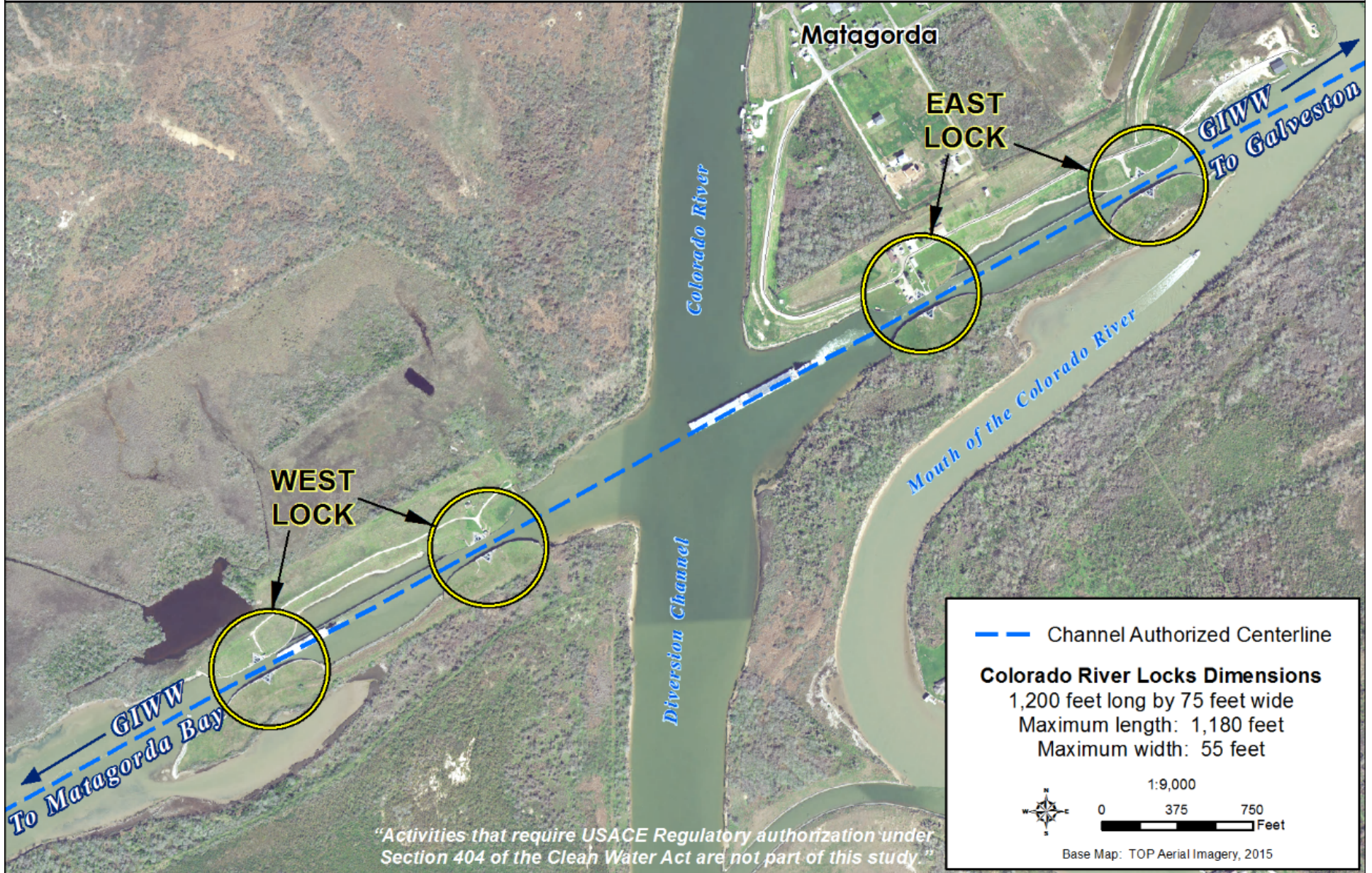






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# COLORADO RIVER LOCKS



"Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study."

— Channel Authorized Centerline

**Colorado River Locks Dimensions**  
 1,200 feet long by 75 feet wide  
 Maximum length: 1,180 feet  
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1:9,000

0 375 750 Feet

Base Map: TOP Aerial Imagery, 2015

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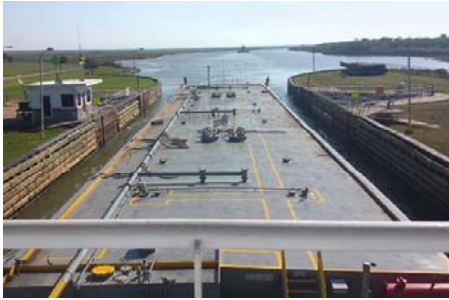


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# Identified Problems



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# Study Objectives

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# Key Considerations

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  - Nearby roadway bridges
  
- Existing Federal Projects
  - Flood-protection levees
  - Dredged material placement areas
  - Increased silting in navigation channels
  
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  - Ongoing ecological recovery in West Matagorda Bay
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- Land Requirements
- Other – ***Seeking Public Input***



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# Potential Measures

## Brazos River Floodgates

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- Raise walls/gates/adjoining levee to match Colorado River Locks

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- Build gate at the dam to serve as water control structure
- Modify operation at dam to allow for split flow through old channels to Gulf
- Restore/replace southwest point
- Modify scheduled maintenance
- Create openings/outlets to reduce flow/currents through locks

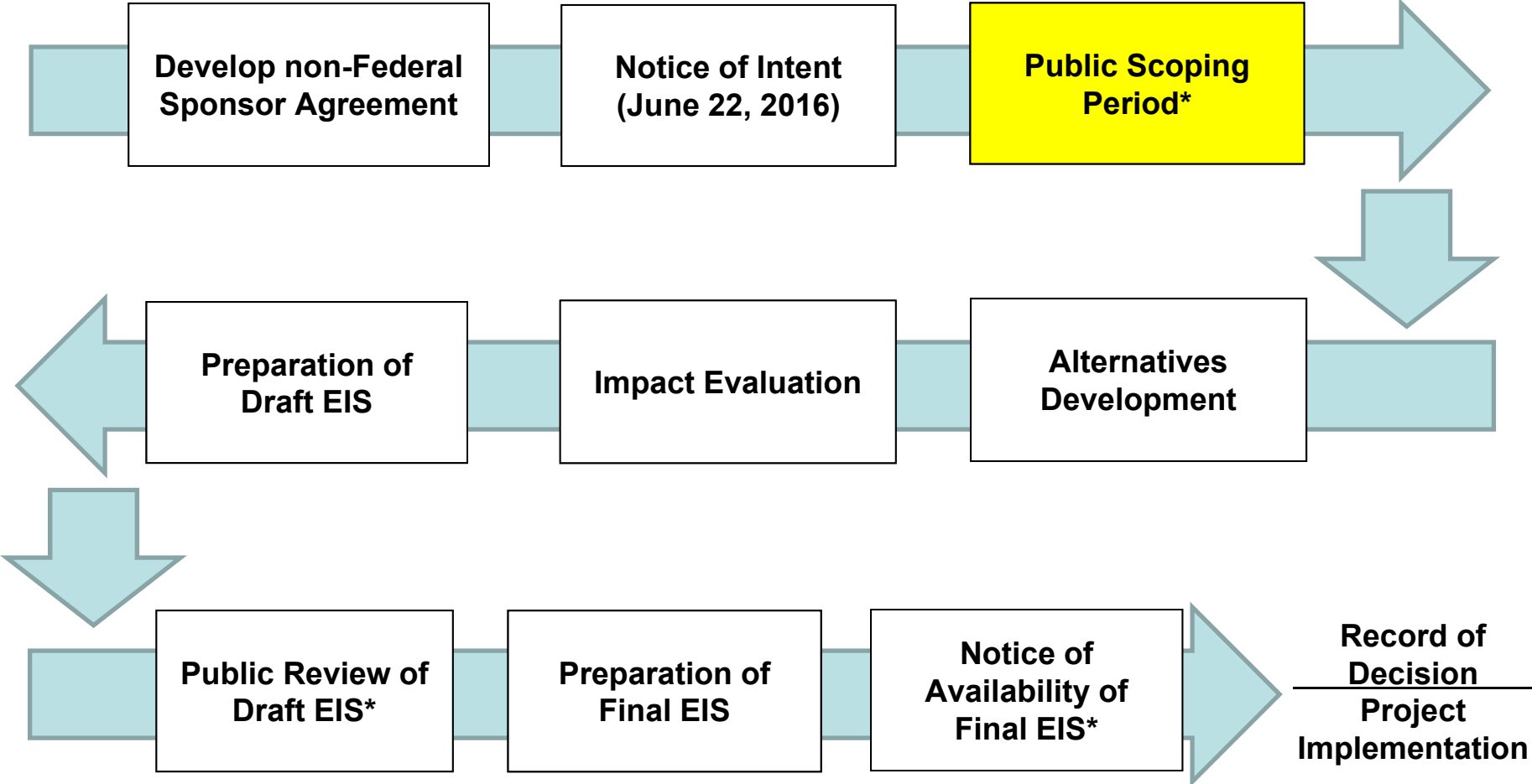


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*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*



# Overview of Feasibility Study/NEPA Process



\* Opportunities for public comment



*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*





# How Can You Participate?

- Review information on display boards and handouts
- Ask the USACE and TxDOT Representatives questions
- Please provide written comments by August 11, 2016:
  - Place comment cards in the comment box tonight
  - Email comments to: [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil)
  - Mail comments to:

**U.S. Army Corps of Engineers, Galveston District  
Attn: Ms. Franchelle Craft  
2000 Fort Point Road  
Galveston, TX 77550**



*"Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study."*



Appendix C  
Sign-In Sheets



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# GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

**National Environmental Policy Act  
Public Scoping Meeting | July 12, 2016**



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Mike Fewell	1254 Enclave Parkway Houston, TX 77077	281-966-2010	fewellmd@dow.com	Dow Chemical
Steve Schropp	18 Champion Cir Wimberley, TX 78676	512-842-3052	sschropp@ taylorengineering.com	Taylor Engineering
Chris Salliese	2506 Siskin Trl League City, TX 77573	713-527-6324	Chris.Salliese@ Dannenbaum.com	Dannenbaum ENGR
MIKE French	P.O. Box 102 West Columbia TX 77486	979-418-1774	mikefrench1@embaymail.com	Property OWNER
Darrell & GLORIA Powell	5431 HAWK RD BRAZORIA TX 77422	979 417 6120	BDPowen@BRAZORIANETICOM	" BRAZORIA County COMM. PET. I
DUDE PAYNE	P.O. Box 998 Clute, Tx. 77531	979-265-3953	dudep@brazoria-county.com	BRAZORIA County COMM. PET. I
Alma Marches	P.O. Box 3416 Lake Jackson TX 77566	713-299-4411		Property Owner
Bill Balboa	2200 7th Street 4th floor Baycity TX 77414	979-245-4100	bill.balboa@ag.tamu.edu	Sea Grant

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**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

**ROUTINE USES:** None. The "Blanket Routine Uses" set forth at the beginning of the Army's Compilations of Systems of Records Notices apply to this system.

**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments.

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## GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

National Environmental Policy Act  
Public Scoping Meeting | July 12, 2016



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
EDDY CARTER	8282 Goodwood AVE RLA		ecarter@gecinc.com	GEC
James Hard	18350 Market St. Chandler TX		james.hard@kirbycorp.com	B-water
Shane Pirtle	1100 Cherry St.		spirtle@port-freeport.com	Port Freeport
JASON HUE	1100 CHERRY ST.		HUE@PORTFREEPORT.COM	PORT FREEPORT
Coraggio Mar	2000 Ft Point RD Galveston		coraggio.maj@usace.army.mil	
BERT SMITH	5071 CR 631, BRAZORIA, TX 77422		agsdev@earthlink.net	Port of Bay City
MIKE GRIFFITH	2245 AVE G BAY CITY TX 77412		mike@franksonandgriffith.com	
BOB BAILEY	331 LAZY CREEK RANCH ST BRAZORIA TX		bob.bailey@gnm.com	FOR
Valmy Meadlin	112 Live Oak Ln Lake Jackson		vmeadlin@outlook.com	FOR

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**GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study**

**National Environmental Policy Act  
Public Scoping Meeting | July 12, 2016**



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Matthew Hyner	9650 High Level Rd		mhyner@se-menschulich.org	Seemen's church
Roy & Jan Edwards	BRAZORIA 162 FISHERMAN'S ISLE	979 964 4332	JR EDWARDS @ BRAZORIANET.COM	SHAREHOLDER
Shelton Perry	3001 Twelve Oaks, BR, LA	285-937-9095	sperry@gecinc.com	Consultant
Scott Kraus	8282 Goodwood Blvd B.R. LA	225-612-3000	RSKraus@GECINC.COM	consultant
JW HOLT	18350 MARKET ST. CHANNEVIEW TX	281 627 6549	JW.HOLT@KIRBYCORP.COM	KIRBY
JIM STARK	PO Box 321649 Cocoa Beach FL 32932	901-490-3312	jstark@gicaonline.com	GICA
Pam Marshall	W.C. TITUS 7738 Old Damon Rd			
David Linder		979-549-8785	DavidL@Brazoria-county.com	County Commissioner Pete

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**GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study**

**National Environmental Policy Act  
Public Scoping Meeting | July 12, 2016**



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Adah Maudlin	112 Live Oak Ln. Lake Jackson, TX	979 297-9957		FOR
Tom Rowayne	7569 CR 6840 SWEENEY, TX 77480	979 345-2111	TKR@USBR@AHCO.com	F.O.R SAN BERNARD
ANGELA Rowayne	" "	" "		" "
Fred Kanter	2916 CR 519 Brazoria	979 482-6429	Fred.kanter@ahco.com	FOR
Dobbs Sutherland	P.O. B. 487 West Columbia 77486	979-345 3123	citymanager@westcolumbiatx.org	City
Claudia & Melvin Techaed	5304 CR 469 Brazoria 77422	281- 615-4798		Home owner
Head of Perry Randolph	5330 CR 469 Brazoria, Tx	713/253-5330		Co
VINCE ROSSITTO	19300 W. HARDY RD	281-684-3620	Vince@kingfab.com	

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# GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

**National Environmental Policy Act  
Public Scoping Meeting | July 12, 2016**

Page 5 of 5



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Patrick Whittenburg	706 S. Gray Ave. West Columbia, TX 77486	979-477-7431	whittenburgp@yahoo.com	
Linda Wight	FRIENDS OF THE RIVER 138 VIVIAN ST. - BRAYORIA	798-6629		
Rod McCrary	5444 Westheimer Houston, TX.	213-267-2735	rod.mccrary@aecom.com	AECOM
Candy Graham	3246 CR 417 Braz., TX 77486		candygraham46@gmail.com	
Gary Graham	3246 CR 417 Braz. CR 417		glgshrimp@embargmail.com	
Erinn Callahan	720 S. Main St. Cute TX 77531			
Woody Woodrow	17629 El Camin Real #24 Houston TX 77058	281 286 8282 x235	Woody-Woodrow@fws.gov	USFWS

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Appendix D  
Notice of Intent



## D. Communications

The Defense Health Agency will post the TRICARE Prime access to care standards on the TRICARE.mil Web site and execute a strategic communication plan to educate beneficiaries enrolled in TRICARE Prime about the access to care standards.

Dated: June 17, 2016.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

[FR Doc. 2016-14786 Filed 6-21-16; 8:45 am]

**BILLING CODE 5001-06-P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Public Notice of Intent for Studies and Initial Scoping Meeting for Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks Feasibility Study

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

**ACTION:** Notice of intent and public scoping meeting.

**SUMMARY:** This notice provides a summary of the ongoing feasibility study activities for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) Feasibility Study and solicit public input regarding the study. The objective of the feasibility study is to investigate and recommend solutions to improve traffic safety and navigation efficiencies at the confluence of the GIWW with the BRFG and CRL. The GIWW BRFG/CRL Feasibility Study will identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays. The non-Federal sponsor for the project is the Texas Department of Transportation (TXDOT).

**DATES:** The Galveston District will hold the Initial Public Scoping Meeting for the Feasibility Phase of the study on July 12, 2016 from 6:00–8:00 p.m.

**ADDRESSES:** The meeting will be held at the West Columbia Civic Center, 516 E. Brazos Ave. (State Highway 35), West Columbia, TX 77486.

**FOR FURTHER INFORMATION CONTACT:** Franchelle Craft, (409) 766-3187.

#### SUPPLEMENTARY INFORMATION:

*Study Background.* In 2000, the Galveston District completed a reconnaissance study to assess the feasibility of modifying the configurations of the BRFG and CRL to reduce traffic accidents and delays. The

study resulted in the determination that there was Federal interest in continuing to the feasibility phase of the study. Funding for the feasibility phase of the study was approved in Fiscal Year 2016. Recognizing the hydrologic connectivity of the GIWW system, the decision was made to conduct the assessment of the BRFG and CRL separately and combine the results into one integrated feasibility report.

Navigation along the GIWW is constrained at the confluence with the BRFG and the CRL resulting in the following conditions:

- Inadequate channel and crossing widths for modern vessels;
- Outdated floodgate construction and width in the floodgate chambers at the Brazos River;
- Outdated lock construction at the Colorado River leading to mechanical failure;
- Shutdown of operations during high water periods presenting a significant security concern;
- Increased hydrology (river flows due to flood events) impacting navigation traffic;
- Increased operations and maintenance costs to prevent marine buildup on mechanical elements of the structures;
- Increased sedimentation at the mouth of the rivers;
- Shoreline erosion.

The Feasibility Study will assess the conditions identified above and develop specific measures/alternatives that can be combined or used as standalone actions to address the problems at each location.

*Study Process.* During the feasibility phase, detailed engineering, hydrology, economic analysis, and environmental studies are performed. The goal of the feasibility phase is to find the most cost-effective solution that responds to the problems identified above while protecting the Nation's environment. The final feasibility report documents the study results and findings, the selection process of the recommended alternative, and the costs and benefits of the recommended plan. The feasibility study ends when the report is submitted to Congress for authorization.

*Study Status.* The Feasibility study will reevaluate the proposed alternatives identified in the 2000 Reconnaissance Study to determine the feasibility of undertaking modifications to the Brazos and Colorado river crossings, as well as identify changes to the floodgate and lock structures at each location that are economically and environmentally justified. There is a need to reduce navigation impacts and costly waterborne traffic delays that are

a result of aging infrastructure and inadequate channel dimensions for modern vessels. Alternatives to be evaluated in the feasibility phase include:

- Moving the gates away from the river;
- Widening the gates;
- Reconfiguring the guide wall to lessen the angle to the GIWW;
- Straightening the crossing at the Brazos and Colorado Rivers;
- Lock modifications (construction of new locks);
- Removal of floodgates; and/or;
- Some combination of these and other measures.

*Meeting.* The Galveston District will hold the Initial Public Scoping Meeting for the Feasibility Phase on July 12, 2016 from 6:00–8:00 p.m. at the West Columbia Civic Center. The purpose of the meeting will be to inform the community about the proposed navigation modification project, present how the study will be conducted, solicit public input regarding the initial scope of potential issues/alternatives to be addressed, and identify those issues/alternatives that should be analyzed further, or eliminated, based on their significance and effects on the environment. The information from the public meeting will be used in the development of an Environmental Impact Statement in compliance with the National Environmental Policy Act (NEPA) requirements. This notice serves as an invitation for the public to attend. The public will be provided an opportunity for questions and comments.

We are soliciting comments/concerns on the opportunities to improve navigation along the GIWW at the Brazos and Colorado Rivers, the identification of resources that may occur within the study area, and other social, economic, and environmental concerns.

All interested parties are invited to provide input to this study. Please send your comments or questions regarding this notice or mailing list updates to USACE SWG, 2000 Ft. Point Rd., Galveston, TX 77550. Written input can also be submitted and is requested by August 11, 2016. If we can provide further information, contact the project manager, Ms. Franchelle Craft, by phone at (409) 766-3187 or by email at [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil).

**Eric W. Verwers,**

*Director, Regional Planning and Environmental Center.*

[FR Doc. 2016-14694 Filed 6-21-16; 8:45 am]

**BILLING CODE 3720-58-P**

## Appendix E

### Media Releases, News Articles, and Social Media Posts

# USACE Galveston District to host GIWW, Brazos River Floodgates and Colorado River Locks Feasibility Study public scoping meeting

U.S. Army Corps of Engineers, Galveston District

Story by [Sandra Arnold](#)

**Date:** 06.29.2016

**Posted:** 06.29.2016 16:06

**News ID:** 202773

GALVESTON, Texas (June 29, 2016) – The U.S. Army Corps of Engineers Galveston District will host an initial public scoping meeting July 12, 2016, from 6–8 p.m. at the West Columbia Civic Center, 516 E. Brazos Avenue (State Highway 35), West Columbia, Texas 77486, to inform the public about the ongoing feasibility study activities for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) and solicit public input regarding the study.

“The Feasibility Study will assess current identified conditions and develop specific measures and alternatives that can be combined or used as standalone actions to address the challenges at each location,” said Project Manager Franchelle Craft, USACE Galveston District. “We will conduct the assessment of the floodgates and locks separately and combine the results into one integrated feasibility report.”

According to Craft, the goal of the feasibility phase is to find the most cost-effective solution that responds to the issues while balancing the need to protect the environment. Staff will gather public feedback about significant issues and impacts that need to be addressed regarding navigation along the GIWW, which continues to be constrained at the confluence with the floodgates and locks.

“Public involvement is an essential part of our processes and we encourage any dialogue that discusses concerns or issues surrounding the study,” said Craft. “We also work closely with various federal, state, local agencies and interested organizations to incorporate their opinions when assessing proposed actions.”

The feasibility study will reevaluate the proposed alternatives identified in the 2000 Reconnaissance Study to determine the feasibility of undertaking modifications to the Brazos and Colorado river crossings, as well as identify changes to the floodgate and lock structures at each location that are economically and environmentally justified. Information gained from the public scoping meeting will be used in the development of an Environmental Impact Statement in compliance with the National Environmental Policy Act requirements.

“We will continue to gather comments and concerns for weeks following the public scoping meeting to gain insight about opportunities to improve navigation along the GIWW at the Brazos and Colorado rivers, pinpoint resources within the study area as well as identify social, economic and environmental concerns,” said Craft.

Written comments may be submitted to Franchelle Craft, USACE Galveston District, 2000 Fort Point Road, Galveston, TX 77550. Comments can also be sent electronically via email to [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil) or directed to (409) 766–3187. All comments must be received or postmarked by Aug. 11, 2016.

For news and information, visit [www.swg.usace.army.mil](http://www.swg.usace.army.mil). Find us on Facebook, [www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict) or follow us on Twitter, [www.twitter.com/USACEgalveston](http://www.twitter.com/USACEgalveston).



# NEWS RELEASE

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

For Immediate Release:  
June 30, 2016

Media Contact:  
Sandra Arnold, APR+M or Breeana Moore  
(409) 766-3004  
[swgpao@usace.army.mil](mailto:swgpao@usace.army.mil)  
Release No. 160608

## USACE Galveston District to host GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study public scoping meeting

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For news and information, visit [www.swg.usace.army.mil](http://www.swg.usace.army.mil). Find us on Facebook, [www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict) or follow us on Twitter, [www.twitter.com/USACEgalveston](http://www.twitter.com/USACEgalveston).

###USACE###

**TAGS: USACE Galveston District, GIWW, Colorado River Locks, Brazos River Floodgates, public scoping meeting**

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**U.S. ARMY CORPS OF ENGINEERS – GALVESTON DISTRICT**

2000 Fort Point Road, Galveston, Texas, 77550

Web: [www.swg.usace.army.mil](http://www.swg.usace.army.mil) • DVIDS: [www.dvidshub.net/units/USACE-GD](http://www.dvidshub.net/units/USACE-GD)

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DEFENSE VIDEO IMAGERY DISTRIBUTION SYSTEM



# USACE Galveston District to host GIWW, Brazos River Floodgates and Colorado River Locks Feasibility Study public scoping meeting



GALVESTON, TX, UNITED STATES

06.29.2016

Story by **Sandra Arnold**

**U.S. Army Corps of Engineers, Galveston**

**District**



## MORE LIKE THIS



GALVESTON, Texas (June 29, 2016) – The U.S. Army Corps of Engineers Galveston District will host an initial public scoping meeting July 12, 2016, from 6–8 p.m. at the West Columbia Civic Center, 516 E. Brazos Avenue (State Highway 35), West Columbia, Texas 77486, to inform the public about the ongoing feasibility study activities for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) and solicit public input regarding the study.

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“Public involvement is an essential part of our processes and we encourage any dialogue that discusses concerns or issues surrounding

## TAGS

USACE Galveston District public scoping meeting Brazos River Floodgates

Colorado River Locks GIWW

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For news and information, visit [www.swg.usace.army.mil](http://www.swg.usace.army.mil). Find us on Facebook, [www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict) or follow us on Twitter, [www.twitter.com/USACEgalveston](http://www.twitter.com/USACEgalveston).

## LEAVE A COMMENT

## NEWS INFO

Date Taken:	06.29.2016
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Location:	GALVESTON, TX, US <input type="checkbox"/>
Web Views:	212
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## U.S. Army Corps of Engineers, Headquarters

July 3 at 11:01am ·

Galveston District, U.S. Army Corps of Engineers to host GIWW, Brazos River Floodgates and Colorado River Locks Feasibility Study public scoping meeting: <http://ow.ly/9Wka301NNV7>



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Write a comment...



**James Jones** Something needs to be done about the floating mooring bouy situation at both locks!!!!

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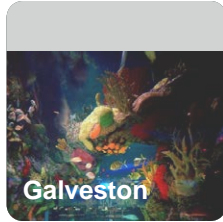




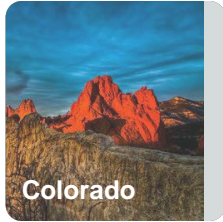
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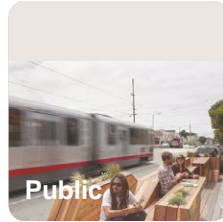
Colorado River



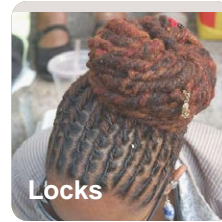
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Colorado



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Locks



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District to host  
GIWW, Brazos  
River Floodgates  
and Colorado River**

DVIDS - News - USACE Galveston District to host GIWW, Brazos River Floodgates and Colorado River Locks Feasibility Study public scoping meeting [More](#)



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## Council overrides mayor's MBG veto

### Cornman tells Bricker: 'Train has left the station'

By Mike Reddell  
 reddell.mike@gmail.com

City council overrode Mayor Mark Bricker's surprise Sunday night veto of council's resolution to approve Bay City Community Development Corporation's (BCCDC) \$7.5 million loan from TDECU to construct the Schulman Movie Bowl Grille before a standing-room only crowd at City Hall Tuesday night.

"The train has left the station," city councilman Bill Cornman told Bricker to applause at the special meeting, sweeping aside the mayor's veto explanation.

"I think we already have damaged the project, and the next phase and the next phase," Cornman continued.

"Investors look at this and this is not good news for them," the councilman said to Bricker, noting the mayor's veto decision was a "mystery."

Bricker has defended his veto of council's approval of the loan resolution last



Bay City Sentinel/Jessica Shepard  
 City councilman Bill Cornman tells mayor that his veto already has done damage.

Thursday, June 30, by asserting he hasn't received information he requested from BCCDC to make an informed decision.

"There are questions I still had - I wasn't against the project," the mayor and he began the Tuesday night session by reading aloud a summary of his opinions on why the Movie Bowl Grille project

shouldn't proceed. "At this point I don't have the information," Bricker said.

His contention centered on the project's lease agreement, the economic impact analysis and whether the entertainment center was sustainable.

"The documents have already been signed," Mayor Pro Tem Chrystal Folse told Bricker after he read his letter.

"I'm just mentioning my concerns," the mayor replied.

"All of these questions are just questions, but it really, really would have helped to have them six months ago," Cornman told Bricker.

"The time for a challenge was six months ago."

Cornman acknowledged there was risk involved, if the Schulman MBG failed at its location off McCrosky Road and Texas 35 between Bay City and Van Vleck.

"That's a possibility, but a very low possibility," the councilman said.



Bay City Sentinel/Jessica Shepard  
 Bobby Head and Jerry Evans applaud council's decision Tuesday night to override mayor's veto of funding for entertainment center.

"You think there's a higher possibility" of the theater complex failing, Cornman said to Bricker.

"It's far from a sure thing that's going to happen," the councilman added.

"We're already obliged to proceed," Cornman said.

"We're going to get a \$400,000 bill tomorrow for the construction that's already been done."

"If we quit now, we'll be three to four million dollars in the hole without anything to show for it."

See Override, Page 2

## BC man sought for shooting

From Staff Reports

A 20-year-old Bay City man is wanted for shooting and wounding another Bay City man in the head at the Bay Breeze Apartments June 24, Bay City police said.

Tylan Tre Quan Knowles is under three felony warrants issued for aggravated assault with a deadly weapon, tampering with physical evidence, and unlawful possession of a firearm, reports show.

Police received a "shots fired" call at 1:21 p.m. Friday, June 24, at the apartments at the 800 Block of Avenue F.

When they arrived, officers found the 30-year-old victim with a head wound.

Matagorda County EMS took the victim to Matagorda Regional Medical Center where he was later flown by helicopter to a Houston hospital.

The victim was treated and released from the hospital.

Detective Chris Cunningham is the lead investigator on the case.

Anyone who has information about this case or information on the whereabouts of the suspect is encouraged to call Bay City Police Department at 245-8500 or call Crime Stoppers at 1-800-299-2878. The suspect is a black-male about 5'11" in height and weighs an estimated 155 pounds, reports indicate.

Knowles should be considered armed and dangerous, police said.

Crime Stoppers tipsters are eligible for a cash reward leading to the arrest or Grand Jury indictment of the suspect.



Bay City Sentinel/Mike Reddell

The Eggmen brought back memories of the Fab Four at the city's Independence Day celebration, Sparks in the Park, Monday in LeTulle Park. The event's featured music group played a wide range of Beatles hits that were well received by Baby Boomers and youngsters alike. Below, Wendy Webster of Van Vleck holds Baby Girl, a pitbull puppy that won the patriotic dog decorating contest.

## 'Sparks in Park' draws 2,000 to July 4th event

By Jessica Shepard  
 bcsentinelnews@gmail.com

LeTulle Park saw over 2,000 people for Bay City's annual "Sparks in the Park" event.

"Anywhere from 2,000 to 3,000 people came," said Kelly Penewitt, parks and recreation supervisor.

Council member Julie Estlinbaum delivered the welcome remarks to the crowd that set up to hear the Eggmen and to await the fireworks show.

Councilman Bill Cornman commented on how well the event ran, noting the parks department has the recipient of criticism before.

This year was well done, he noted at a council meeting Tuesday night.

"Turnout was about the same as last year."

The largest attraction was definitely the fireworks, she said.

"There were over 2,000 aerial fireworks in the show," added Penewitt.

The event also featured many children's activities as well as live music.

"We want to showcase a variety of music at this event," she said.

"The Eggmen put on a great show."

"The Eggmen" are an Austin-based Beatles tribute band.

Penewitt is already on the hunt for next year's musical guest.

"We look forward to seeing everyone out next year," she said.

"Like our Facebook to keep updated on our upcoming events and programs!"

## Fireworks explosion imperils teenager

By Mike Reddell  
 reddell.mike@gmail.com

A Matagorda County teenager lost part of a leg and his eyes are threatened from metal fragments from a homemade explosive reportedly made of sparklers behind his aunt's Sargent residence Saturday night, according to news reports and local officials.

Rowdy Radford is in intensive care at Children's Memorial Hermann Hospital in Houston, where he was flown shortly after the accident, said Constable Tom Ward.

The 15-year-old who recently graduated from eighth grade at Matagorda Junior High School was facing possible new surgery Tuesday, according to a GoFundMe website page created to help the boy's family defray medical expenses.

The teenager is on a breathing machine and possibly will have more surgery on both legs - including the one that was partially removed - and both arms, the website indicated.

Doctors were able to fix and reattach fingers, but it's unknown whether that procedure will work - if not, they will be removed.

The website said there was a 50/50 chance of preserving his vision, said local officials who were familiar with the situation, but not authorized to speak on the record.

His hands, face and chest were also badly burned.

A friend also was injured by the blast, reports show.

Media details about the blast are conflicting, but the Sargent constable said officials will never know how many sparklers were taped together - the varied accounts ranged from 60 to 260 - while the explosion itself left a two-foot-wide hole. Ward said some reports had the explosion's hole four feet deep.

Matagorda County EMS took the injured boy to the Sargent VFW, where a helicopter flew him to the Houston hospital, Ward said.

"Rowdy has always been known for making his booms and he makes his booms by scaring everybody," said his aunt Samantha Hansen.

"They do it every year," said his mom Wendy Hendrickson said in an interview Monday with KHOU 11 News.

"But we didn't know this was going to be a big one," she added.

See Teenager, Page 2



### 5-day forecast

<b>Thursday</b>		<b>Hi 93</b>
July 7		<b>Low 79</b>
<b>Friday</b>		<b>Hi 95</b>
July 8		<b>Low 79</b>
<b>Saturday</b>		<b>Hi 95</b>
July 9		<b>Low 79</b>
<b>Sunday</b>		<b>Hi 95</b>
July 10		<b>Low 80</b>
<b>Monday</b>		<b>Hi 94</b>
July 11		<b>Low 79</b>

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## Sargent's Freedom Fest

Bay City Sentinel/Mike Reddell

Sargent Lions Club's Freedom Fest Saturday had fair weather and a good attendance - in contrast to when it was scheduled earlier this year and became the victim of inclement weather. At left, aspiring young golfer Teddy Fuller is guided by his father Neill Fuller at the event miniature golf course. Fuller, his wife Felicia and Teddy are from Austin. Below, people look over the wares of different vendors.



# Persistence pays off for Sargent teenager in 90-minute challenge

Drivers on beach road stop to see what Ford is after

By Mike Reddell  
reddell.mike@gmail.com

Persistence paid off for a young fisherman who pulled in a nearly four-foot-long stingray off Sargent Beach after a 90-minute battle with a rod and reel recently.

People all over the beach watched as 14-year-old Logan Ford of Sargent patiently worked the stingray to shore.

"Everybody quit and started watching him," said Sargent area Constable Tom Ward.

"I even stopped what I was doing and stayed with him and to see what he would reel in," Ward added.

There were 10 to 15 cars driving along the Sargent Beach road following Ford as he worked with the relative of the shark family for a half-mile stretch on the beach.

"Everyone was waiting to see what it was," said Ward.

It's not uncommon for shore fishermen to catch a stingray, the constable added.

"It's normal, but not that size."

"I was looking for it (the fishing line) to pop, but he held on to it. Never lose hope," Ward said.

Bay City Realtor Sue Crow is Ford's grandmother.

Ford, who will attend Van Vleck High School this fall, enjoys fishing in the Gulf or in Caney Creek, as well as hunting, Crow said.



Contributed photo

Sargent teenager Logan Ford shows off a good-sized stingray he reeled in on the Sargent Beach surf recently.

**"I even stopped what I was doing and stayed with him and to see what he would reel in" - Constable Tom Ward**



Bay City Sentinel/Jessica Shepard

Bay City Blackcat Band senior Isabella Gonzalez, left, explains the difference between regular sparklers, morning glories and their larger counterparts to customer David Shepard, Jr. The BCHS Blackcat Band students and booster club parents volunteered time to run the American Fireworks Superstore at 5021 Avenue F in Bay City. Proceeds from fireworks sales were collected to help fund camps, instruments, uniforms and other student needs.

## Locks feasibility study planned

From Staff Reports

GALVESTON – A feasibility study on how to improve the U.S. Army Corps of Engineers' Gulf Intracoastal Waterway (GIWW) Colorado River Locks and Brazos River Floodgates will be discussed – and public input sought – at an initial public scoping meeting from 6 to 8 p.m. July 12, at the West Columbia Civic Center, 516 E. Brazos Avenue (Texas 35), in West Columbia.

"The Feasibility Study will assess current identified conditions and develop specific measures and alternatives that can be combined or used as standalone actions to address the challenges at each location," said Project Manager Franchelle Craft, USACE Galveston District.

"We will conduct the assessment of the floodgates and locks separately and combine the results into one integrated feasibility report."

"We will continue to gather

comments and concerns for weeks following the public scoping meeting to gain insight about opportunities to improve navigation along the GIWW at the Brazos and Colorado rivers, pinpoint resources within the study area as well as identify social, economic and environmental concerns," said Craft.

In the USACE summary in the June 22 Federal Register note that navigation along the GIWW is constrained at the confluence with the Colorado River locks and the Brazos River floodgates resulting in the following conditions:

- Inadequate channel and crossing widths for modern vessels.
- Outdated floodgate construction and width in the Brazos floodgate chambers.
- Outdated lock construction at the Colorado River leading to mechanical failure.
- Shutdown of operations during high-water periods presenting a significant security concern.
- Increased river flows from

flooding impacting navigation traffic.

■ Increased operations and maintenance costs to prevent marine buildup and mechanical elements of the structures.

■ Increased sedimentation at the rivers' mouths.

■ Shoreline erosion.

Alternates listed in the Federal Register include:

- Moving the gates away from the river.
- Widening the gates.
- Reconfiguring the guide wall to lessen the angle to the GIWW.
- Straightening the crossing at the Brazos and Colorado rivers.
- Lock modifications (construction of new locks).
- Removal of the floodgates; and/or;
- Some combination of these and other measures.

Written comments may be submitted to Franchelle Craft, USACE Galveston District, 2000 Fort Point Road, Galveston, TX 77550.

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Appendix F  
Pamphlet and Comment Form



US Army Corps  
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Galveston District



# GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

## Study Information

Public Scoping Meeting, July 12, 2016

*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*

### About the Study

The U.S. Army Corps of Engineers (Corps) Galveston District is leading a Feasibility Study, including preparation of an Environmental Impact Statement (EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates and Colorado River Locks. The study is intended to investigate and recommend solutions to improve safety and navigation efficiency on the GIWW at these two locations. The study will identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays.

The Corps is leading this study in collaboration with the non-Federal sponsor, the Texas Department of Transportation (TxDOT). The Corps leads the development of the Feasibility Study and the EIS preparation, which will be conducted concurrently to result in a single integrated Feasibility Study and EIS document. The assessment of the Brazos River Floodgates and the Colorado River Locks will be conducted separately, and the results will be combined into one integrated Feasibility Report and EIS.

In June 2016, a Notice of Intent for Studies and Initial Scoping Meeting for Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks Feasibility Study was published in the Federal Register.

### About the Brazos River Floodgates

The Brazos River Floodgates are located where the GIWW intersects with the Brazos River southwest of the city of Freeport in Brazoria County, Texas.

- Constructed in September 1943
- Dimensions: 750 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 55 feet
- Prevent excessive tidal action and silting in the GIWW
- Average 38 tows/day transit

### About the Colorado River Locks

The Colorado River Locks are located where the GIWW intersects with the Colorado River at the city of Matagorda in Matagorda County, Texas, 40 miles southwest of the Brazos River Floodgates

- 1st Operating Navigation Lock in Texas:  
May 1951
- Dimensions: 1,200 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 55 feet
- Prevent excessive tidal action and silting in the GIWW
- Average 38 tows/day transit



## What is the purpose of the study?

In 2000, a Corps reconnaissance study resulted in the determination that there was Federal interest in conducting a Feasibility Study for modifying the Brazos River Floodgates and Colorado River Locks to reduce accidents and delays. The purpose of the Feasibility Study is to reevaluate alternatives from the 2000 reconnaissance report to determine the feasibility of modifying the Brazos and Colorado River canals, as well as identify changes to the floodgate and lock structures at each location that are economically and environmentally justified.

## Why is the study needed?

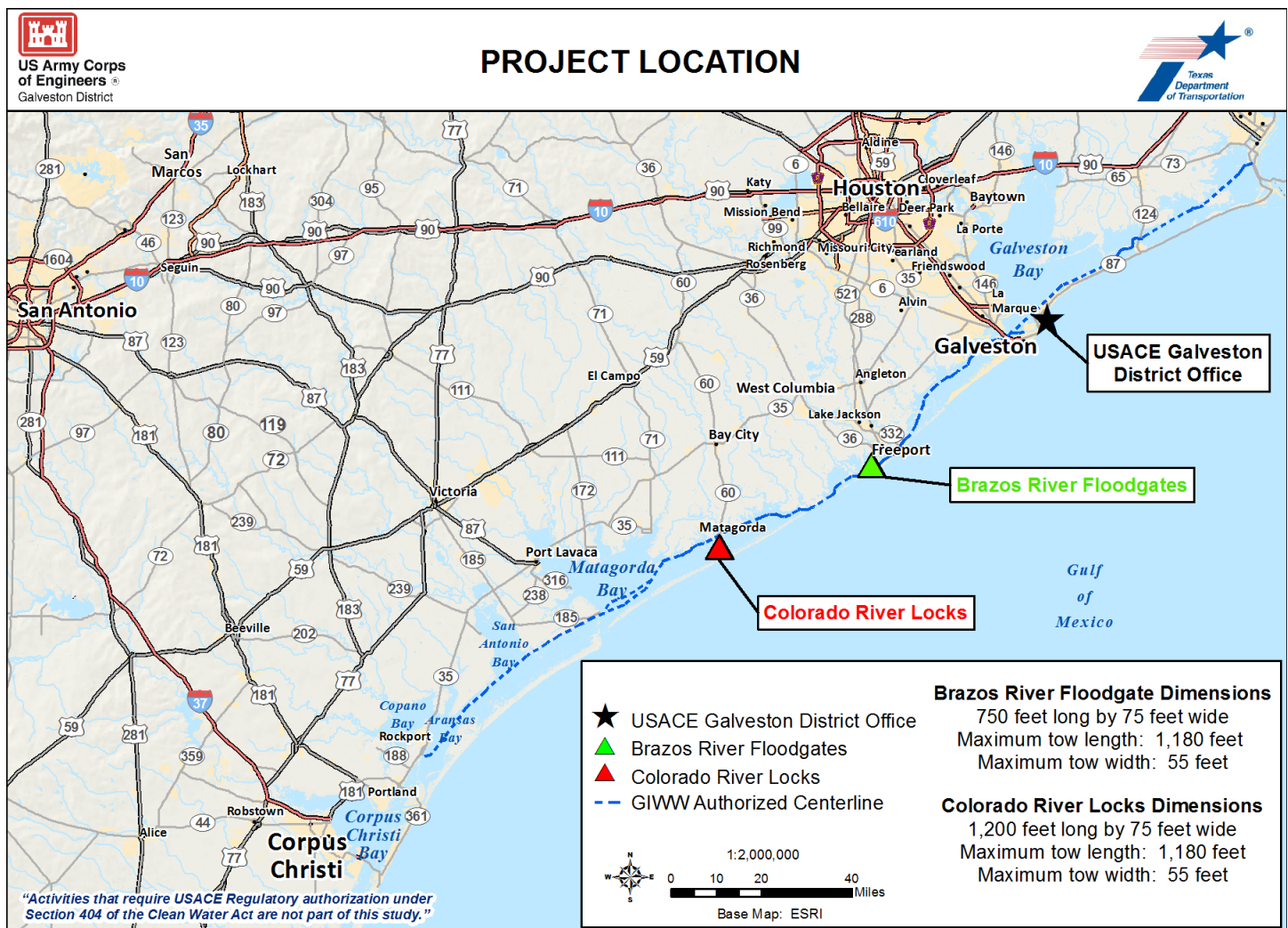
Navigation along the GIWW is constrained at the Brazos River Floodgates and Colorado River Locks due to:

- Inadequate channel width/crossings for modern vessels
- Outdated floodgate construction and width in floodgate chambers

- Outdated lock construction at Colorado River leads to mechanical failure, presents security concerns
- High river flows due to flood events, impact traffic navigation
- Marine buildup on mechanical equipment leads to increased operations and maintenance (O&M) cost
- Sedimentation increases at mouth of rivers
- Shoreline erosion

## The study has several objectives:

- Improve/modernize critical infrastructure at the floodgates/locks
- Reduce operational delays that contribute to economic impacts to navigation industry
- Improve navigation in channel/crossings
- Minimize environmental impacts
- Reduce risks to life, health, safety of shipping crews



# Potential Measures to Meet the Objectives

## Brazos River Floodgates:

- Remove floodgates and dredge channel
- Relocate gates further from river
- Widen gates/structure lift
- Create guide wall on river side (lessen angle)
- Straighten crossings
- Construct lock system
- Assess effects of flows from San Bernard River (west of floodgates)
- Raise walls/gates/adjointing levee to match Colorado River Locks

## Colorado River Locks:

- Relocate locks further from river
- Widen locks
- Move intersection of bypass channel east
- Build gate at the dam to serve as water control structure
- Modify operation at dam to allow for slit flow through old channels to Gulf
- Restore/replace southwest point
- Modify scheduled maintenance
- Create openings/outlets to reduce flow/currents through locks

## About the Study Process

### What is a Feasibility Study?

All major Federal water resource projects, including navigation, must follow a study process that evaluates proposed solutions to problems, such as inefficient navigation, by analyzing the engineering, economic, environmental, cost, real estate, and other impacts and aspects of alternative solutions. This study process, consisting of six major steps, is used to identify a plan of most value to the national economy, consistent with protecting the nation's environment and follows principles and guidelines in Federal water resource law and Corps regulations.

**We Are  
HERE**

### What is an Environmental Impact Statement (EIS)?

A Federal agency must prepare an EIS if it is proposing a major federal action that may significantly affect the quality of the natural and human environment to comply with the National Environmental Policy Act (NEPA). NEPA established our country's national environmental policies in 1969. The environmental review process seeks to facilitate better-informed decisions and involve citizens, and the Corps will seek to involve the many stakeholders throughout this study process.

### Where are we in the study process?

We are early in the study process. We are currently at the "Scoping" stage of the study. Scoping is an open process to identify the scope of significant issues related to the study. After reviewing comments and constraints identified by the public and agency coordination, we will develop alternatives for future public review in the Draft EIS.

## The Study Process

1. Develop non-Federal Sponsor Agreement
2. Notice of Intent
3. Public Scoping Period
4. Alternatives Development
5. Impact Evaluation
6. Preparation of Draft EIS
7. Public Review of Draft EIS
8. Preparation of Final EIS
9. Notice of Availability of Final EIS
10. Record of Decision and Project Implementation

## What will happen next?

The study team will identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays at the Brazos River Floodgates and Colorado River Locks and will complete a Draft Integrated Feasibility Report and EIS for public and agency review. At the time that the Draft Feasibility Report and EIS are made available for public review, a public comment period with a public meeting will be held. The study team will process the comments received, prepare responses to the comments, and revise the documents as appropriate.

The Integrated Feasibility Report and EIS will then be refined and analyzed. At this stage, the agency has considered all impacts from the proposed plan and compared alternatives before making the final recommendation and documentation.

The Final Integrated Feasibility Report and EIS will be published in the Federal Register for final comment. The Final Feasibility Report will then be submitted to Corps Headquarters for signature. A draft Record of Decision (ROD) will be included as part of the Chief's Report package. The ROD will then be signed by the Assistant Secretary of the Army for Civil Works.

### Study Milestones

- Public scoping comments by August 11, 2016
- Selection of focused alternatives (Fall 2016)
- Identify a Tentatively Selected Plan (Late 2017)
- Draft Integrated Feasibility Report/EIS (2018)
- Final Integrated Feasibility Report/EIS (2019)

## How do I participate?

You may participate in this process by providing comments for consideration by the study team. Public involvement is integral to assessing the environmental consequences of the proposed project and improving the quality of the environmental and feasibility study decision making. The Corps is using this public scoping meeting to receive citizens' ideas on the significant issues and impacts to be addressed in the analysis of environmental impacts and to help define the scope of the study. The Corps also specifically seeks the public's input on the problems, objectives, and potential alternatives that navigation improvements can address.

The Corps encourages full participation to promote open communication on the issues surrounding the study. In addition, participation by Federal, State, and local agencies, and other interested organizations is encouraged.

The purpose of this public scoping meeting is to:

- Share information
- Seek input
- Define how you can be involved

This is an opportunity for the public to participate and provide comments on:

- Environmental concerns
- Local conditions, issues, opportunities, etc.
- Alternative ways to meet the project purpose

**We encourage your input during the public scoping period!**



## Who do I contact for more information or to provide comments?



**Mail: U.S. Army Corps of Engineers,  
Galveston District**

**Attn: Ms. Franchelle Craft  
2000 Fort Point Road  
Galveston, TX 77550**

**Email: [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil)**

**Comments are requested by August 11, 2016**





Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

Comments and questions regarding the EIS public scoping meeting may be placed in the comment box tonight or sent to:

Mail: U.S. Army Corps of Engineers, Galveston District  
Attn: Ms. Franchelle Craft  
2000 Fort Point Road  
Galveston, TX 77550

Email: [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil)

**Comments are requested by August 11, 2016.**

*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*

#### **PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

**ROUTINE USES:** None. The “Blanket Routine Uses” set forth at the beginning of the Army’s Compilations of Systems of Records Notices apply to this system.

**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments. Failure to provide one’s name may also result in one losing one’s right to be recognized in the official record and/or the right to make a public comment during this meeting.

# Appendix G

## Photographs



## Project Overview

- The U.S. Army Corps of Engineers (USACE) Galveston District is leading a feasibility study to:
  - Investigate and recommend solutions to improve safety and navigation efficiency on the Gulf Intracoastal Waterway (GIWW) at the Brazos River Floodgates and the Colorado River Locks
  - Identify and evaluate possible structural and navigation alternatives to reduce traffic accidents and navigation delays
- The non-Federal sponsor for the project is the Texas Department of Transportation (TxDOT).

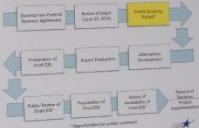


U.S. Army Corps of Engineers  
Galveston District

"Under Plans that require USACE, requesting collaborators issue Section 404 of the Clean Water Act on their part of this study."



## Overview of Feasibility Study/NEPA Process



U.S. Army Corps of Engineers  
Galveston District

Activities that require USACE Engineers and/or other personnel are shown in yellow.



Texas Department of Transportation



**Brazos River Floodgates**

- Constructed in September 1943
- Dimensions: 750 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 55 feet
- Prevent excessive tidal action and siltation in the GWW
- Average 38 tows/day transit

USACE District Office  
USACE Area Office  
USACE Region Office  
USACE National Office

It is illegal to copy the USACE logo without permission under Section 504 of the Clean Water Act as part of this study.

EXIT

### Brazos River Floodgates



- Constructed in September 1943
- Dimensions: 750 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 55 feet
- Prevent excessive tidal action and silt in the GPKW
- Average 36 tow/day transit

**END**  
U.S. Army Corps of Engineers  
Corpus Christi District

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### BRAZOS RIVER FLOODGATES



Map showing the location of the Brazos River Floodgates in relation to the surrounding area, including the Gulf Port Canal (GPKW) and the Gulf of Mexico.

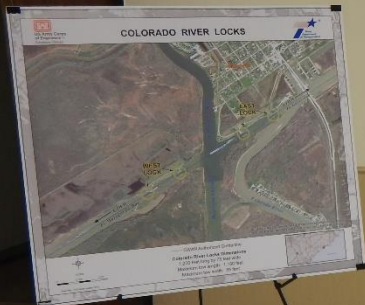
### BRAZOS RIVER FLOODGATES



Aerial view of the floodgates structure, showing the concrete walls and the water flow through the gates.







### Identified Problems

- Inadequate channel width/crossings for modern vessels
- Outdated floodgate construction and width in floodgate chambers
- Outdated lock construction at Colorado River leads to mechanical failure, presents security concerns
- High river flows due to flood events impact traffic navigation
- Moisture buildup on mechanical equipment leads to increased O&M cost
- Sedimentation increases at mouth of river
- Shoreline erosion

U.S. Army Corps of Engineers  
State of Colorado

Materials that remain in the river water do not stay part of this study.

U.S. Army Corps of Engineers  
State of Colorado

## Study Objectives

- Improve/modernize critical infrastructure at the floodgates/locks
- Reduce operational delays of structures that contribute to economic impacts to navigation industry
- Improve navigation in channel/crossings
- Minimize environmental impacts
- Reduce risks to life, health, and safety of shipping crews



US Army Corps  
of Engineers  
Corpus Christi District

\*Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.



Texas  
Department of  
Transportation

## Key Considerations

- Navigation/Transportation
  - Impacts to navigation during construction
  - Nearby roadway bridges
- Existing Federal Projects
  - Flood-protection levees
  - Dredged material placement areas
  - Increased silt in navigation channels
- Energy and Mineral Resources
  - Bryan Mound Strategic Petroleum Reserve
  - Existing pipelines/wells



US Army Corps  
of Engineers

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Texas  
Department of  
Transportation

## Key Considerations

- Environmental
  - Wetlands and other local habitats
  - Floodplains
  - Wildlife refuges/management areas and recreation areas
  - Ongoing ecological recovery in West Matagorda Bay
  - Protected wildlife, marine mammals, fisheries
  - Cultural and historic resources
  - Changes in salinity, bank erosion, sedimentation/shoaling
- Land Requirements
- Other – Seeking Public Input



City of Victoria  
British Columbia

*"Victoria Park Regatta" is a City of Victoria project and is not part of the study.*



City of Victoria  
British Columbia

## Potential Measures

### Brazos River Floodgates

- Remove floodgates and straight channel
- Relocate gates further from river
- Widen gate/restructure lift
- Create guide wall on river side (Nelson angle)
- Straighten coverage
- Construct lock system
- Assess effects of flows from San Bernard River (west of floodgates)
- Raise walls/gates/adjusting levee to match Colorado River levee

### Colorado River Locks

- Relocate locks further from river
- Widen locks
- Move intersection of bypass channel east
- Build gate at the start to serve as water control structure
- Modify operation of dam to allow for split flow through old channels to Gulf
- Restore/replace southwest point
- Modify scheduled maintenance
- Create openings/culverts to reduce flow/flows through locks



City of Victoria  
British Columbia

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City of Victoria  
British Columbia

EXIT

FIRE  
↓  
EXIT



River Floodgates and Locks Feasibility Study  
Scoping Meeting  
July 12, 2016  
Columbia, SC  
Carter's Creek  
Meeting Room

**How Can You Participate?**

- 1. Attend the Scoping Meeting on July 12, 2016 at 10:00 AM
- 2. Attend the Public Hearing on July 13, 2016 at 6:00 PM
- 3. Provide written comments to the project manager by July 15, 2016
- 4. Contact the project manager at (803) 785-1234

Written  
Comments



## How Can You Participate?

- Review information on display boards and handouts
- Ask the USACE and TxDOT Representatives questions
- Please provide written comments by August 11, 2016:
  - Place comment cards in the comment box tonight
  - Email comments to: [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil)
  - Mail comments to:

**U.S. Army Corps of Engineers, Galveston District**  
**Attn: Ms. Franchelle Craft**  
**2000 Fort Point Road**  
**Galveston, TX 77550**



U.S. Army Corps of Engineers  
Galveston District

*"Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study."*



Texas Department of Transportation

Written  
Comments






Written  
Comments



**GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study**

**Public Scoping Meeting**  
**July 12, 2016**

West Columbia Civic Center  
516 E. Bearing Swamper Blvd. (Highway 35)  
West Columbia, TX 77406



For more information, visit the GIWW Feasibility Study website at [www.giww.com](http://www.giww.com) or call 714.261.1234. For more information, visit the website at [www.giww.com](http://www.giww.com).





# GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

Public Scoping Meeting  
July 12, 2016

West Columbia Civic Center  
516 E. Brazos Avenue (State Highway 35)  
West Columbia, TX 77486



US Army Corps  
of Engineers  
Galveston District



"Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study."

WEST COLUMBIA LIBRARY/CIVIC CENTER FACILITY

*This facility was made possible by the  
community, for the community.*

WEST COLUMBIA CITY COUNCIL

M.A. Brooks, MAYOR

Robert Dixon, MAYOR PRO-TEM

Dorothy Mansel

Eugene Fink

Loretta Washington

Jimmy Harris

Vicki S. Knight, CITY MANAGER

WEST COLUMBIA LIBRARY BOARD

FRIENDS OF THE WEST COLUMBIA LIBRARY

WEST COLUMBIA ROTARY CLUB

JANUARY 27, 1988

EXIT

### Brazos River Floodgates



- Closed for 100 days in 1992
- Estimated 100 working days of lost work
- 2007: 100 days of lost work
- 2008: 100 days of lost work
- 2009: 100 days of lost work
- 2010: 100 days of lost work
- 2011: 100 days of lost work
- 2012: 100 days of lost work
- 2013: 100 days of lost work
- 2014: 100 days of lost work
- 2015: 100 days of lost work
- 2016: 100 days of lost work
- 2017: 100 days of lost work
- 2018: 100 days of lost work
- 2019: 100 days of lost work
- 2020: 100 days of lost work
- 2021: 100 days of lost work
- 2022: 100 days of lost work
- 2023: 100 days of lost work
- 2024: 100 days of lost work
- 2025: 100 days of lost work
- 2026: 100 days of lost work
- 2027: 100 days of lost work
- 2028: 100 days of lost work
- 2029: 100 days of lost work
- 2030: 100 days of lost work





EXIT

**Bioscience & Forestry**  
1000+ acres of forestland  
1000+ acres of wetlands  
1000+ acres of riparian habitat  
1000+ acres of agricultural land  
1000+ acres of open space









EXIT

How Can You Participate?

me

er Pileolates and Concrete

... and constraints

...

Development Team and ... may have tonight







Welcome

- 1. Welcome
- 2. Project Overview
- 3. Project Goals
- 4. Project Objectives
- 5. Project Benefits
- 6. Project Risks
- 7. Project Next Steps

Overview of Feasibility Study

- 1. Project Overview
- 2. Project Goals
- 3. Project Objectives
- 4. Project Benefits
- 5. Project Risks
- 6. Project Next Steps

PROJECT LOCATION





EXIT



Have You Done This Before?

NEPA Review

NEPA Review



## Appendix H

### Written Comments Received During Public Scoping Meeting and Public Comment Period



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

**GIWW Brazos River Floodgates and  
Colorado River Locks Feasibility Study**

**National Environmental Policy Act  
Public Scoping Meeting**

**July 12, 2016**



Your comments are very important in the National Environmental Policy Act (NEPA) process. Please let us know your thoughts, concerns, and suggestions about issues that should be considered in the Environmental Impact Statement (EIS). Here are a few questions that may help you formulate your comments. Please keep in mind that these are only suggestions and in no way should limit your comments.

- What environmental issues and impacts should be evaluated in the environmental review?
- What local knowledge or information can you provide to assist in the environmental review?
- What options and alternatives should be considered and evaluated?
- When and how would you like to be informed about the project?

I have the following comment(s) to be considered as part of the preparation of the GIWW Brazos River Floodgates and Colorado River Locks Integrated Feasibility Study and Draft Environmental Impact Statement (DEIS).

① SOLUTIONS SHOULD BE COMPATIBLE WITH AN OPEN SAN BERNARD RIVER MOUTH.

② STUDY SHOULD COORDINATE W/ H-GAC WATERSHED PROTECTION PLAN (WPP) FOR THE SAN BERNARD

③ CONSIDER A STRUCTURE OR SYSTEM TO GUIDE TOWS THRU THE BRAZOS GATES

- STRUCTURE ACROSS & ABOVE THE RIVER TO GUIDE TOWS ACROSS THE RIVER

- CABLE SYSTEM TO DRAW TOWS ACROSS & THRU GATES.

PLS NOTIFY ME BY EMAIL OR WEB SITE.

EMAIL IS TKRONSBR@YAHOO.COM

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

Comments and questions regarding the EIS public scoping meeting may be placed in the comment box tonight or sent to:

Mail: U.S. Army Corps of Engineers, Galveston District  
Attn: Ms. Franchelle Craft  
2000 Fort Point Road  
Galveston, TX 77550

Email: [franchelle.e.craft@usace.army.mil](mailto:franchelle.e.craft@usace.army.mil)

**Comments are requested by August 11, 2016.**

*“Activities that require USACE Regulatory authorization under Section 404 of the Clean Water Act are not part of this study.”*

**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

**ROUTINE USES:** None. The “Blanket Routine Uses” set forth at the beginning of the Army’s Compilations of Systems of Records Notices apply to this system.

**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments. Failure to provide one’s name may also result in one losing one’s right to be recognized in the official record and/or the right to make a public comment during this meeting.



**US Army Corps  
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Galveston District

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I have the following comment(s) to be considered as part of the preparation of the GIWW Brazos River Floodgates and Colorado River Locks Integrated Feasibility Study and Draft Environmental Impact Statement (DEIS).

*What impact will opening the San Bernard River have on the operation of the locks on the Brazos River? flood gates*

*Do we have data that says there are less accidents when the mouth of the San Bernard River is open?*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name Adalia Moudlin  
Address 112 Live Oak Ln  
Lake Jackson, TX 77566  
Phone Number (optional) \_\_\_\_\_  
Email Address (optional) \_\_\_\_\_

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Galveston District

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I have the following comment(s) to be considered as part of the preparation of the GIWW Brazos River Floodgates and Colorado River Locks Integrated Feasibility Study and Draft Environmental Impact Statement (DEIS).

~~How~~

Is any consideration being given to the effect of the San Bernard River being closed or not on the project.

Name Valray Maudlin  
Address 112 Live Oak Ln  
Lake Jackson, TX 77566  
Phone Number (optional) \_\_\_\_\_  
Email Address (optional) vmaudlin @ outlook .com

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Colorado River Locks Feasibility Study**

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I have the following comment(s) to be considered as part of the preparation of the GIWW Brazos River Floodgates and Colorado River Locks Integrated Feasibility Study and Draft Environmental Impact Statement (DEIS).

If the San Bernard River was an open flowing river I think it would have a positive impact on the intercoastal water ways. You might consider putting the locks at the San Bernard. It would be much easier for barges to navigate the straight shot.

Stop studying and get busy doing something!!

Candice Peckack

Resident San Bernard River

Our river is dying! No flow is impacting wildlife!

You caused this problem by changing flow of Brazos River! ~~Same~~ Shame on you!

Name Claudia Pechacek  
Address 5304 CR 469  
77422  
Phone Number (optional) 281-615-4798  
Email Address (optional) \_\_\_\_\_

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Galveston, TX 77550

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US Army Corps  
of Engineers®  
Galveston District

## GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

National Environmental Policy Act  
Public Scoping Meeting  
July 12, 2016



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Didn't hear a word about the San Bernard River effects on barge traffic. We see barges backed up due to Brazos flooding. How can you fix this problem? use some of the study money. To many studies.

Alma Marcher  
Property owner

I think our river is dying!  
My family has lived on the San Bernard for 4 generations.

Name Alma Marchis  
Address P.O. Box 3416  
Lake Jackson, Texas 77566  
Phone Number (optional) 713-299-4411  
Email Address (optional) \_\_\_\_\_

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**US Army Corps  
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Galveston District

**GIWW Brazos River Floodgates and  
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**National Environmental Policy Act  
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When we took Assistant Secretary of the Army, John Paul Woodley Jr. to the mouth of the San Bernard in 2008, he was on a tour of the Coastal projects. Along the way, we pointed out projects in the works. He said, "We <sup>(the COE)</sup> do a ~~good~~ good job of taking care of individual projects, But what we don't do is understand what we are doing affects other projects. We need to do a better job of that."

this is an opportunity to do so.

But ~~what~~ whatever you do, the first ~~obj~~ goal should be — First, Do No Harm.

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

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## Friends Of the River San Bernard

P.O. Box 93, Brazoria, Texas 77422

[www.sanbernardriver.com](http://www.sanbernardriver.com)

### ■ Officers

President  
MIKE GOODSON

Vice President  
FRED KANTER

Corporate Secretary  
MARIE BREAKIRON

Corporate Treasurer  
BOB BAILEY

### ■ Board of Directors

ELENA BERGER

RON EVANS

TOM FOLGER

VICKI HEAD

GARY KERSH

VALROY MAUDLIN

TOM RONAYNE

VANESSA TAYLOR

LINDA WRIGHT

### ■ FOR Programs and Activities

ADOPT A HIGHWAY

BOAT PARADES

BREAKFAST ON BERNARD

CONSERVATION EASEMENT

EDUCATIONAL PROGRAMS

REOPENING RIVER MOUTH

RIVER CLEANUP

RIVER RANGERS

SCHOLARSHIP PROGRAM

WATER QUALITY TESTING

### ■ 501(c)3 organization

#### ■ Fundraiser Chairman

DAVID LINDER

Commissioner Precinct 4  
[davidl@brazoria-county.com](mailto:davidl@brazoria-county.com)

Co-chairman

GARY KERSH

Chief Administrator

Commissioner Precinct 4  
[garyk@brazoria-county.com](mailto:garyk@brazoria-county.com)

Franchell Craft  
USACE Galveston District  
2000 Fort Point Road  
Galveston, TX 77550  
July 10, 2016

Franchell Craft:

Representatives from Friends of the River (FOR) San Bernard plus interested river residents will be attending the scheduled July 12th meeting in West Columbia. A

major issue of concern to the organization is the reopening the Mouth of the river. It is proposed that the Mouth be opened via dredging the current silted-in channel to a width and depth that will enhance river flow.

The opening of the river will provide numerous economic benefits to the state and the nation. During high water events with the river mouth closed, the river water backs up the river and into the **Gulf Intracoastal Waterway**. This creates an unnatural current along the **GIWW**. This current impedes the ability of barges to safely navigate the portion of the **GIWW** through the **Brazos River Floodgates**. It also causes sediment to move along the **GIWW** causing increased siltation in the vicinity of the those flood gates and in the deep draft channel at **Port Freeport**. This increased sediment costs **USACE**, the federal government, the port and private industry millions of dollars in unnecessary dredging costs each year.

Having the Mouth silted-shut effects the river basin's water quality, normal sediment transfer rate, and the ability for fish pass. The closure is also leading to a degradation of the fresh and saltwater marsh system in the region to include areas within the **USFWS San Bernard National Wildlife Refuge** and the **Texas Parks and Wildlife Department's Justin Hurst Wildlife Management**.

Threatened and endangered species will benefit from the reopening, as well as the environmental and economic health to the **Texas coastal estuary system**.

**FOR San Bernard** greatly appreciates your interest in this matter .

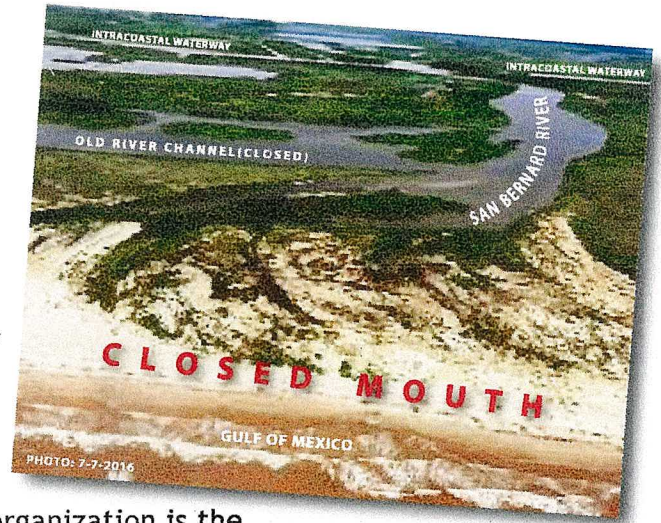
*Mike Goodson*

**Mike Goodson**

President Friends of the River San Bernard

Email: [mikegoodson38@hotmail.com](mailto:mikegoodson38@hotmail.com)

Ph: 979.299.9646



## Jason Schindler

---

**From:** Craft, Franchelle E SWG <Franchelle.E.Craft@usace.army.mil>  
**Sent:** Thursday, June 23, 2016 11:56 AM  
**To:** Lovett, David MVN; Mahoney, Matthew; Hoerner, Denis J MVN; Pourtaheri, Hasan; Grey, Patrick R MVN; 'McLaughlin, Patrick W'; Bermudez, Hugo; 'Campbell, Matthew'; Jason Schindler; 'Carter, Joshua D'; Sallèse, Chris; Middleton, Mark C MVN; Bonanno, Brian P MVN; Allen, Daniel SWF; Sorrels, Christy A SWF @SWG; Peterson, Mark Steven SWG; Russek, Eric G SWG; DeSoto, Simon R SWG; Page, Robert L SWG; George, Robert E SWG; Otero, Victor L SWG; Stamper, Jeffrey L MVS; Ryan, Alex LRL; Richardson, Jerica M SWF  
**Cc:** Thomas, Robert C SWG; Tirpak, Sharon M SWG  
**Subject:** FW: [EXTERNAL] Fwd: Ideas-Brazos & Colorado

FYSA

Franchelle E. Craft  
Civil Engineer: Houston Resident Office  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: tjkentmusic@att.net [mailto:tjkentmusic@att.net]  
Sent: Thursday, June 23, 2016 11:46 AM  
To: Stark, Jim <jstark@gicaonline.com>; Craft, Franchelle E SWG <Franchelle.E.Craft@usace.army.mil>; makapu@flash.net  
Subject: [EXTERNAL] Fwd: Ideas-Brazos & Colorado

I had some ideas re: Brazos & Colorado locks. Ron Hull asked that I pass my ideas along. Please see email below...

See you on the one,

Captain Joe Kent

Begin forwarded message:

From: tjkentmusic@att.net <mailto:tjkentmusic@att.net>  
Date: June 8, 2016 at 8:27:31 AM CDT  
To: "makapu@flash.net <mailto:makapu@flash.net>" <makapu@flash.net <mailto:makapu@flash.net> >  
Subject: Ideas-Brazos & Colorado

Gentlemen,

When considering Brazos & Colorado locks it has become painfully obvious the last two years, with all the flooding, that something definitely needs to change in order to keep the industry profitable when running tows on the west end of the ICW.

I have had many discussions with many people regarding those two locks. There have been some heated debates about if those locks are even necessary especially when it comes to Brazos. There are many good key points on both sides of that issue but the purpose of my thoughts in this writing is not to argue or advocate for either side, but to pass along my insights.

The fact of the matter is, that those two locks do exist, so I will assume that they have a higher purpose than revenue from accidents, and will share my thoughts on improvements, and how to fix a flawed system.

A simple (although not easy) solution to the problem would be to move the locks about 1000 feet from the rivers.

Currently a tow has to transit the first chamber of the locks, immediately cross a river, and line up on the second chamber while at the mercy of Mother Nature.

The worst possible time to slow and/or stop a tow is when it is under the influence of wind, and current. Without propulsion and good headway, the tow is under limited control by the captain and will go whichever way the elements decide to take it. It takes a whole lot of talent and situational awareness to put a 54' barge (or barges) into a 75' lock chamber with high winds and/or strong cross currents.

Most of the time we hear the negative side when someone slams one of the lock walls, causing damage. What most don't consider is that we are set up for failure to begin with, and it is truly an amazing feat for the boats that transit these areas on a regular basis without incident. It's not something you can teach just any ol' drunk monkey to do.

Moving the lock chambers 1000' back from the rivers would greatly minimize the the risk of allisions due to cross current. The lock chambers would then become no different than the bridges we make all over the ICW and the rivers would then be no different than the ship channels we cross (i.e. Freeport Intersection).

Once the tow cleared the first chamber the captain could come full ahead and negotiate the river under full control of the vessel, re-enter the ICW on the other side with enough time and area to re-group, and line up on the second chamber while in the safety of the ICW instead of in the path of a raging river.

It would be a major expense to reposition the locks, but the question is not about how much it would cost-the question is-how much is it worth? When compared to the loss of revenue, and down time from delays due to high water and/or lock repair, not to mention barge repair from accidents with the possibility of environmental damage should a spill occur, I can't help but wonder if a major re-construction would be worth it?

A few other things to consider:

-Shoaling-

Both the east and west sides of Brazos is constantly shoaling. The river brings down large amounts of silt that gets caught in the eddies just below the lock. Last year tows were hanging up on the sandbar on the east side of Brazos causing major delays and the need for a dredge that further complicated the situation. That sandbar (east side) although dredged is still there and is still building. The last time I made Brazos west bound my sounder indicated the same thing is happening on the west side of Brazos as well. We barely have enough room to transit now and those sand bars are right where we need to be in order to get lined up for the next chamber. I predict (just my observation) that after the flood waters receded there will be groundings due to these shallow areas building up even higher from the silt the high waters send down the river. Once the high water has left us-those sand bars will be at flood stage highs when the water returns

to normal pool and low water. Mother Nature & Father Time are working together to limit us even further in our abilities. Mark my words: grounding delays are soon to follow.

-A wider chamber-

Should a major re-construction of those locks be considered I think widening them at that time should be considered. The majority of empty tows run double wide (up to 108') in that area due to an 18 mph daily average wind. Were the locks to be rebuilt with a 125' horizontal clearance then there would be no need for boats to break up the tow to transit the locks. The tows could transit through without any delay.

Problem: How would the boats transit through during the time of re-construction?

A waiver should be obtained so that tows could run from the Freeport jetties to the Matagorda ship channel (near coastal) in order to by pass Brazos & Colorado locks during the time of reconstruction. It only requires an actual act of congress, and a presidential signature to make such a waiver possible so I'm fully aware that I'm not asking for very much. But consider the fact that Industrial lock is about to be reconstructed and a waiver was signed into law so that tows will be legal to transit Chandelier Sound by way of virtual buoys during the time that they are working on the lock. It may be a tall order but I think it is possible-besides you never know until and unless you ask.

In conclusion: Brazos and Colorado locks have been a major thorn in the industry's side costing our companies and customers far more than they are worth for the job intended. Because of the outdated design of those two facilities I refer to the west end as the anal canal of the ICW. I know that is a crude reference but it is true that this is the shittiest place to run for towboaters. However I love a good challenge and the felling of accomplishment that comes from doing a job that not every towboat captain is capable of or willing to do. Brazos & Colorado is job security for me, and a source of revenue for the companies that are continually doing repairs on the locks and the shipyards that fix the barges but the benefits for the few are at the expense of the majority. Either way, I am confident that the powers that be (USCG, USACE, etc...) recognize the need for improvement and have some genius ideas of their own. I just wanted to pass along my ideas so that you would have some input from someone that transits these areas on a regular basis.

Captain Joe Kent

## Jason Schindler

---

**From:** Craft, Franchelle E SWG <Franchelle.E.Craft@usace.army.mil>  
**Sent:** Wednesday, July 13, 2016 8:56 AM  
**To:** Jason Schindler; Portia Osborne; Allen, Daniel SWF  
**Subject:** FW: Comments-GIWW Brazos and Colorado Feasibility Study

Please add to the public comments

Franchelle E. Craft  
Civil Engineer: Houston Resident Office  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Mike Griffith [mailto:Mike@franksonandgriffith.com]  
Sent: Wednesday, July 13, 2016 8:50 AM  
To: Craft, Franchelle E SWG <Franchelle.E.Craft@usace.army.mil>  
Cc: DeSoto, Simon R SWG <simon.r.desoto@usace.army.mil>  
Subject: [EXTERNAL] Comments-GIWW Brazos and Colorado Feasibility Study

My comments are relative to the Colorado River Locks portion of the study.

I am Chairman of the Port of Bay City Authority (POBCA) and have served on the Board for 18.5 years. I have worked with a variety of USACE departments and personnel on numerous projects within our area.

I was raised in Bay City, spent countless hours on the water (still do) and believe I possess local knowledge regarding East and West Matagorda Bay.

As you well know the Brazos and Colorado gates and locks are the "pinch" point west of New Orleans with a 75' width. There is no question these need to be widened to the proposed 150'.

I wish to address the Potential Measures to Meet the Objectives-Colorado River Locks listed on page 3 of the handout.

The last item, Create Openings/outlets to reduce flow/currents through locks, has significant merit for this effort. There has been a proposed outlet for East Matagorda Bay on the southwest corner. The County was granted a permit many years ago but lacked funding and the permit expired. There has been continued interest in the project over the years renewed recently when the TXDOT Maritime Division reached out to the POBCA.

The current proposal is a culvert system under FM2031 from East Matagorda Bay into the Colorado River Channel with no dredging or widening. The POBCA has engaged USACE-ERDC, Tanya Beck and Lihwa Lin, to update the existing model based on this proposed culvert design. The POBCA has met with TXDOT Maritime Division regarding this project to work in a collaborative effort. This culvert system, FM2031 Flood Relief Project, would reduce the times when excessive rainfall overtops the roadway (restricting residential and emergency access), reduce currents at the intersection of the Bypass Channel/GIWW intersection, reduce currents around the GIWW/Mitchell's Cut area and provide flood relief for areas surrounding East Matagorda Bay. This may also provide additional ebb flow velocity at the Mouth of the Colorado

Jetties reducing the dredging frequency. The previous model showed impacts as mentioned above but the existing model needs to be updated with new data point information.

Another outlet, The Diversion Channel, into West Matagorda Bay has changed drastically since it was created in 1991. Accretion has extended the delta a great distance into the Bay creating a shallow alluvial plane restricting flood water discharge. This restriction has caused a decrease in upstream flood water velocity, higher flood water levels upstream and increased sedimentation at the intersection of the GIWW. This channel needs to be dredged and maintained creating a more effective flood discharge channel as originally intended.

Please let me know if you have any questions or comments,

Mike Griffith, Chairman

Port of Bay City Authority

POB 1426

Bay City TX 77404-1426

979-245-9236 direct

979-245-5831 office

979-245-9430 fax



# PORTRAIT OF A DYING RIVER

The San Bernard River at the village of River's End, Texas

**Mason Roylen (Roy) Edwards**



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Village of River's End  
Brazoria, Texas 77422

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## July 12, 2016 U.S.A.C.E. Scoping Meeting on Brazos Gates and Colorado Lock Address



My name is Roy Edwards. My wife and I live in the village of River's End on the lower San Bernard River.

In the early 1900's, Freeport Sulphur started to lobby for a "dead water" port for the city of Freeport. In 1929, the Brazos River Diversion Canal was opened to the Gulf of Mexico. The mouth of the Brazos River was moved from just over 10 miles east of the mouth of the San Bernard River to about 3 ½ miles away. The mouth of the San Bernard had remained in a stable location throughout recorded history. Things started to change in the 1980's, after the Brazos had completed its new delta in the Gulf.

The Brazos silt and sediment load averages 245,000 cubic yards in a "normal" year. A flood event can increase this load to in excess of 400,000 cubic yards per event. Of the total in

a "normal" year, 176,000 cubic yards of washed, small grain, yellow beach quality sand with less than 4% silt, is carried across the mouth of the San Bernard River. The San Bernard does not have the flow volume or quantity to wash that much sand out of its mouth.

In the mid 1980's, the San Bernard began to migrate to the southwest and shallow. By 2005, the river was migrating southwest at a rate in excess of 2 feet per day, closing completely in 2006, approximately 4 miles southwest of its original location.

As the mouth of the San Bernard closed, its flow was diverted into the Intracoastal Canal through the west floodgate, into the Brazos, then into the Gulf. This is the only section of the Intracoastal Canal between Florida and the Rio Grande where the waters flow to the east. The Intracoastal in this area between the San Bernard and the Brazos averages in excess of 550' wide per a Texas Parks and Wildlife study.

[http://tpwd.texas.gov/landwater/water/conservation/coastal\\_studies/san\\_bernard/index.phtml](http://tpwd.texas.gov/landwater/water/conservation/coastal_studies/san_bernard/index.phtml)

The west floodgate structure is 75' wide. This mass of water, on an outgoing tide piles up at the west end of the west gate. The Corps website

( <http://www.swg.usace.army.mil/BusinessWithUs/OperationsDivision/BrazosRiverFloodgatesSummary.aspx> readings from the west Gate has recorded water elevations of over 6 feet higher at the west side of the gate structure than at the east or Brazos side. They have posted currents within the structure in excess of 15 knots. A push boat with a single barge can only make about 8 knots in calm water. Pushing a liquid cargo barge containing 142,000 gallons of product 6 feet up a hill into a 15 knot current is impossible. Navigation of the west gate becomes difficult, if not impossible into currents in excess of 3 knots.

The Gulf Intracoastal Canal Association (GICA) has stated that passage across the Brazos River is the most difficult, dangerous and expensive passage between Florida and the Rio Grande. Their newsletter has stated that accidents, increased insurance rates, and delays cost the barge industry over 4 million dollars per year at the west gate alone.

At a Corps presentation in Bay City in 2010, the statement was made that the cargo value of products crossing the Brazos was 94 million dollars per day. In 2015, an article in the Houston Chronicle Business section stated that in the last 4 years, the Cargo crossing the Brazos had increased by 40%. This means that around 150 million dollars' worth of cargo crossed the Brazos daily. Eighty-seven percent of that cargo is petrochemical.

Also, at the Bay City meeting, we were told that the average structure operated or maintained by the Corps nationwide has less than 40 recorded barge/structure accidents

per year. The recorded accidents at the west gate structure in 2008 were in excess of 650. That's 40 versus over 650, 87% petrochemical.

In 2007, John Paul Woodley, Jr., Assistant Secretary of the Army and Texas Congressman Ron Paul toured the central Texas coastal area represented by Dr. Paul. The grassroots organization formed to protect the San Bernard River escorted Mr. Woodley to the closed river mouth and presented him with a book containing all the research material they had gathered. Assistant Secretary Woodley returned to Washington D.C., confirmed our concerns and research. He then ordered the Galveston District of the United States Army Corps of Engineers to "open the closed mouth to reduce unanticipated currents at the Brazos River floodgates on the Gulf Intracoastal Waterway."

U.S. Army Corps of Engineers synopsis of the San Bernard River Mouth Opening as presented to Clean Waters Initiative, June 22, 2011 : [http://www.h-gac.com/community/water/watershed\\_protection/sanbernard/documents/HGCA%20MSBR%202011%2006%2022.pdf](http://www.h-gac.com/community/water/watershed_protection/sanbernard/documents/HGCA%20MSBR%202011%2006%2022.pdf)

Dredging started January 25, 2009, entering the Gulf on March 1, 2009. The barge/structure accident rate immediately dropped 1500% returning to normal figures. Unfortunately, 4 years of severe drought in the San Bernard Watershed resulting in low flow volume in the San Bernard, and the west floodgate repair and maintenance project lasting over 2 ½ years resulted in the mouth of the San Bernard sanding shut in 2013.

The beach at the mouth of the San Bernard is the only beach in the state of Texas that is accruing daily, expanding over 2 ½ miles into the Gulf since the 1930's.

When the mouth was closed, the habitat for the endangered Piping Plover disappeared. The day after the dredge entered the Gulf, 7 endangered Piping Plovers returned to the area per Kat McConnell, independent wildlife observer for the San Bernard River dredging project. The flock increased in numbers and stayed in the area until the mouth closed.

The dredged sand placed on the southwest corner of the newly opened river was carried by the longshore currents to the Sargent, Texas area. Sargent had the best tourist season in 2009 that they had had in over 20 years. They had a beach.

As the San Bernard River slowed due to its closure, it dropped its silt load into the river and the back lakes close to the river. Recreational fishing navigation into the lakes near the river is becoming more difficult daily due to the shallowing of the access channels.

The grass beds in upper McNeil's and Redfish bayous have died out due to the silting.

My wife and I are members of the Texas Stream Team. We monitor the San Bernard River at River's End the second Monday of every month and have for over 6 years. Because the San Bernard cannot exchange fresh water from upstream and salt water from the Gulf, fresh water stays in the rivers and lakes for much longer than it should. Only 2 salinity tests since the Memorial Day 2015 flood has the salinity in the San Bernard contained "normal" salinity levels. In a normal year, the salt content at River's End runs between 22 - 28 ppt.

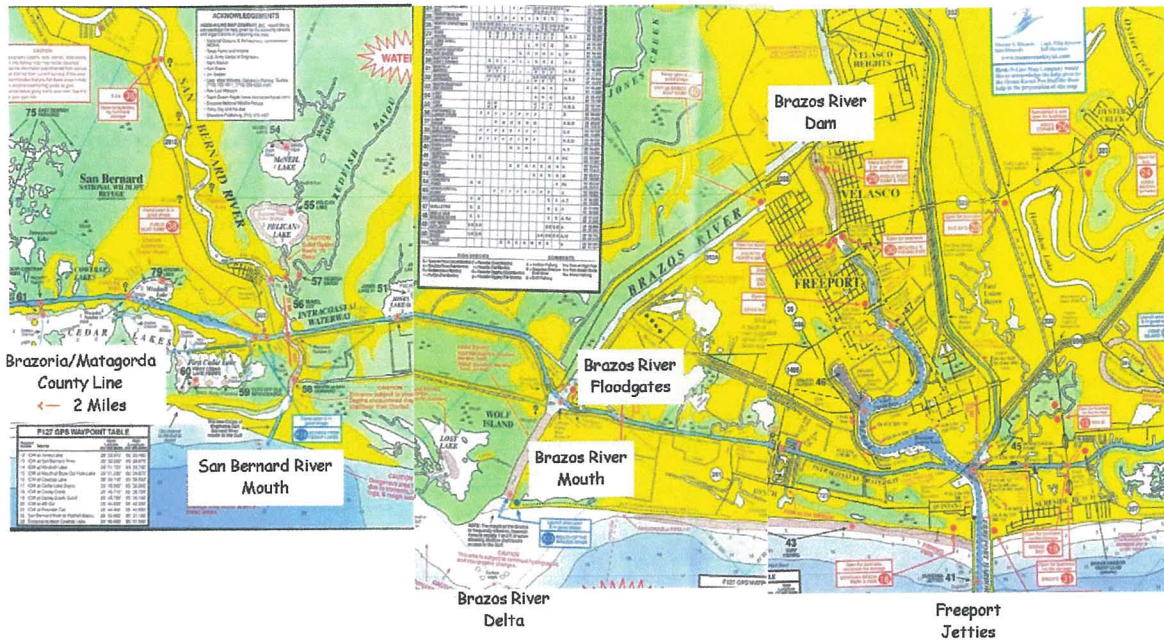
A single oyster can filter up to 50 gallons of water per day. Oysters do not tolerate long periods of low salinity. I have not found a single live oyster in the river or in the back lakes since the Memorial Day flood. We have lost literally millions of oysters which are the kidneys of the bays and rivers. Per the Houston-Galveston Area Council, the tidal section of the San Bernard River was impaired for bacteria prior to the 2009 opening of the river mouth. As long as the mouth was open, the impairment disappeared. As of the report released 7-12-16, the bacterial impairment has returned to the tidal section of the San Bernard.

All of the reports, photographs, editorials, and much more information about the plight of the San Bernard River and its interaction with the Brazos River floodgates is available on [www.sanbernardtx.com](http://www.sanbernardtx.com) . Please visit this website.

In closing, I would like to read one sentence from the Civil Engineering Database, a study titled "Reduction of Unanticipated Intracoastal Waterway Current by Relocating the San Bernard River Mouth, Texas, by Dr. Nicholas C. Kraus, Research and Development, United States Army Corps of Engineers," and I quote, "The recommended alternative is to restore the migrating river mouth to its historic position."

Thank you for your Time and attention.

Mason Roylen (Roy) Edwards  
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[www.sanbernardtx.com](http://www.sanbernardtx.com)



This coastal map showing pertinent locations concerning the San Bernard River mouth issues was spliced together from pieces of the "after Hurricane Ike Edition" of the *Bay Hook-N-Line Fishing Maps—Freeport area, Texas—Hook-N-Line Map Co., Inc.* - [www.hooknline.com](http://www.hooknline.com) .



# Research Links

## Pertinent documentation prior to initial mouth re-opening 2-22-09:

1. U.S. Army Corps of Engineers (Galveston District) Draft Environmental Assessment  
<http://ww3.swg.usace.army.mil/pe-p/SanBernard/SanBernardMONDAYVersion6-16-08.pdf>
2. Final Environmental Assessment done for the original opening of the San Bernard River : <http://ww3.swg.usace.army.mil/pe-p/SanBernard/SanBernardDraftFINALEA12-10-08.pdf>
3. Storming Media Executive Summary of *Coastal Study of San Bernard River Mouth, Texas: Stability and Maintenance of the Mouth* by Nicholas C. Kraus and Lihwa Lin:  
<http://www.stormingmedia.us/56/5677/A567704.html>
4. ASCE Library Executive Summary of Reduction of Unanticipated Intracoastal Waterway Current by Relocating the San Bernard River Mouth, Texas by Nicholas C. Kraus, Lihwa Lin, M.ACE 2 and Laura L. Robinson:  
<http://ascelibrary.org/doi/abs/10.1061/40680%282003%2919>
5. *Status Report: Stream Velocity and Discharge at the Intersection of the San Bernard River and the Gulf Intracoastal Waterway, near Rivers End, Texas , October 2003 - September 2004* by Jeffery W. East U.S. Geological Survey, WRD:  
[http://www.twdb.texas.gov/publications/reports/contracted\\_reports/doc/2004483516\\_USGS\\_Oct\\_Sept.pdf](http://www.twdb.texas.gov/publications/reports/contracted_reports/doc/2004483516_USGS_Oct_Sept.pdf)
6. Texas Department of Transportation - *Gulf Intracoastal Waterway 2005 - 2006 Legislative Report* page 5 : <http://ftp.dot.state.tx.us/pub/txdot-info/library/reports/gov/tpp/giww05.pdf>
7. Texas Parks and Wildlife - *Tracing Shoreline Change in the Mouth of the San Bernard River* by Grace Chen and David Buzan:  
[http://www.tpwd.state.tx.us/landwater/water/conservation/coastal\\_studies/san\\_bernard/index.phtml](http://www.tpwd.state.tx.us/landwater/water/conservation/coastal_studies/san_bernard/index.phtml)
8. *Severe Beach Erosion at Surfside, Texas Caused by Engineering Modifications to the Coast and Rivers, February, 2003* by Richard L. Watson, Ph.D :  
<http://texascoastgeology.com/papers/surfside.pdf>
9. *Texas Coast Geology Website* by Dr. Richard L Watson :  
<http://www.texascoastgeology.com/>

## Pertinent documentation demonstrating opening the river mouth is effective:

1. Gulf Intracoastal Canal Association *The Connecting Link* , Vol. 9, Issue 2; Page 3 which documents the savings of the barge industry (\$3 million a year) and that navigation of the west gate of the Brazos during a flood (after the San Bernard was re-opened was minimal:  
<http://www.gicaonline.com/media/newsletters/newsletter0902.pdf>
2. U.S. Army Corps of Engineers synopsis of the San Bernard River Mouth Opening as presented to Clean Waters Initiative, June 22, 2011 : [http://www.h-gac.com/community/water/watershed\\_protection/sanbernard/documents/HGCA%20MSBR%202011%2006%2022.pdf](http://www.h-gac.com/community/water/watershed_protection/sanbernard/documents/HGCA%20MSBR%202011%2006%2022.pdf)
3. H-GAC (Houston- Galveston Area Council) 2011 Basin Summary Report - San Bernard River page documenting that oxygen levels returned to normal when the mouth of the river was opened: <http://www.bsr2011.com/page049.aspx>
4. Coastal Inlets Research Program, March 2009 Newsletter, Item #3 - Mouth of the San Bernard River TX, Open - Very short project synopsis :  
[http://cirp.usace.army.mil/news/CIRP\\_News/CIRP-news-Mar09.html](http://cirp.usace.army.mil/news/CIRP_News/CIRP-news-Mar09.html)

### Supporting articles and documentation:

1. Texas Highways article , *Now Open - San Bernard River* by Janice Van Dyke Walden : <http://www.texashighways.com/index.php/component/content/article/48-gulf-coast/6075-now-open>
2. Texas Parks and Wildlife article, *A River Returns to the Sea* by Janice Van Dyke Walden : [http://www.tpwmagazine.com/archive/2009/dec/ed\\_1/](http://www.tpwmagazine.com/archive/2009/dec/ed_1/)
3. The Facts article, *San Bernard River mouth shut again* by Alan Nieschwietz (12-18-12) : [http://thefacts.com/news/article\\_d504edea-48d0-11e2-8614-001a4bcf887a.html](http://thefacts.com/news/article_d504edea-48d0-11e2-8614-001a4bcf887a.html)
4. The Facts article, *Corps Details Plan to Open River Mouth* by Hunter Sauls, January 27, 2008  
<http://www.centerpointenergy.com/staticfiles/CNP/Common/SiteAssets/doc/Brazoria%20-%20201-27-08,%20Army%20Corps%20details%20plan%20to%20open%20San%20Bernard%20River%20mouth.pdf>
5. The Houston Chronicle article, *Excess Sand a Problem for San Bernard River* by Richard Stewart, April 3, 2006 - <http://www.chron.com/news/houston-texas/article/Excess-sand-a-problem-for-San-Bernard-River-1864357.php>
6. CSR Wire (The Corporate Social Responsibility Newswire) article, *Smithsonian Community Catalyst Contest Winners Changing Lives in Dow Community*, March 18,



2008: [http://www.csrwire.com/press\\_releases/25941-Smithsonian-Community-Catalyst-Contest-Winners-Changing-Lives-in-Dow-Community](http://www.csrwire.com/press_releases/25941-Smithsonian-Community-Catalyst-Contest-Winners-Changing-Lives-in-Dow-Community)

Dear Friend,

We at King Fabrication have just completed shipping our largest project to date. The Sector Gates and Canal Closure for the West Closure Complex on the Gulf Intracoastal Waterway at Belle Chasse was a challenging, but rewarding project to support flood control for New Orleans and the surrounding areas.

King participated with our customer, Gulf Intracoastal Constructors, and the U.S. Army Corps of Engineers on an Early Contractor Involvement contract beginning with design drawings that were 30% complete in December 2009.

King delivered the completed gates ahead of the escalated schedule which will allow the storm protection system to be in operation ahead of the June 1, 2011 hurricane season.

I have enclosed a re-print of the USACE Task Force Hope Status Report Newsletter with pictures of the gates and an explanation of the project.

Large enough to do the job, small enough to care – this is small business building America. Now we need to put on our sales caps and get busy again.

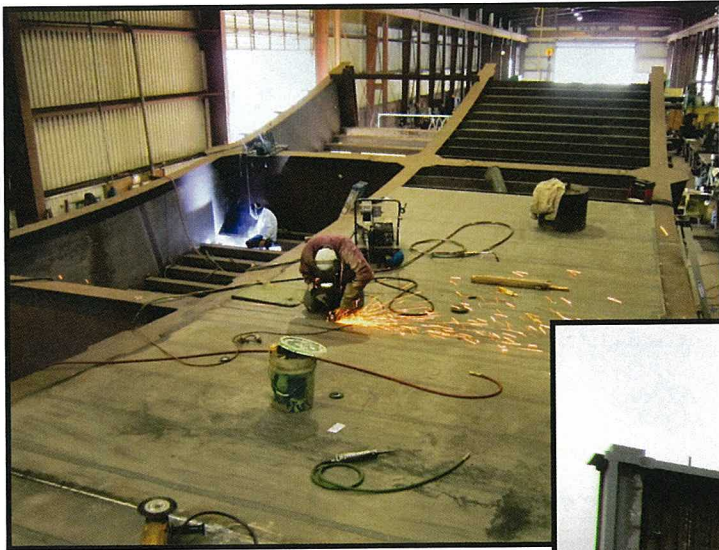
Regards,



Lou Rossitto  
President



West Closure Complex Project, Southwest of Belle Chasse, Louisiana



**100 Ton Buoyancy  
Tank Section  
In Fabrication**

**Buoyancy Tank Section  
Being Placed on Gate  
Leaf Prior to Shipment**



**66 Ton  
Gate Truss  
In Fabrication**



**Gate Trusses  
Assembled Prior  
To Shipment**





**Completed Gates Ready to Load on Barge**



**Completed Gates in Transit to Job Site**



US Army Corps  
of Engineers  
Mississippi Valley Division



## Corps Hurricane Response

Task Force Hope Status Report Newsletter

March 14, 2011

# Nation's largest sector gates headed to West Closure Complex



USACE Photo by Jenny Marc

by Susan Spaht

**The largest sector gates in the U.S., 225 feet wide, make their way to the West Closure Complex on the Gulf Intracoastal Waterway. The massive gates will be part of the first line of surge defense for the West Bank.**

**O**n March 10, the Corps of Engineers installed the second leaf of the nation's largest sector gate at the West Closure Complex on the Gulf Intracoastal Waterway at Belle Chasse. The pair of sector gate leaves were constructed in Texas, floated down the GIWW and installed one at a time, over a 24-hour period each, into the WCC project site.

The Gulf Intracoastal Waterway

West Closure Complex (WCC) is a major feature of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) that will provide the first line of defense from storm surge entering the Harvey and Algiers Canals. When complete, the complex will significantly reduce risk to a large area of the West Bank by removing 25 miles of levees, floodwalls, floodgates and pumping stations along the two canals from the direct impacts of hurricane surge.

In addition to having the nation's largest sector gate, the nearly \$1 billion WCC project will also have the world's largest drainage pump station, floodwalls that abut a 404c environmentally-sensitive area, sluice gates, foreshore protection and an

*Continued on page 2*

**Also in this issue:**

WCC East Gate Installation.....Page 3  
St. Bernard Floodwalls.....Page 4-5



Sector gates en route to West Closure Complex



Sector gates in construction

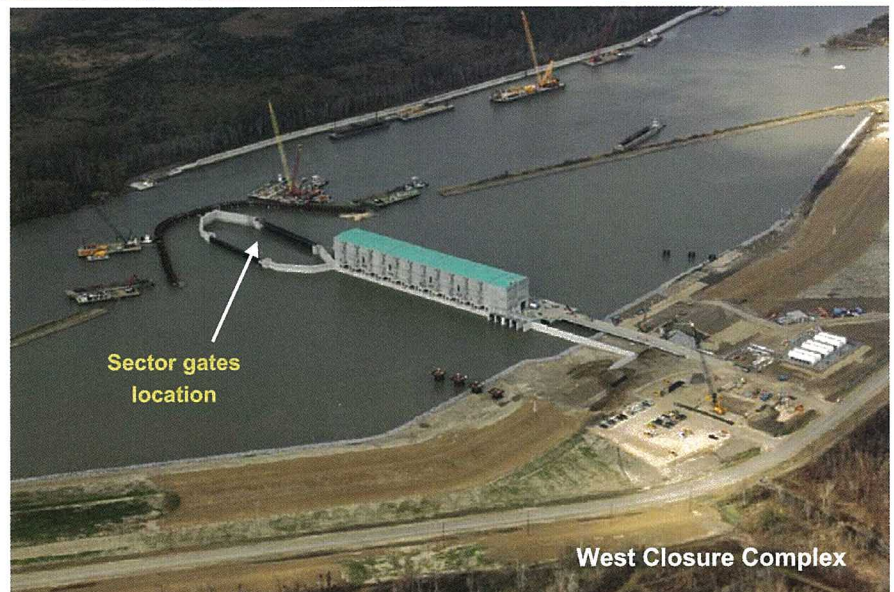
Continued from page 1

earthen levee. The project also includes dredging of the Algiers Canal, beneficial use of the dredged material, and realignment of a portion of Bayou Road in Plaquemines Parish.

Construction of this enormous project began in August 2009 and is already nearly 68% complete.

The pair of sector gates were built by King Fabrication of Houston, Texas, and transported by barge along the GIWW to the WCC site. The first 750-ton gate leaf was installed on March 6. The second steel sector gate leaf was gently lowered into its place four days later after bad weather cleared.

The 225-foot-wide gate will tie into a pumping station and floodwalls to defend against a 100-year storm surge.



Sector gates location

West Closure Complex

### WCC Sector Gate Facts:

- Constructed by King Fabrication of Houston, Texas
- Took four days to ship via barge
- Measures 125 feet 3 inches from hinge to skin plate and stands 32 feet high
- Each sector gate leaf weighs 750 tons
- 97,000 tons of reinforced concrete was required for the sector gate foundation
- Gates will only be closed for a tropical event, and pumps will operate only when the gates are closed
- The sector gate will take 30 minutes to close

## WCC East Sector Gate Installation



### Contact Information

#### U.S. Army Corps of Engineers

**Task Force Hope**  
(504) 862-1836

**New Orleans District**  
(504) 862-2201

**Hurricane Protection Office**  
(504) 862-1708

The *Status Report Newsletter* supports the information program for Task Force Hope and its stakeholders. It also serves as the primary tool for accurately transmitting the Corps' hurricane risk reduction efforts to stakeholders.

*This is an online publication that is open to public distribution.*

This issue and past issues can be found at:  
<http://www.mvn.usace.army.mil/hps>

Comments and questions may be sent to the Status Report Newsletter editor at:  
[b2fwdpao@usace.army.mil](mailto:b2fwdpao@usace.army.mil)

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**Status Report Newsletter**  
Task Force Hope  
Strategic Communications  
7400 Leake Ave., Room #388  
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(504) 862-1949

# Corps constructing St. Bernard Floodwall with determination, ingenuity



LPV 148.02

By Susan Spaht

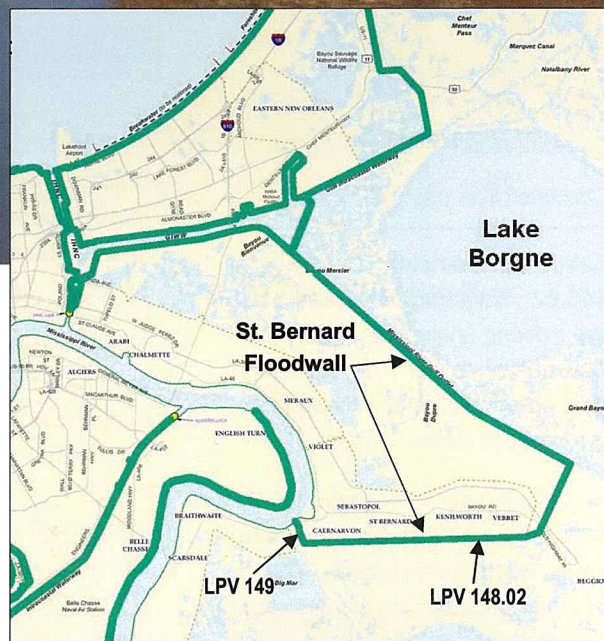
**The** Corps of Engineers is driving hard to put into place a 100-year level perimeter hurricane defense system by June 1, 2011. To accomplish this ambitious goal, which includes some of the largest surge protection structures in the world, the Corps has faced many challenges. One of these is the St. Bernard Floodwall, a 23-mile long T-wall being constructed atop the existing Chalmette Loop Levee and rising 26 to 32 feet high. The wall runs from the IHNC Surge Barrier to the Mississippi River at Caernarvon. It includes sector gates structures at Bayou Dupre and the Caernarvon Canal, and will include five additional floodgates that are being constructed to allow access through the T-wall.

“To make our goal of constructing 23 miles of floodwalls before the start of hurricane season, we determined that we needed to construct two

miles of floodwalls a month,” said Col. Robert Sinkler, Commander of the Hurricane Protection Office “*Two miles of floodwalls a month!* I don’t think this has ever been attempted before, but we knew the team could do it.

And thanks to the determination of our contractors, the dedication of our Corps employees, and the partnership with our non-federal sponsor, we are on schedule to deliver this project to the people of St. Bernard and the Lower 9th Ward.”

Two of the largest and most costly projects in the Corps’ Hurricane and Storm Damage Risk Reduction System (HSDRRS) are the IHNC Surge Barrier wall and gates at \$1 billion, and the West Closure Complex at nearly \$1 billion. The St. Bernard Floodwall project is estimated to cost **\$1.5 billion.**

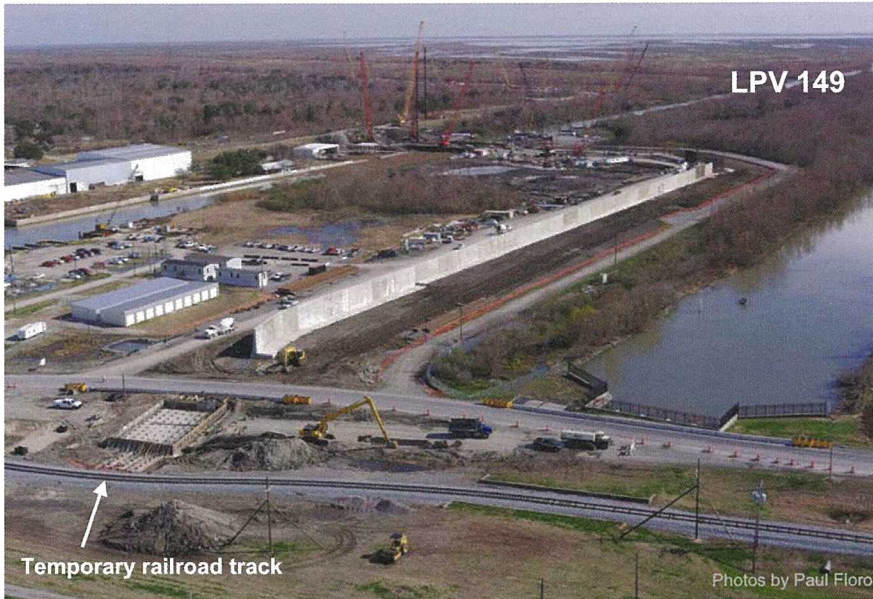


### Determination, Ingenuity

The St. Bernard Floodwall project is currently 81% complete and on schedule to provide 100-year level defense by June 1. As can be expected of a construction project of this size, proportion and schedule, there have been numerous hurdles and unique situations along the way. Take for example, two particular portions of the 23-mile floodwall: LPV 148.02 and LPV 149 (see map).

Continued on page 4





Continued from page 3

**Lake Pontchartrain & Vicinity**

**148.02:** Construct a T-wall on top of the existing levee from Verret to Caernarvon to the 100-year elevation, and install an overhead trolley gate across Bayou Road.

The original contract award for LPV 148.02 was held up because of two separate contract protests. This meant a serious delay to the start of construction since each protest must follow strict federal laws and regulations before a resolution can be determined. “Once the LPV 148.02 contract was settled and awarded, the only way we could make up the lost time was for the contractor to work a very aggressive construction schedule,” said Senior Project Manager Chris Gilmore. “Cajun Constructors



Chris Gilmore

is doing a fantastic job; they are making up the lost time and getting that job back on schedule.”

LPV 148.02 requires that more than 10,000 sheet piles and 17,401 H-piles be driven into the existing levee to build the foundation for the floodwall. Of the 17,401 H-piles, approximately 7,500 were spliced piles. To accomplish this feat, Cajun Constructors rounded up 115 cranes (see photo) and about 1,000 employees to work the site. “This is surely a record number of cranes for a construction site of this size,” noted Gilmore. “I’m certain that we have never had this many cranes working one site before – and it’s getting the job done for us.”

**Lake Pontchartrain & Vicinity 149:** Construct a T-wall on a new alignment and a sector gate across the Caernarvon Canal, and replace railroad tracks and the Highway 39 floodgate. All to the new 100-year elevation.

LPV 149 presented Conti Federal Services, Inc. and the Corps of Engineers with a special situation: con-

struction of a floodwall across railroad tracks that are in daily use by trains. “The solution we came up with for LPV 149,” said Col. Sinkler, “was to build temporary railroad tracks around the construction site so the railroad’s schedule was not impacted, and our construction work could continue without delays.

The Corps worked with Norfolk Southern, owners of the railroad tracks, who participated in the design and advised on the construction of the temporary tracks.

“When we complete the floodwall and gate across the railroad tracks,” said Gilmore, “we’ll take out the temporary tracks and re-build the railroad tracks to their original alignment. All it took was a bit of ingenuity to get through this special situation.”

“The safety of people in St. Bernard and the Lower 9th Ward is our highest priority,” said Col. Sinkler.



Col. Sinkler

“We are determined to deliver a perimeter system that meets our 100-year level criteria. Thanks to the hard work and drive of our contractors and Corps employees, the St. Bernard Floodwall project should be ready!”



For more information on the St. Bernard floodwalls, go to this site: [http://www.mvn.usace.army.mil/hps2/pdf/May\\_29\\_09.pdf](http://www.mvn.usace.army.mil/hps2/pdf/May_29_09.pdf)



Vince Rossitto  
Vice President  
vince@kingfab.com

## KING FABRICATION, LLC

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(PH.) 281-209-0811  
(FAX) 281-209-1774

*Responses per Respondent:* 1.1, approximately.

*Annual Responses:* 94.

*Average Burden per Response:* 14.2 hours, approximately.

*Annual Response Burden Hours:* 1,334.

### Summary of Information Collection

The clause at DFARS 252.243-7002, Requests for Equitable Adjustment, is prescribed at DFARS 243.205-71 for use in solicitations and contracts, including solicitations and contracts using FAR part 12 procedures for the acquisition of commercial items that are estimated to exceed the simplified acquisition threshold. The clause requires contractors to certify that requests for equitable adjustment that exceed the simplified acquisition threshold are made in good faith and that the supporting data are accurate and complete. The clause also requires contractors to fully disclose all facts relevant to the requests for adjustment.

**Jennifer L. Hawes,**

*Regulatory Control Officer, Defense Acquisition Regulations System.*

[FR Doc. 2018-03856 Filed 2-23-18; 8:45 am]

**BILLING CODE 5001-06-P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Policy and Procedural Guidance for Processing Requests To Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to Section 408

**AGENCY:** U.S. Army Corps of Engineers, DoD.

**ACTION:** Extension of comment period.

**SUMMARY:** On February 5, 2018, the U.S. Army Corps of Engineers (USACE) published a notice announcing the availability of a draft Engineer Circular (EC), which is an agency policy document, for a 30-day comment period. This draft EC provides the proposed policies and procedures related to how USACE will process certain requests by others to alter a USACE civil works project pursuant to Section 14 of the Rivers and Harbors Act of 1899, as amended (more commonly referred to as Section 408). This notice announces the extension of the comment period by an additional 30 days. The extension of the comment period is a result of requests by entities to allow more time to submit their comments. The draft EC is available for review on the USACE Section 408 website (<http://www.usace.army.mil/>

*Missions/Civil-Works/Section408/*) and at <http://www.regulations.gov> reference docket number COE-2018-0003.

**DATES:** The public comment period that began on February 5, 2018 (83 FR 5075) is extended until April 6, 2018.

**ADDRESSES:** You may submit comments identified by docket number COE-2018-0003 by any of the following methods:

*Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

*Email:* [HQ-Section408@usace.army.mil](mailto:HQ-Section408@usace.army.mil) and include the docket number COE-2018-0003 or "EC 1165-2-220 Comments" in the subject line of the message.

*Mail:* Headquarters, U.S. Army Corps of Engineers, ATTN: CECW-CE/3E62, 441 G Street NW, Washington, DC 20314-1000.

*Hand Delivery/Courier:* Due to security requirements, we cannot receive comments by hand delivery or courier.

*Instructions:* Instructions for submitting comments are provided in the document published on February 5, 2018 (83 FR 5075). Consideration will be given to all comments received by April 6, 2018.

**FOR FURTHER INFORMATION CONTACT:** Ms. Tammy Conforti at 202-761-4649, email [HQ-Section408@usace.army.mil](mailto:HQ-Section408@usace.army.mil), or visit <http://www.usace.army.mil/Missions/Civil-Works/Section408/>.

**SUPPLEMENTARY INFORMATION:** In the February 5, 2018 issue of the **Federal Register** (83 FR 5075), the U.S. Army Corps of Engineers (USACE) published a notice announcing the availability of a draft Engineer Circular (EC), which is an agency policy document, for a 30-day comment period. This draft EC provides the proposed policies and procedures related to how USACE will process certain requests by others to alter a USACE civil works project pursuant to Section 14 of the Rivers and Harbors Act of 1899, as amended (more commonly referred to as Section 408). Several entities have requested an extension of the comment period. USACE finds that an extension of the comment period is warranted. Therefore, the comment period for the draft EC extended until April 6, 2018.

Dated: February 20, 2018.

**James C. Dalton,**

*Director of Civil Works.*

[FR Doc. 2018-03851 Filed 2-23-18; 8:45 am]

**BILLING CODE 3720-58-P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Availability of Draft Integrated Feasibility Report and Environmental Impact Statement for the Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Locks Systems Feasibility Study, Brazos and Matagorda Counties, TX

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

**ACTION:** Notice of availability.

**SUMMARY:** Pursuant to the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers, Galveston District (USACE) announces the release of the Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Recommended Plan of the Gulf Intracoastal Waterway (GIWW): Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) Systems Feasibility Study, Brazos and Matagorda Counties, TX. The DIFR-EIS documents the existing condition of environmental resources in and around areas considered for development, and potential impacts on those resources as a result of implementing the alternatives.

**DATES:** The Galveston District will hold a public meeting for the DIFR-EIS on March 13, 2018 from 6:00-8:00 p.m. USACE will accept written public comments on the DIFR-EIS from February 26, 2018 to April 11, 2018. Comments on the DIFR-EIS must be postmarked by April 11, 2018.

**ADDRESSES:** The public meeting will be held at the West Columbia Civic Center, 516 E. Brazos Ave. (State Highway 35), West Columbia, TX 77486. Comments may be submitted at the public meeting or mailed to the District Engineer, P.O. Box 1229, Galveston, TX 77553. Comments may also be sent to the District Engineer via email at [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil).

**FOR FURTHER INFORMATION CONTACT:** Galveston District Public Affairs Office at 409-766-3004 or [swgpao@usace.army.mil](mailto:swgpao@usace.army.mil).

**SUPPLEMENTARY INFORMATION:** Authority: The lead agency for this proposed action is USACE. This study has been prepared in response to the provision of funds in the Energy and Water Development Appropriations Act of 1998, under the authority of Section 216 of the 1970 Flood Control Act. The non-federal sponsor is the Texas Department of Transportation (TxDOT).

*Background:* The USACE, with input provided by the non-federal sponsor, TxDOT, and other Federal, State, and local resource agencies, prepared the GIWW BRFG/CRL DIFR-EIS. The GIWW BRFG/CRL study was recommended for feasibility level analysis after completion of a 2000 reconnaissance report entitled, (GIWW Modifications, Texas Section 905(b) Analysis, to determine federal interest. It encompassed two locations on the GIWW along the Texas Coast. The BRFG is located about 7 miles southwest of Freeport, TX, at the crossings of the Brazos River and the GIWW in Brazoria County. The CRL are located near Matagorda, TX, at the intersection of the Colorado River and the GIWW in Matagorda County.

In 1940, six 75-foot-wide gated structures, which were designed to control flows and silt into the GIWW at the Brazos and Colorado Rivers, were completed. The gates are closed during higher flow events, which generally carry more sediments, thus reducing shoaling and therefore dredging in the GIWW. Although the structural improvements on both rivers helped to reduce shoaling, they created their own set of delays to navigation. The narrow opening of the gated structure creates an impedance to the flow of water causing the water to swell and rise locally, which accelerates the water through the structure, creating hazardous navigation conditions. At a certain level of swell, or head differential, navigation is deemed too hazardous and the river crossing is closed to navigation. The 75-foot-wide opening also requires tows that are assembled to two barges wide to break down to single wide to traverse the structures. The narrow gate opening and crossing geometry create hazardous cross currents and eddies, which when coupled with winds and other drivers are the cause for numerous vessel impacts (allisions) to the structures.

These problems combine to create massive average delays to navigation, which became the single-most important economic driver and decision point for the study process. The study process includes an in-depth investigation of the existing practices and conditions for navigation as well as an extrapolation of these practices and conditions into the future to establish a baseline, or without-project condition, to which all improvements, measures/alternatives, can be measured.

*Recommended Plan:* The Recommended Plan includes structural measures for both the Brazos and Colorado River crossings. The Brazos River crossing portion of the plan will be in the existing channel alignment

with open channel on the west side and a gate structure (125 feet wide) on the east side. The open channel on the west side changes the river reactions and the overall sediment deposit distribution compared to the without-project condition. Modeling has determined that sediments will result in an increase of 8% in dredging volumes and costs above current levels. The current cost estimate for construction is approximately \$147.8 million including contingencies.

The Colorado River crossing portion of the plan will also be in the existing channel alignment and include gate removal of the riverside gate structures while retaining the outer gates, creating a wider (125 feet) channel and much longer forebay, reducing barge allisions with the guidewalls. For the Colorado crossing, full gated structures remain, resulting in minimal changes to sediment distribution patterns. The current cost estimate for construction is approximately \$36.9M including contingencies.

To quantitatively analyze and compare alternatives, monetized benefits of the alternatives were estimated using a stand-alone model developed and approved for use by this study. Benefits were compared to costs to develop benefit-cost ratios (BCR) and net benefits estimates. The system BCR for the Recommended Plan is 2.5.

*Project Impacts and Environmental Compliance:* The recommended plan would result in the loss of approximately 6.0 acres of wetlands at the BRFG and 0.7 acre of wetlands at the CRL, primarily due to excavation of temporary bypass channels. The USACE would provide onsite mitigation for the impacted wetlands in the form of wetland creation. The proposed project is not expected to adversely affect federally listed threatened or endangered species. A net increase in sedimentation would occur at the BRFG as a result of the Recommended Plan, and maintenance dredging would be needed to prevent or reduce shoaling due to natural sediment deposition processes.

Potential hazardous, toxic, and radioactive waste (HTRW) concerns may occur at the BRFG and CRL facilities, such as possible lead paint on the structures and potential for contaminants in sediment deposits in the areas. These areas will be tested as appropriate and, depending on the sediment sample results, there will be additional efforts for disposal, treatment, or additional health and safety requirements during construction.

The impact analysis determined there would be only minor impacts to soils

and waterbottoms, water quality, turbidity, protected wildlife species (*i.e.*, marine mammals, bald and golden eagles, and migratory birds), benthic organisms, commercial and recreational fisheries, essential fish habitat, coastal barrier resources, air quality, and noise. No impacts to floodplains and flood control, salinity levels, protected/managed lands, or historic and cultural resources are anticipated. No impacts to minority or low-income populations are expected, and the proposed project would provide a long-term economic benefit to the shipping industry by making travel through the BRFG and CRL more efficient. Coordination is ongoing with applicable Federal and State agencies regarding potential project impacts and environmental compliance.

*Solicitation of Comments:* The USACE is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Comments will be used in preparation of the Final Integrated Feasibility Report and Environmental Impact Statement.

*Document Availability:* Compact disc copies of the DIFR-EIS are available for viewing at the following libraries:

- Brazoria Library, 620 South Brooks, Brazoria, TX 77422
- Clute Branch Library, 215 North Shanks Street, Clute, TX 77531
- Freeport Library, 410 Brazosport Blvd., Freeport, TX 77541
- Lake Jackson Library, 250 Circle Way, Lake Jackson, TX 77566
- West Columbia Branch Library, 518 East Brazos, West Columbia, TX 77486
- Bay City Public Library, 1100 7th Street, Bay City, TX 77414
- Matagorda Branch Library, 800 Fisher Street, Matagorda, TX 77457

The document can also be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>.

**Arnold R. Newman,**

*Acting Director, Regional Planning and Environmental Center.*

[FR Doc. 2018-03852 Filed 2-23-18; 8:45 am]

**BILLING CODE 3720-58-P**

# **Summary Report**

## **Public Meeting for the Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS)**

### **Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks Feasibility Study**

#### **Public Meeting for the DIFR-EIS**

Tuesday, March 13, 2018

6:00 p.m. to 8:00 p.m.

West Columbia Civic Center

516 E. Brazos Ave. (State Highway 35)

West Columbia, Texas 77486

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Appendix G	Summary of Public Comments and Responses	
Appendix H	Written Comments Received During Public Meeting and Public Comment Period	

**Gulf Intracoastal Waterway  
Brazos River Floodgates and Colorado River Locks  
Public Meeting Summary for the  
Draft Integrated Feasibility Report and Environmental Impact Statement**

**1.0 Project Description**

The U.S. Army Corps of Engineers (USACE) Galveston District in collaboration with the non-Federal sponsor, the Texas Department of Transportation (TxDOT), prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates (BRFG) and Colorado River Locks (CRL).

The intent of the DIFR-EIS was to investigate and recommend solutions to improve safety and navigation efficiency on the GIWW at these two locations. The DIFR-EIS includes analysis of several structural and navigation alternatives to reduce traffic accidents and navigation delays and presents the Tentatively Selected Plan (TSP), which proposes structural modifications to the existing BRFG and CRL to improve safety and navigation along the GIWW. The DIFR-EIS also documents the existing conditions of environmental resources in and around areas considered for development, and potential impacts on those resources due to implementing the alternatives.

On February 26, 2018, a Notice of Availability for the DIFR-EIS was published in the Federal Register, as well as a notice for a public meeting on the DIFR-EIS. This report summarizes the public meeting that was held on March 13, 2018, including an overview of the meeting (Section 2.0) and a summary of public comments (Section 3.0).

**2.0 Public Meeting for the DIFR-EIS Overview**

**Meeting Date:** Tuesday, March 13, 2018

**Meeting Location:** West Columbia Civic Center  
516 E. Brazos Ave. (State Highway 35)  
West Columbia, Texas 77486

**Meeting Purpose:** To inform the public of the Tentatively Selected Plan (TSP) at the BRFG and CRL and provide the public an opportunity to comment on the DIFR-EIS.

**Meeting Format:** The meeting was held between 6:00 p.m. and 8:00 p.m. and included an open house followed by a PowerPoint presentation outlining information in the DIFR-EIS. Following the presentation, the meeting was opened for public comments. Seventeen individuals signed up to speak and voiced their comments. Opportunities to make written comments during the meeting were also provided.

A copy of the PowerPoint presentation is included in **Appendix A** of this report. A copy of the Court Reporter Transcript is included in **Appendix B** of this report.

**Attendance:** The Public Meeting was attended by approximately 58 people. Attendees included county (Brazoria County), city (West Columbia and Sweeny), port (Freeport), user (Gulf Intracoastal Canal Association [GICA]), industry (Dow Chemical, King Fabrication), and interest group (Friends of the San Bernard River [FOSBR]) representatives, as well as landowners and interested members of the public. Below is a summary of the people that attended the Public Meeting by category:

Members of the Public – 45  
USACE Personnel – 7  
TxDOT Personnel – 2  
TxDOT Team Consultants – 3  
Media – 1

Sign-in sheets are included in **Appendix C**. Note that not all members of the project team, including USACE and TxDOT staff and consultants, signed in on the sign-in sheets.

#### **Meeting Notice**

**Publications:** *Federal Register* Monday, February 26, 2018

#### **Media Releases, News**

##### **Articles, and Social**

**Media Posts:** *USACE Federal Register* Posted Monday, February 26, 2018  
*USACE News Release* Posted Tuesday, March 6, 2018  
*The Facts News Article* Posted, Monday, March 12, 2018  
*FOSBR Calendar Notice* Posted, Monday, March 12, 2018  
*The Facts News Article* Posted, Tuesday, March 13, 2018  
*The Facts News Article* Posted, Monday March 19, 2018

Copies of media, news articles, and social media posts are included in **Appendix D**.

**Meeting Summary:** The Public Meeting for the DIFR-EIS provided members of the public an overview of the TSP and DIFR-EIS in the form of a PowerPoint presentation which is included in **Appendix A**. Copies of an informational pamphlet and comment form distributed at the meeting are included in **Appendix E**. Photographs taken during the meeting are included in **Appendix F**. Additionally, sign-in sheets and written comments received at the meeting are included as **Attachment G**.

### **3.0 Summary of Public Input**

Forty-two comment cards and letters were received during the Public Meeting for the DIFR-EIS and the public comment period. The following matrix summarizes the comments and provides responses. To facilitate the compilation of comments and responses, comments from multiple letters that had a similar



theme were extracted and grouped into general categories. Copies of the written comment cards and letters received are included in **Appendix G**.

#### **4.0 Conclusion**

The USACE and TxDOT staff reviewed all public comments and/or questions received in response to the March 13, 2018 Public Meeting for the DIFR-EIS, and those submitted during the public comment period. The public comments received will be incorporated into the project record and will be considered as project development continues.

Appendix A  
PowerPoint Presentation

# DRAFT INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT

## GIWW Brazos River Floodgates and Colorado River Locks Systems Feasibility Study



Public Meeting  
Tuesday, March 13, 2018

West Columbia Civic Center  
516 E. Brazos Ave  
West Columbia, TX

*"The views, opinions and findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."*

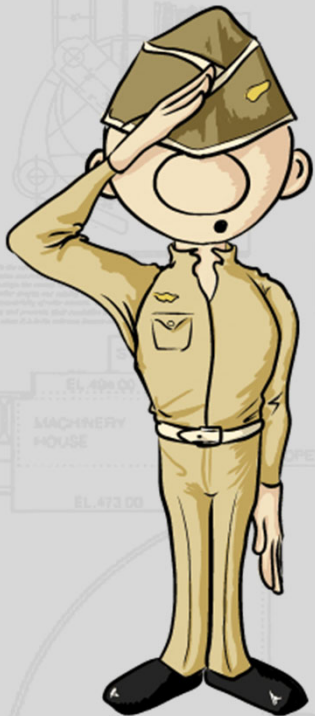


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# WELCOME

- Please sign in before you leave.
- The primary purpose of this public meeting is to:
  - Inform you of the Tentatively Selected Plan (TSP) at the Brazos River Floodgates and Colorado River Locks
  - Provide you an opportunity to comment on the TSP
- The Draft Integrated Feasibility Report and Environmental Impact Statement is available at:  
*<http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>*
- You will have the opportunity to provide written or verbal comments tonight. You may also submit written comments until **April 11, 2018**.



# PROJECT OVERVIEW

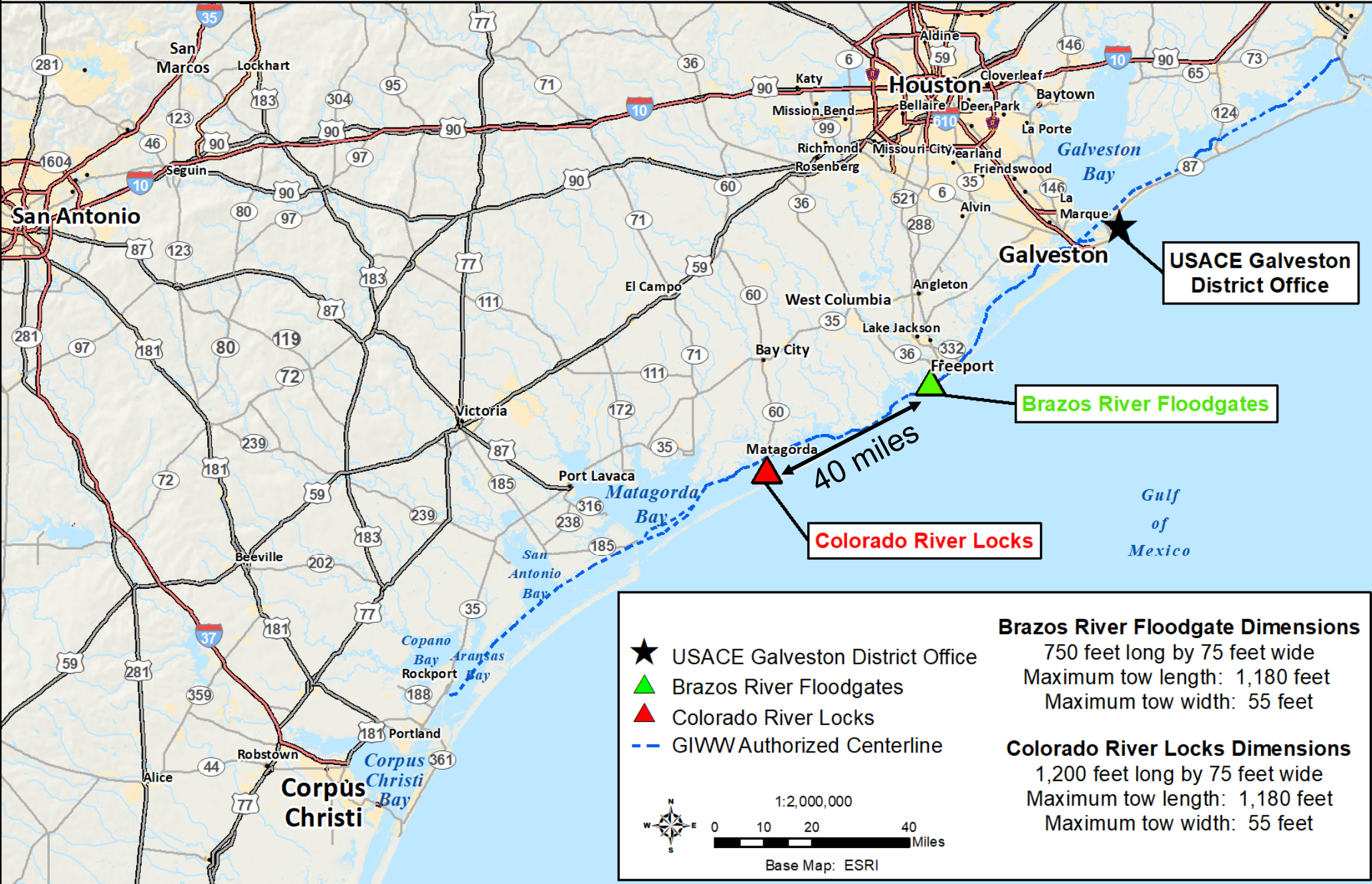
- Study to determine feasibility of undertaking modifications to the Brazos River Floodgates and Colorado River Locks river crossings.
- Study Authority: Flood Control Act of 1970 – Section 216
- Federal Sponsor: U.S. Army Corps of Engineers
- Non-Federal Partner: Texas Department of Transportation
- Current Study Efforts:
  - Concurrent review of Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS)
  - Respond to Comments and Refine the TSP
  - Prepare to Draft the Final IFR-EIS





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# PROJECT LOCATION



# BRAZOS RIVER FLOODGATES



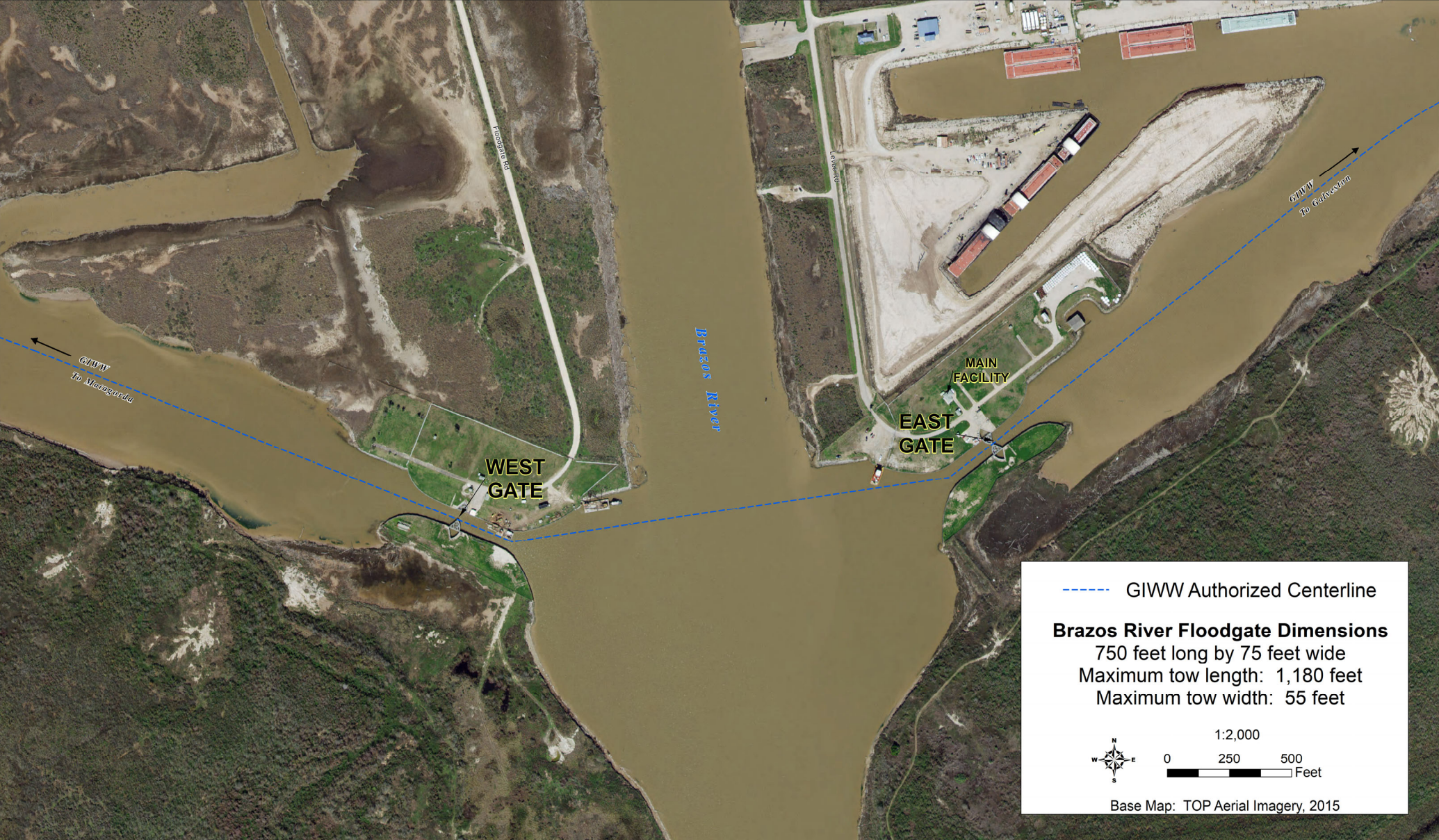
- Constructed in September 1943
- Dimensions: 750 feet long by 75 feet wide
- Max Tow Length: 1,180 feet  
Max Tow Width: 74 feet
- Prevent excessive tidal action and silting in the GIWW
- Average 38 tows/day transit





US Army Corps of Engineers®

# BRAZOS RIVER FLOODGATES



----- GIWW Authorized Centerline

**Brazos River Floodgate Dimensions**  
 750 feet long by 75 feet wide  
 Maximum tow length: 1,180 feet  
 Maximum tow width: 55 feet

1:2,000

0 250 500 Feet

Base Map: TOP Aerial Imagery, 2015





# COLORADO RIVER LOCKS



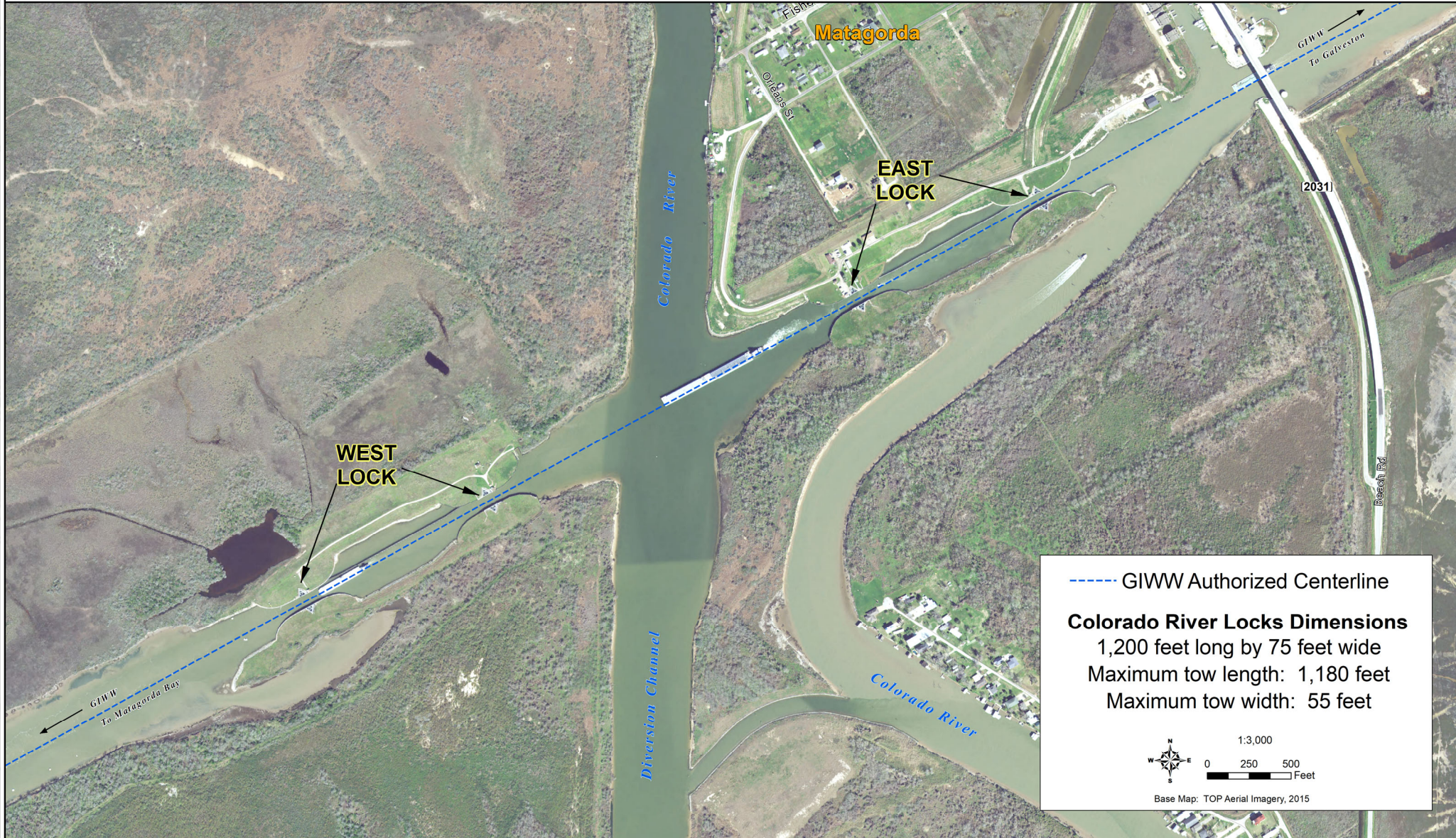
- Originally Constructed as Floodgates: September 1944
- Converted to 1<sup>st</sup> Navigation Lock in Texas: May 1954
- Dimensions: 1,200 feet long by 75 feet wide
- Max Tow Length: 1,180 feet Max Tow Width: 74 feet
- Prevent excessive tidal action and silting in the GIWW
- Average 38 tows/day transit





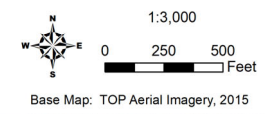
US Army Corps of Engineers®

# COLORADO RIVER LOCKS

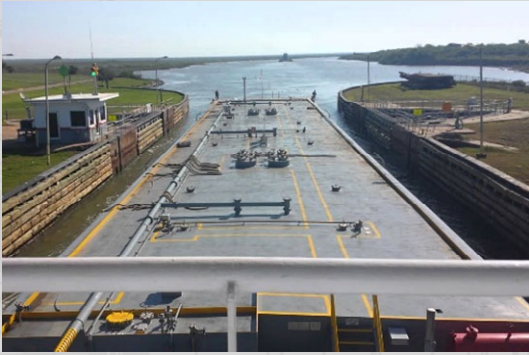


----- GIWW Authorized Centerline

**Colorado River Locks Dimensions**  
 1,200 feet long by 75 feet wide  
 Maximum tow length: 1,180 feet  
 Maximum tow width: 55 feet



# NEPA PURPOSE AND NEED



- **Purpose of Study:** To develop alternatives to determine the feasibility of undertaking modifications to the Brazos River Floodgates and Colorado River Locks river crossings.
- **Need for Action:** There is a need to reduce navigation impacts and costly waterborne traffic delays that are a result of permanently altered tow arrangements and barge sizes, changed transiting procedures, hazardous approaches and exits to structures, overall aging of infrastructure, narrow openings at structures, and complex hydraulic conditions.



# STUDY OPPORTUNITIES AND OBJECTIVES

## Study Opportunities

- Improve navigation efficiency through the system and on the GIWW by updating structures, channel alignments, and improving flow characteristics at the river crossings
- Reduce potential accidents that result from vessels striking guidewalls, thus reducing potential hazardous material spills into the waterway
- Improve navigation tracking systems and records management to help determine future trends and to allow for adjustments to accommodate traffic changes

## Study Objectives

- Reduce navigation delays, tripping, and allisions of vessels traveling through the structures
- Improve channel alignments and hydraulic flows for vessels approaching structures and traveling through crossings during high river periods
- Improve overall operations/functions of the floodgate/lock structures, which experience frequent mechanical failures due to age and outdated systems
- Manage sediment in the GIWW

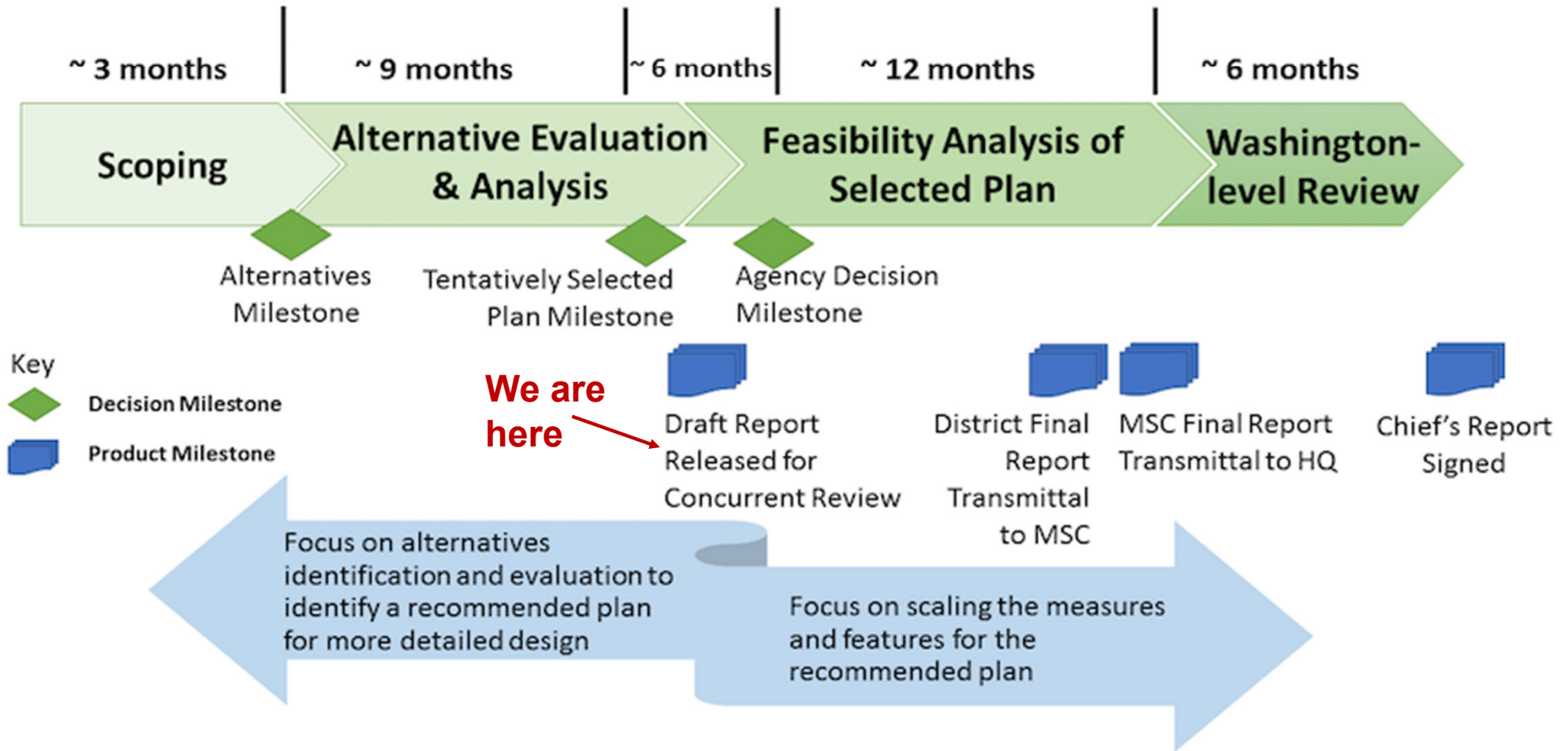


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# FEASIBILITY STUDY PROCESS

## The Feasibility Study Process: Key Decision & Product Milestones

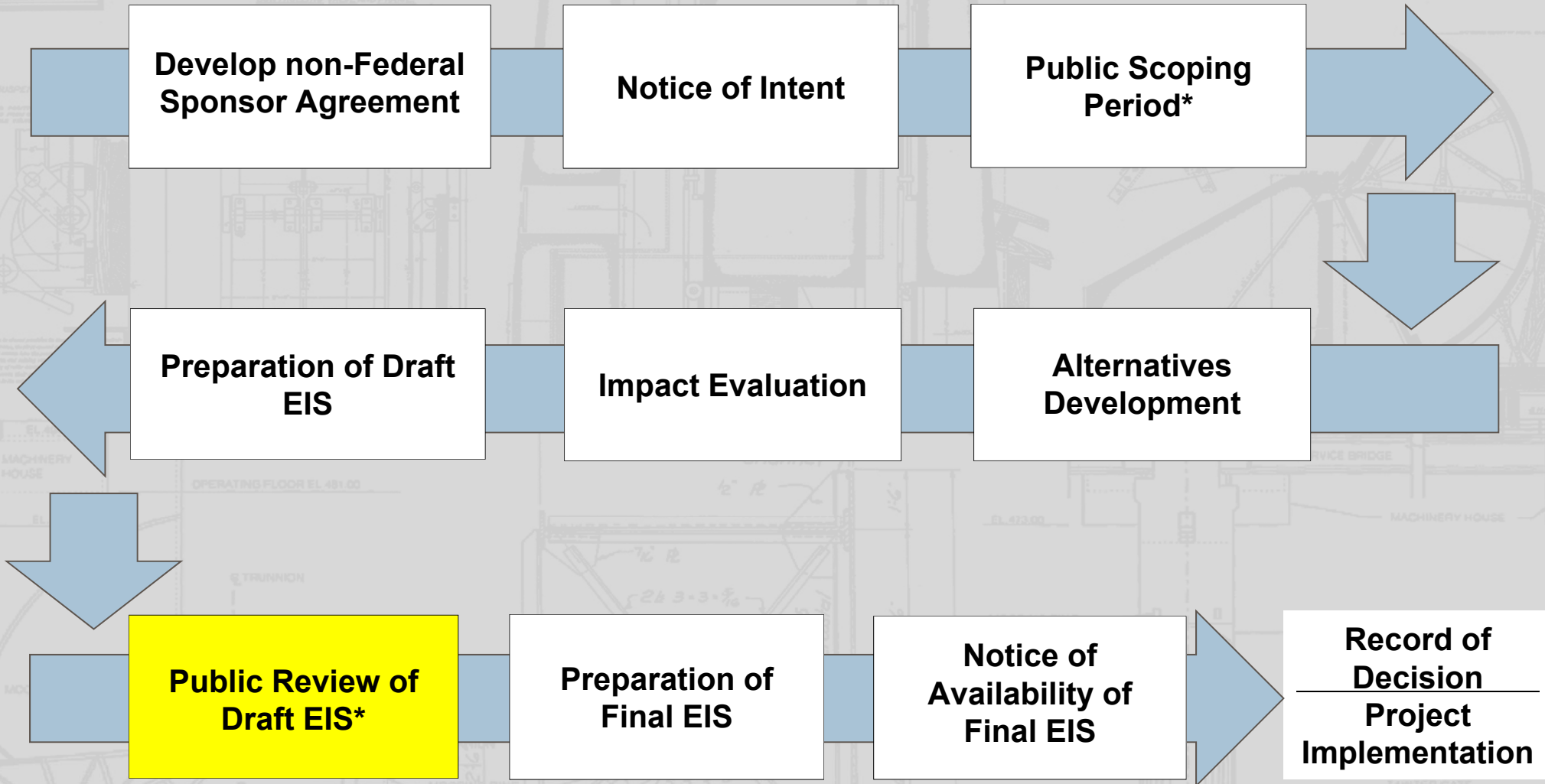


# INTEGRATION OF NEPA

- **The National Environmental Policy Act (NEPA) of 1969** established a process for evaluating environmental impacts as part of any major Federal action.
- **Key goals of NEPA are to:**
  - Assist Federal agency officials in making well-informed decisions
  - Ensure public involvement and consultation with other agencies
- **The Environmental Impact Statement (EIS)** documents the impacts of the project on the natural and human environment and documents compliance with other laws and regulations.
- **The EIS is integrated into the DIFR-EIS.**



# NEPA PROCESS



\* Opportunities for public comment



# ALTERNATIVES ANALYSIS

- 27 separate measures for modifying the BRFG and CRL were identified and screened first on ability to meet objectives and avoid constraints.
- Measures combined into 11 alternatives for both locations based on categories (structures, channel alignments, sediment/water management, navigation efficiency/safety improvements).
- Alternatives screened based on preliminary cost, environmental impact, economic benefit, and best professional judgement.
- Focused array of 6 alternatives, including the No-Action alternative, carried forward for detailed analysis.

Alternative	Location	Description
No Action	BRFG and CRL	Existing condition, no change in operation and maintenance of structures
Alt. 2	BRFG and CRL	Major rehab of existing floodgates/locks
Alt. 3	BRFG and CRL	<b>BRFG:</b> Remove existing gates. Install 125 feet minimum width gates each side of river, located further from river. Include temporary bypass channel. <b>CRL:</b> Remove existing structures for open channel. Includes bypass channel.
Alt. 4	BRFG and CRL	<b>BRFG:</b> Convert floodgates to locks. Retain existing gates and install additional 75 feet width gates to form the locks. <b>CRL:</b> Convert locks to floodgates. Remove existing gates and locks. New channel with 125 feet bottom minimum width, with new 125 feet minimum width gates.
Alt. 6	CRL	Rebuild locks at same location and on existing alignment with wider gates and channel. Remove existing gates, install new 125 feet minimum gates. Create 125 feet bottom width channel. Includes temporary bypass channel.
Alt. 9	BRFG	Construct new alignment north of the existing alignment which is along the existing barge mooring facility. There are four configurations: no gates, gate each side of river, gate each side of river with sediment/flow control features in the existing alignment, and locks each side of the river.



# SELECTION OF TSP

Analyses for the focused array of alternatives included:

## Hydraulic Analysis

(re-calibrated after Hurricane Harvey)

Velocities  
Sedimentation  
Salinity

## Economic Modeling

Economic Benefits  
Project Costs  
Risks and  
Uncertainties

## Environmental Impacts

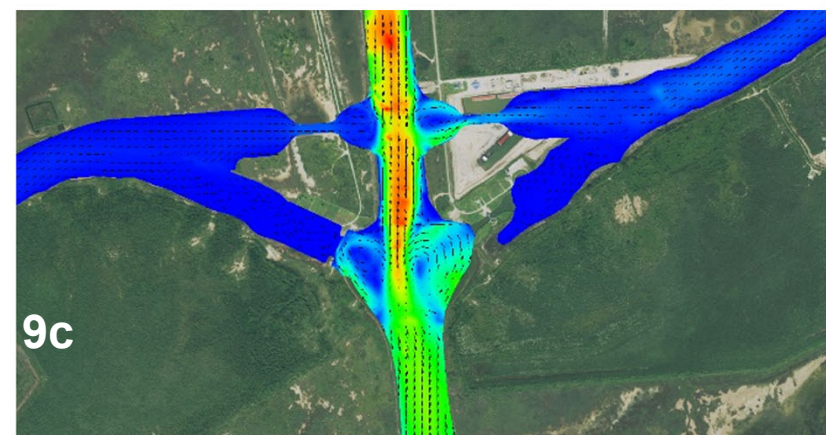
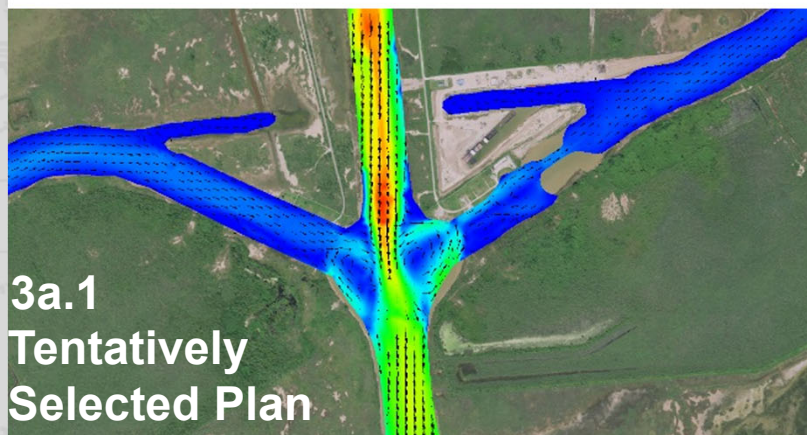
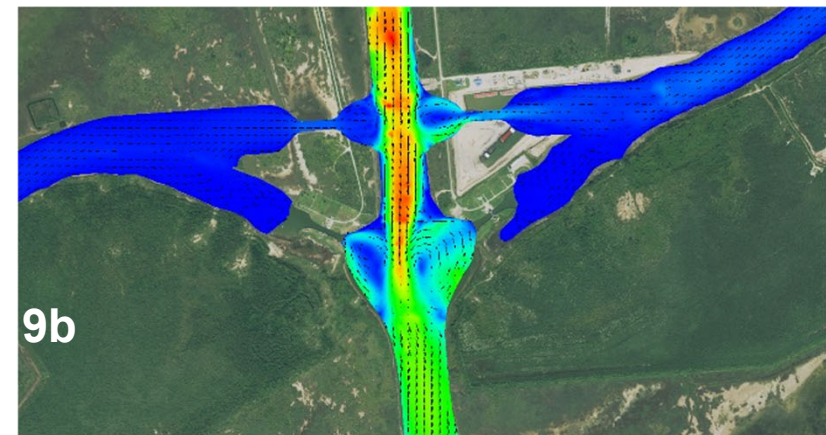
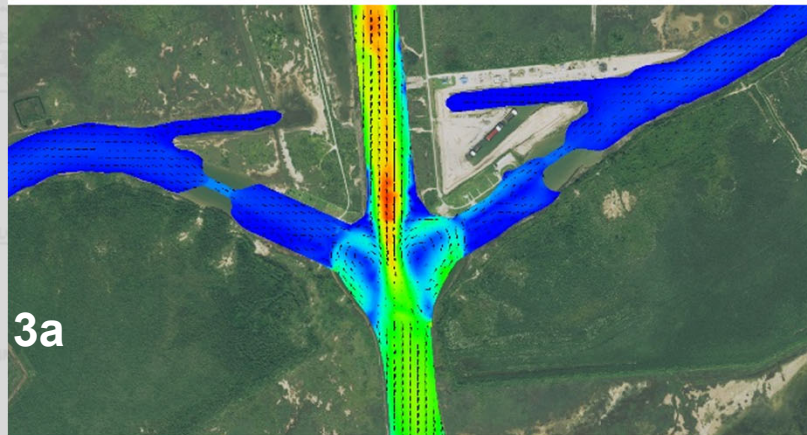
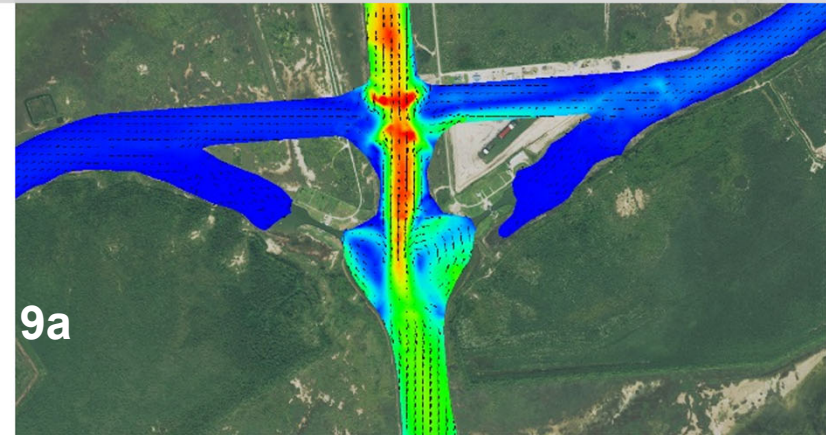
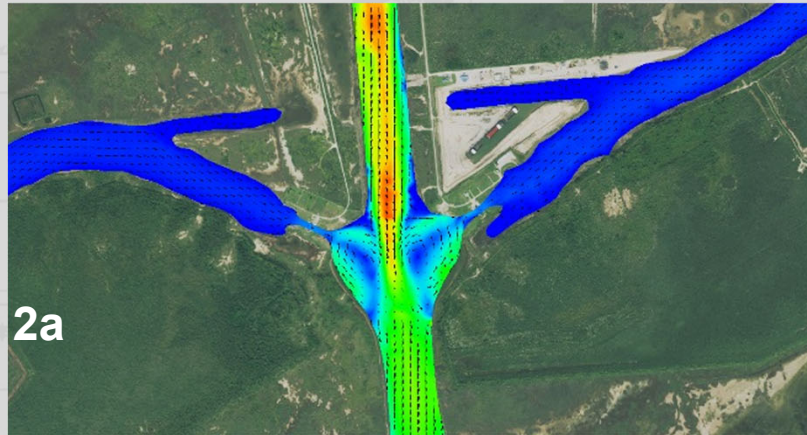
Natural Environment  
Human Environment

Selection of the TSP was based on economic benefits, project cost, and potential risks and uncertainties.



# HYDRAULIC MODEL VELOCITY AT BRAZOS RIVER

Comparison  
of peak flood  
velocity for  
all BRFG  
alternatives



Velocity [ft/s]



# HYDRAULIC MODEL SEDIMENTATION AT BRAZOS RIVER

Alternative	West GIWW	Brazos Basin	East GIWW	Freeport Channel	Brazos Delta	Freeport Offshore	Total in Zones Requiring Maintenance
Existing/2a	554,769	48,000	890,769	295,385	44,382,462	208,726	1,788,923
3a	493,846	59,077	902,769	316,615	44,332,615	190,864	1,772,307
	(-11%)	23%	1%	7%	0%	(-8%)	(-0.1%)
3a.1 TSP	<b>653,130</b>	<b>58,332</b>	<b>902,653</b>	<b>326,420</b>	<b>44,000,887</b>	<b>196,239</b>	<b>1,940,535</b>
	<b>18%</b>	<b>22%</b>	<b>1%</b>	<b>11%</b>	<b>(-1%)</b>	<b>(-6%)</b>	<b>8%</b>
9a	781,846	92,308	1,079,077	978,462	42,026,769	854,614	2,931,693
	41%	92%	21%	231%	(-5%)	309%	64%
9b	780,923	96,923	1,044,000	550,154	43,232,308	396,989	2,472,000
	41%	102%	17%	86%	(-3%)	90%	38%
9c	781,846	107,077	1,044,000	550,154	43,218,462	395,887	2,483,077
	41%	123%	17%	86%	(-3%)	90%	39%

Changes in sedimentation relative to Future Without Project condition



# HYDRAULIC MODEL AT COLORADO RIVER

- Compared to the Future Without Project condition, the TSP at the Colorado River (Alternative 4b.1) is nearly identical in sediment deposition.
- Compared to the Future Without Project condition, an open channel at the Colorado River would cause significant increases to sedimentation in the GIWW and significant decreases in sedimentation in deltas.



US Army Corps  
of Engineers.



# TSP AT BRAZOS RIVER FLOODGATES

## TENTATIVELY SELECTED PLAN (ALT. 3A.1) BRAZOS RIVER FLOODGATES (BRFG)

- REMOVE EXISTING 75-FT WIDE EAST AND WEST FLOOD GATES
- CONSTRUCT NEW 125-FT WIDE EAST FLOOD GATE AND OPEN CHANNEL ON WEST
- NEW EAST FLOOD GATES TO BE SET BACK FROM RIVER FOR LONGER APPROACH CHANNEL
- CONSTRUCT NEW WING WALLS AND GUIDE WALLS FOR EAST FLOOD GATES
- CONSTRUCT TEMPORARY BYPASS CHANNEL - OPEN CHANNEL FOR 2 YEARS
- BACKFILL OR PLUG TEMPORARY BYPASS CHANNEL WHEN CONSTRUCTION IS COMPLETE
- PRELIMINARY CONSTRUCTION COST ESTIMATE: \$147,818,000

**SHEET LEGEND**

PROPOSED NEW NAVIGATION CHANNEL

- - - - - BOTTOM EDGE OF CUT
- - - - - EXISTING CHANNEL CENTERLINE
- - - - - BOTTOM EDGE OF CUT

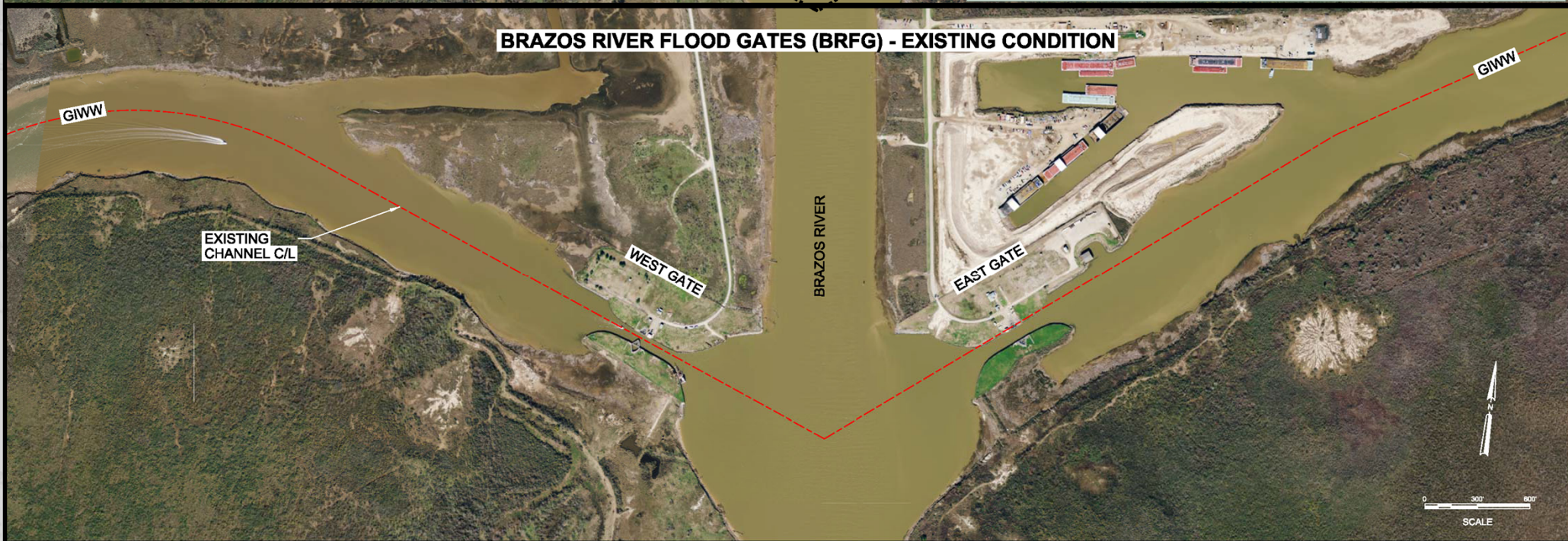
EXISTING NAVIGATION CHANNEL C/L

TEMPORARY BYPASS CHANNEL

PROPOSED FLOOD GATE

Temporary bypass channel will result in open channel throughout construction: Estimated 2 years

## BRAZOS RIVER FLOOD GATES (BRFG) - EXISTING CONDITION



# TSP AT COLORADO RIVER LOCKS

**SHEET LEGEND**

PROPOSED NEW NAVIGATION CHANNEL

- BOTTOM EDGE OF CUT
- CHANNEL CENTERLINE
- BOTTOM EDGE OF CUT

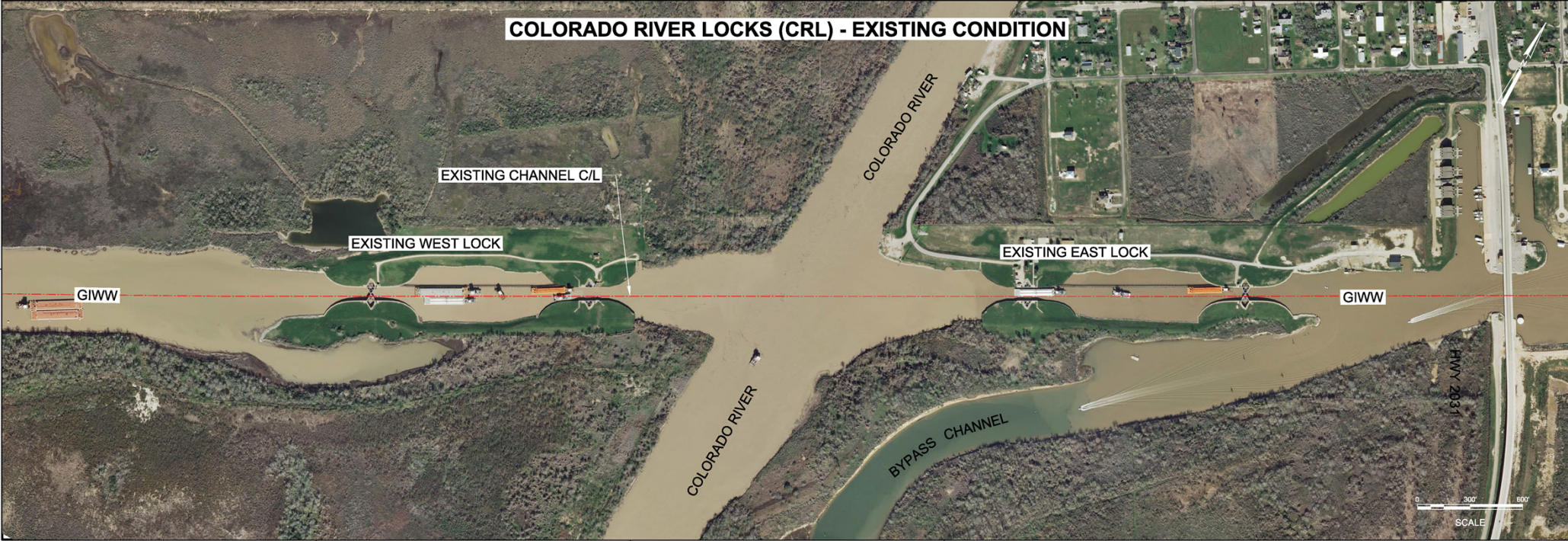
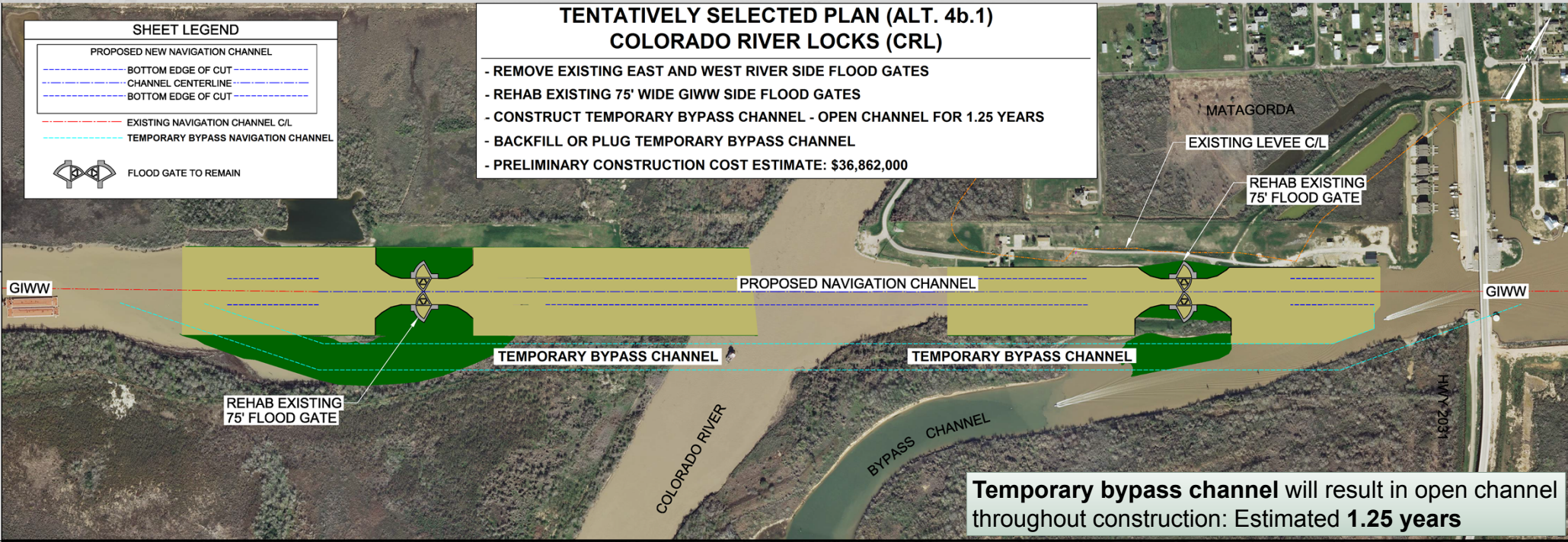
EXISTING NAVIGATION CHANNEL C/L

TEMPORARY BYPASS NAVIGATION CHANNEL

FLOOD GATE TO REMAIN

**TENTATIVELY SELECTED PLAN (ALT. 4b.1)  
COLORADO RIVER LOCKS (CRL)**

- REMOVE EXISTING EAST AND WEST RIVER SIDE FLOOD GATES
- REHAB EXISTING 75' WIDE GIWW SIDE FLOOD GATES
- CONSTRUCT TEMPORARY BYPASS CHANNEL - OPEN CHANNEL FOR 1.25 YEARS
- BACKFILL OR PLUG TEMPORARY BYPASS CHANNEL
- PRELIMINARY CONSTRUCTION COST ESTIMATE: \$36,862,000



# INFORMATION ON THE TSP

- Will reduce delays and accidents at both the Brazos River Floodgates and Colorado River Locks.
- Preliminary cost estimate for both facilities is \$184,680,000
  - \$147,818,000 at BRFG
  - \$36,862,000 at CRL
- Overall dredging volumes and costs would increase about 8% in the vicinity of the BRFG. Dredging changes at the CRL would be minor.
- Based on riverine modeling conducted during the study, water surface elevations along the San Bernard River would be similar to slightly reduced when compared to existing conditions.
- No significant environmental impacts are anticipated. Impacted wetlands would be restored and/or mitigated.
- Coordination with natural resource agencies is ongoing. The project will comply with all applicable environmental laws and regulations.



# OVERVIEW OF ENVIRONMENTAL IMPACTS

## Temporary Bypass Channel

- Mitigation required for disturbed areas adjacent to the structures
- Beneficial use of dredged material can be used to mitigate

## Historical Structures

- Structures are over 70 years old
- Continued O&M has changed some historical system functions
- Consultation with SHPO and Advisory Council ongoing

## Threatened and Endangered Species and Critical/Essential Habitat

- No adverse impacts are anticipated to known T&E Species. Consultation with USFWS, NMFS, and TPWD is ongoing.

## Climate Change and Sea Level Rise

- Sea level rise and impacts to wetland and mitigation sites were considered to be the same for the future with and without project conditions.



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# HOW CAN YOU PARTICIPATE?

- Review information on display boards and handouts
- Ask the USACE and TxDOT Representatives questions
- Review the Draft Integrated Feasibility Report and EIS:  
<http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>
- Provide comments on the project. **COMMENTS WILL BE ACCEPTED THROUGH APRIL 11, 2018**
  - Record verbal comments with Court Reporter today
  - Place written comment cards in the comment box today
  - Email comments: **BRFG\_CRL\_FeasibilityStudy@usace.army.mil**
  - Mail comments to:  
**District Engineer, Galveston District  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553**



US Army Corps  
of Engineers.



Appendix B  
Court Reporter Transcript

ORIGINAL

**In the Matter Of:**  
**BRAZOS RIVER FLOODGATE**

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**MEETING**  
*March 13, 2018*

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PUBLIC REVIEW OF DRAFT ENVIRONMENTAL IMPACT STUDY  
FOR  
GIWW BRAZOS RIVER FLOODGATES  
AND COLORADO RIVER LOCKS SYSTEMS  
FEASIBILITY STUDY

March 13, 2018

US Army Corps of Engineers, Galveston District

West Columbia Civic Center  
516 East Brazos Avenue, State Highway 35  
West Columbia, Texas 77486

Facilitator: Jerica Richardson

1 MS. RICHARDSON: So we're about to get  
2 started. If you could take your seats please.

3 My name is Jerica Richardson. I'm the plan  
4 formulator for this project.

5 I'm going to turn it over to Sheri. She's  
6 going to give a brief introduction.

7 We're going to go through some of the  
8 slides here, and then have some open comments and  
9 questions later on. So, Sheri?

10 MS. WILLEY: Yes. Good evening, everyone.  
11 My name is Sheri Willey, and I'm the Deputy Chief of  
12 Project Management for the Galveston District.

13 I want to welcome everybody to this NEPA  
14 public meeting for the Gulf Intercoastal Waterway  
15 Systems Feasibility Study for the Brazos River  
16 Floodgates and the Colorado River Locks.

17 The purpose of this study is to complete a  
18 feasibility-level navigational study focused on  
19 maximizing the efficiency on the -- of the, sorry, of  
20 the Brazos River floodgates and the Colorado River locks  
21 to the greatest extent possible.

22 The goal is to improve navigation  
23 efficiency by selecting a plan that is economically  
24 justified, and environmentally sound, to maintain the  
25 GIWW as a nationally significant waterway system while

1 continuing to provide water management capability,  
2 sediment control, and navigation safety on the GIWW.

3           During this meeting there will be a brief  
4 comment session after the presentation where you'll be  
5 allowed to express concerns or even ask questions of the  
6 planning process.

7           Additionally, there are comment cards.  
8 Most of you received one as you came in the door. If  
9 not, there is some back on the table, and, I believe,  
10 over on -- on that table where the box is.

11           So thank you very much for coming to the  
12 meeting. And I'll turn it over to Jerica, and she's  
13 going to do the presentation. Now, it's a very brief  
14 presentation.

15           Oh, also, we have a court reporter. So  
16 during your comment period, anything you say would be in  
17 the official record for the public meeting. Thank you.

18           MS. RICHARDSON: So Carl is our court  
19 reporter. So, "Hi, Carl."

20           All right. Just a few logistical things  
21 for those who are not familiar and have never been here.  
22 The restrooms are back through that open door right  
23 there. I think there is also a water fountain back  
24 there in case you need a break and get thirsty or  
25 what-not.

1                   And we're going to ask that you hold your  
2 questions or comments until after the presentation.  
3 It's really, really brief. So I don't expect to spend a  
4 whole lot of time on it.

5                   We do, also, have a lot of the PET members  
6 here. Danny and Dave, in particular, are going to get  
7 up and -- and help me through some of the more detailed  
8 discussions for the environmental, and the H and H  
9 analysis that was conducted for the study.

10                   So with that, we can go ahead and get  
11 started.

12                   This is the GIWW Brazos River Floodgates  
13 and Colorado River Locks Systems Feasibility Study.

14                   You have already signed in. So and -- and  
15 Sheri's kind of run you through the expectations for  
16 your comment cards, and what-not.

17                   So the draft of the greater report is  
18 currently out for public review. It is listed on that  
19 website. And, again, you will have opportunity to  
20 provide written comments, or -- or verbal comments this  
21 evening.

22                   Sheri went through much of this. But, it's  
23 a study to determine the feasibility of undertaking the  
24 modifications to the Brazos River floodgates and  
25 Colorado River lock river crossing.



1           The study authority for this project is the  
2 Flood Control Act of 1970, Section 216.

3           The federal sponsor is TxDOT -- or the  
4 nonfederal sponsor is TxDOT.

5           The Corps of Engineers is the agency --  
6 lead agency responsible for the project.

7           The current study efforts are the current  
8 review of the draft report -- which is ongoing right  
9 now -- and the Environmental Impact Statements.

10           We're going to respond to your comments as  
11 they come in, and then refine our draft PSP once we have  
12 all those comments from you. And then, we are going to  
13 prepare our final draft, our feasibility report, in our  
14 EIS.

15           This is just a general overview of the  
16 project area. It's roughly a 40-mile difference between  
17 the two locations. Here is the Galveston District.

18           A little background on the floodgates.  
19 They were constructed in September of 1943. They are  
20 roughly 750 feet long by 75 feet wide. They have  
21 specific tow lanes. For Brazos, it's eight --  
22 1180 feet. And maximum tow width is 74 feet. They were  
23 constructed to prevent excessive tidal action and  
24 silting within the GIWW channel.

25           And then, the average tows per day is about

1 thirty-eight daily transits.

2           And this is just a general overview of what  
3 the structure looks like right now. Here's your west  
4 gate here, and your east gate over there. And then, the  
5 crossing is here.

6           The other portion of this project covers  
7 the Colorado River locks.

8           It was constructed in September of 1954.  
9 It was converted to navigation locks in Texas in May of  
10 1954. The mention -- the dimensions of this particular  
11 lock is 1200 feet long by 75 feet wide. The tow length  
12 is roughly the same as what you would find on the  
13 Brazos. It was also constructed to prevent tidal action  
14 and silt -- silting within the GIWW.

15           And it, roughly, has about the same tows  
16 and daily transits per day.

17           And then, again, this is just a -- an  
18 overview of the -- the west lock and the east locks meet  
19 locations.

20           So, again, the purpose of this meeting is  
21 to address your NEPA comments or concerns.

22           So we developed an array of alternatives to  
23 determine the feasibility of undertaking any  
24 modifications to these particular structures and the  
25 river crossing.

1                   The need is there because there is the need  
2 to reduce the navigation impact. And it's causing  
3 waterborne traffic delays that are results of the  
4 permanently altered tow arrangements and barge sizes.  
5 And also change transiting procedure and hazardous  
6 approaches, particularly for Brazos. And then an exit  
7 to the structures.

8                   So overall age of the infrastructure is  
9 also a concern.

10                   And then the narrow openings within the  
11 channels, and the structures themselves, is all -- a  
12 major concern that we needed to address.

13                   And then, also the crossings themselves  
14 presented a hydrologic challenge for navigation crews.

15                   So these are -- are study opportunities,  
16 and objectives.

17                   When we started looking at the project, we  
18 had to kind of identify each of the particular concerns.  
19 We had an initial scoping meeting, gathered all the  
20 information that we could, and these were the,  
21 basically, the objectives here, that we identified.

22                   We wanted to reduce the navigation delays  
23 in tripping, and the allisions or accidents that are  
24 occurring out there traveling through the structures.

25                   We wanted to improve the channel

1 alignments. I know a bunch of you have expressed  
2 concerns with the approach for Brazos and that sharp  
3 alignment that's there. And also to address the  
4 hydrologic flows to the vessels approaching these  
5 structures and travelling through those crossings during  
6 high river periods.

7 We wanted to also improve the overall  
8 operations and functions of the floodgates and lock  
9 structures because they currently experience frequent  
10 mechanical failures because of their age. A lot of  
11 those pieces aren't constructed or made anymore. So we  
12 need to update that system.

13 And then, also, to continue to manage the  
14 sediments within the GIW [sic].

15 This here is just an overall view of the  
16 study process.

17 We have, roughly, 3 years to complete this  
18 study. We started this in, I believe, March of 2016.  
19 We are quickly approaching our third year early next  
20 year. So we're in that sort of phase right there where  
21 we have our draft report released for concurrent review.

22 Up next, we'll get into our decision  
23 milestone -- or ADM milestone. And then go into the  
24 final report, and any approvals that need to take place  
25 at the higher levels at headquarters.

1           As we mentioned before, this is a  
2 feasibility report. It's also integrated with NEPA. So  
3 it's also in -- environmental impact statement.

4           NEPA, the -- the NEPA Policy Act of 1969  
5 establishes a process for evaluating the environmental  
6 impacts of any part -- part of a major federal action.

7           The goals of NEPA are to assist federal  
8 agency officials in making well-informed decisions,  
9 ensure the public involvement in consultation with  
10 agencies, and also the public in general.

11           As I said, this is going to be a -- an EIS  
12 document, which will show the impacts of the project on  
13 a natural and also the human environment, and documents  
14 compliance with other laws and -- and regulations.

15           This is a general overview of the NEPA  
16 process.

17           As I state, last -- 2 years ago, we started  
18 the -- the scoping meetings. We've done analysis on the  
19 alternatives. We've screened them down to our TSP. And  
20 now we have our draft report out for -- for your review.

21           Next step, again, is to finalize the EIS.  
22 Get out a -- a notice of availability, and then a record  
23 of decision.

24           Here, we are getting into our NEPA  
25 analysis.

1                   We identified twenty-seven separate  
2 measures to modify the two structures. Of these  
3 measures, eleven were identified and combined into a  
4 specific alternatives for both locations.

5                   We kind of divided them into, you know, the  
6 structures themselves, what we could do -- address for  
7 the channel alignment, and then the sediment and water  
8 management, and then the improvement of navigation  
9 efficiencies and safety improvements.

10                   The alternatives were then screened, based  
11 our your primary costs, our environmental impacts, and  
12 economic benefits, and also best professional judgement  
13 of the team members.

14                   We screened these down to a focused array  
15 of six alternatives.

16                   We had a meeting with our headquarters  
17 offices. They agreed that these were appropriate  
18 alternatives that addressed at both locations.

19                   I won't go through each of those. They are  
20 addressed in the report. And they are also on the  
21 boards in the back as well.

22                   Once we got approval to -- to -- to further  
23 do analysis on the six alternatives, we had to do some  
24 additional H and H. Basically, that's the hydraulic --  
25 hydrologic analysis. We had to do some additional

1 economic modeling. And we also had to, kind of, consult  
2 and coordinate with other agencies to complete the  
3 environmental impacts.

4           For the H and H, just as we had gotten  
5 approval kind of -- to kind of move forward with the  
6 alternatives, Hurricane Harvey hit in August. And so we  
7 had to kind of recalibrate that specific model to  
8 determine what those impacts were. And it -- it looked  
9 at velocities of sedimentation and solidity throughout  
10 that system.

11           For the economic modeling, we looked at the  
12 economic benefits, the project costs, and then the risks  
13 and uncertainties.

14           And then for our environmental impact, we  
15 looked at the natural environment; any wildlife  
16 management areas that were out there; any downstream  
17 impacts to any fisheries or what-not; and then, also the  
18 human environment -- what that might do for traffic or  
19 for other entities out there for the -- for the entity  
20 folks.

21           We then, based off of the results of those  
22 different analyses, selected our TSP.

23           And it was based off the economic benefits,  
24 what the project costs, and a potential risk and  
25 uncertainty throughout the region.

1 I'm going to ask Dave to step up. He is  
2 our engineer. And -- to explain the hydrologic analysis  
3 that was completed for the study.

4 DAVE: Good evening, everybody.

5 So we ran a ADH modeling, which is adaptive  
6 hydraulic. It's a computer model that was run. We  
7 looked at velocities, stages. That information, really,  
8 was fed to the economics team to look at the impacts to  
9 the navigation.

10 We also looked at the salinity with these  
11 models, salinity and it's effects on the environment.

12 Then, of course, sedimentation, the impacts  
13 from sedimentation on the various alternatives; and, you  
14 know, what those increases or decreases are in the  
15 various portions of the GIWW, Freeport, et cetera.

16 So this just shows some screen shots of the  
17 various alternatives we looked at. And it shows the  
18 velocities. And this in -- input was provided to the  
19 economics team, and helped feed the benefits, and you --  
20 you know, accident -- not accidents -- but delays  
21 associated the with the crossings based off of these  
22 velocities, and head differentials that the models came  
23 up with.

24 All right. So this is a table showing from  
25 the hydraulic models. So sedimentation was another



1 component that we took out of the models. Sedimentation  
2 was important because, based of the alternative, there  
3 could be large increases of sedimentation along the  
4 GIWW.

5 So this shows more broadly the various  
6 alternatives, existing condition, shows what the  
7 existing rates are, quantities. I'll note that those  
8 quantities are based off of models.

9 We then validated it, refined it slightly,  
10 based off of the real-world dredging historical database  
11 that we have.

12 But you can see from the 3A.1, the TSP,  
13 there are some increases. And just the -- we'll  
14 describe the TSP in a little bit.

15 But that 3A.1 -- Technically Selected Plan,  
16 for those not familiar with our jargon -- that's an open  
17 channel on the west side of Brazos, and a 125 foot  
18 sector gate on the east side of Brazos.

19 That shows you have some increase of 18 --  
20 22 percent on the west GIWW and the Brazos basin, and  
21 smaller increases on the east GIWW in the Freeport  
22 harbor.

23 As Jerica mentioned, the -- the Harvey  
24 event gave us a real-world verification for the  
25 sedimentation that could be expected in a larger

1 dread -- larger river event.

2 We had taken surveys before-hand, and then  
3 we had surveys taken post event. We were able to  
4 calibrate the model.

5 For Colorado, we saw that in the  
6 higher-flow events, you have a larger contribution of  
7 sand to the sedimentation. So we reran our model based  
8 off that, because it didn't have that high-flow event  
9 before, and were able to revise that and get updated  
10 numbers.

11 The numbers that Brazos, from the Harvey  
12 event, were fairly similar to what the models look at.  
13 So there weren't major changes. But, again, a good  
14 opportunity to validate those models based off of that  
15 real-world event.

16 This just summarizes the hydraulic model of  
17 the Colorado River. And, basically, the TSP for  
18 Colorado right now is the removal of the riverside  
19 gates, and rehab of the GIWW side gates. Compared to  
20 the future without project conditions, the sedimentation  
21 deposition are nearly identical for that.

22 We also looked at open channel on the  
23 Colorado. And we will keep those same gates on the GIWW  
24 rehab. The sedimentation increases were too high; and  
25 therefore, we didn't have a good benefit-to-cost ration

1 with the yearly, determining that would have been  
2 involved with that open channel on the Colorado.

3           So this shows the TSP at the Brazos River.  
4 So essentially, you've now gotten a wide open 125-foot  
5 channel along the existing alignment. And from the  
6 navigation perspective, you have now taken your 56-foot  
7 gate -- 75-foot gate that's right here, and moved it  
8 back 1500 feet or so, and increase -- increased that  
9 opening. So you have a 125 foot opening now.

10           You will have a temporary bypass during the  
11 construction of it. That will be on the south end. And  
12 that will be closed off after construction is over. So  
13 the -- the impacts to navigation will be minimized by  
14 having that temporary bypass there.

15           And this is the Colorado TSP. Basically,  
16 the removal of the riverside gates; and then, major  
17 rehab of the existing 75-foot gates. Improvements to  
18 reduce allisions, collisions, whatever, on the guide  
19 walls.

20           You -- this opportunity gives you a larger  
21 fore bay to get through the river crossing to get  
22 through the existing gate structures.

23           All right. So -- so this just summarizes  
24 information on the TSP. Reduce delays and accidents at  
25 both structures, both river crossings.

1                   This summarizes the cost. The overall  
2 dredging increases -- and this dredging increase is  
3 included in the benefit-to-cost ratio. That's a yearly  
4 cost that was factored into the economics. That's an  
5 8 percent increase at Brazos.

6                   Colorado River, the dredging increases are  
7 negligible, based off of removing those riverside gates.

8                   You know, San Bernard was looked at in  
9 terms of upstream, what the elevation impacts would be.  
10 And they're similar in larger events. They're actually  
11 slightly reduced, is what the modeling showed.

12                   Danny can talk more about the environmental  
13 impacts. Danny?

14                   Danny: Go ahead and put the next slide, if  
15 you would.

16                   DAVE: All righty.

17                   MS. RICHARDSON: So this is Danny, Elm  
18 everybody.

19                   DANNY: My name is Danny Elm. I'm the  
20 environmental lead for the project.

21                   When we were looking at the environmental  
22 impacts, primarily, we were looking to see what those  
23 impacts were in the different environmental resources.  
24 Whether or not we were in compliance with the Endangered  
25 Species Act, the Clean Water Act, and cultural and

1 historic resources, and -- just to make sure that we  
2 were in compliance with that, and what those impacts  
3 were.

4           The -- the primary impacts to the project  
5 on environmental side stems more from the construction  
6 of the bypass channel that we would use for -- for  
7 traffic to operate while the facilities are under  
8 construction. That -- that bypass channel, the only  
9 really impacts it has environmental is the -- impacting  
10 wetlands.

11           About .7 acres of wetlands impacted on the  
12 Colorado River. About 6 acres of wetlands impacted on  
13 the Brazos River.

14           Those wetlands will be inundated. When we  
15 restore that bypass channel, we'll recreate those  
16 wetlands when we take out the -- the bypass channel,  
17 which [sic] the facilities are in operation.

18           The -- the historical, the floodgates  
19 themselves are old enough to be historically eligible  
20 for the National and Federal Register of Historic  
21 Places. The -- the Corps has determined that even  
22 thought they're eligible for listing, they're not  
23 significant to -- to be recognized as a historical  
24 resource.

25           And the coordination with the State

1 Historic Preservation Office is underway, and we're  
2 expecting them to make that same determination.

3 For endangered species, we have those in  
4 the area. But none will be affected by the -- by the  
5 project itself.

6 We're in coordination with the Fish and  
7 Wildlife Service, National Marine Fishery Service, and  
8 Texas Parks and Wildlife. I'm (inaudible) project, and  
9 preliminary coordination with Fish and Wildlife Service,  
10 we've got a determination that we're not likely to  
11 adversely impact those species.

12 And then, we also looked at the impacts on  
13 climate change, and sea level rise on the project. And  
14 for the Corps studies, we compared our future with  
15 projects to a future without projects. So sea level  
16 rise and climate change would be a constant between  
17 those two. So we -- we didn't account for a sea level  
18 rise or climate change since that's going to be  
19 occurring anyway.

20 Jerica?

21 MS. RICHARDSON: I think there is this  
22 slide.

23 DANNY: Oh, yeah. And then, the -- the --  
24 the whole purpose of this meeting is -- is us presenting  
25 the Draft Environmental Impact Statement Feasibility

1 Report. We've -- we've put that out on public a couple  
2 of weeks ago on the Galveston website, which is on -- on  
3 the slide.

4           You can also comment through written  
5 comments. We've got written comments over here at these  
6 two tables, as well as the entrance. You can provide us  
7 comments. You can e-mail comments to the  
8 BRFGCRLFeasibilityStudy@usace.army.mil. Or you can mail  
9 them directly to the district engineer, and we'll get  
10 those.

11           Those comments will be incorporated into  
12 the final environmental impact statement where we  
13 address the comments within that document. And I think  
14 that's it.

15           MS. RICHARDSON: Okay. That's it. So that  
16 wasn't too painful was it? All right.

17           At this time, we're going to -- I think we  
18 have a, roughly, fifteen or so people that -- that think  
19 that they want to provide some comments. And we'll go  
20 in order of -- of the names that are listed here.

21           We have roughly twenty some-odd minutes.  
22 So you can take about 2 minutes each, to ask your  
23 questions or make your comments.

24           Again, Carl here is recording -- recording  
25 your comments here. If you have them to write down,

1 please do so.

2                   And then, if the team is able to answer  
3 some of your comments or questions, then they are  
4 available to kind of speak and walk you through those.

5                   So with that, I have Roy and Jan Edwards.  
6 Are you in the room? All right.

7                   MS. EDWARDS: Okay.

8                   MS. RICHARDSON: Hello.

9                   MS. EDWARDS: Hello. We've been studying  
10 on the San Bernard for forever. And -- and we've been  
11 to every -- every meeting that we could for these --  
12 these meetings, because there's a relationship between  
13 what's happening at the mouth of the San Bernard and the  
14 west gate of the Brazos.

15                   And there's a Texas Parks and Wildlife  
16 study that states that when the mouth of the river is  
17 core -- San Bernard is closed, this is one of the places  
18 on the GIWW that river turns and goes -- goes east to  
19 the -- to the west gate of the Brazos.

20                   Okay. The evidence proved in that Texas  
21 Parks and Wildlife study that it -- it made the -- the  
22 GIWW wider there.

23                   So my concern is: When you take out these  
24 gates, okay, and you leave nothing there, what is to  
25 keep this -- this flow, that you say will be increased



1 in the Bernard if things stay the same, to take out that  
2 125 feet and wallow it out even further?

3 That just doesn't make sense to me.

4 And there's also -- it -- it proves that  
5 when the Bernard is opened, the water goes out the  
6 Bernard.

7 Harvey was a terrible thing. It opened the  
8 mouth of the Bernard, but not until it went down to the  
9 Brazos, and was running 3 feet higher than the Brazos  
10 was at flood stage.

11 They couldn't -- they opened the gates  
12 then, and the water -- it wasn't enough to get the water  
13 out. And the water went down the GIWW from the Bernard  
14 and cut Cedar Lake No. 4 open again. And then, it  
15 splashed it open at the Bernard. But once they opened  
16 the gate at the Brazos, they couldn't shut it.

17 So my concern is that there is a symbiotic  
18 relationship between these two rivers. And your study  
19 says: If things stay as they are.

20 Well, we're in the process of trying to get  
21 the mouth opened, and continue to get it -- keep it  
22 opened on the San Bernard. And when that happens, I --  
23 there needs to be some study done between the  
24 relationship, because it's -- it's going to change  
25 things.

1                   And the two are tied together, and there's  
2 no -- there's no where we're going to get around that  
3 now.

4                   And I've come to every meeting asking:  
5 "Y'all consider the Bernard," when you're doing this.

6                   And -- and it doesn't appear to me that  
7 you're considering what it's been doing. And there's  
8 tons of studies out there. I mean, I've read them.

9                   But, it's just like: There's blinders.  
10 And we have this one problem, let's solve this one  
11 problem.

12                   Well, you can't solve the problems on the  
13 west gate of the Brazos and leave out the Bernard.  
14 It's -- it's not going to happen.

15                   UNIDENTIFIED SPEAKER: Well put.

16                   MS. RICHARDSON: I'm sorry. Did someone --

17                   UNIDENTIFIED SPEAKER: I just said, "Well  
18 put." (Inaudible)

19                   MS. RICHARDSON: Okay. No. Thank you  
20 for -- for your comment.

21                   We're definitely looking at potentially  
22 addressing some of the concerns there as much as  
23 possible. We'll be looking at some additional H and H  
24 and refine our TSP based on that.

25                   And -- and, Danny, I think that she had

1 mentioned the -- the Texas Parks and Wildlife report.

2 Have you had a chance to --

3 MS. EDWARDS: If you haven't seen it --

4 MS. RICHARDSON: -- what the impacts might  
5 be to San Bernard at all, or --

6 DANNY: Yeah, I don't -- I haven't seen  
7 that report --

8 MS. EDWARDS: Okay. It's --

9 DANNY: -- but, we've -- we've been out  
10 there with Parks and Wildlife, and Fish and Wildlife  
11 service. We went out to the San Bernard.

12 MS. EDWARDS: It's -- it's -- it's all --  
13 on -- on the website we -- we retained, it's  
14 [www.sanbernardtx.com](http://www.sanbernardtx.com).

15 DANNY: Okay.

16 MS. EDWARDS: We have a link of all the  
17 studies that we could find that's associate to this  
18 process. And that -- that report is out there.

19 DANNY: Okay.

20 MS. EDWARDS: Okay? Or our link is out  
21 there.

22 MS. RICHARDSON: No, no. Thank you.  
23 That -- that's a very good comment. Something that  
24 we're -- we're considering.

25 MR. EDWARDS: Do I get a shot at it too?

1 MS. RICHARDSON: Okay.

2 MR. EDWARDS: People at the west gate, when  
3 the water was up in the Brazos, would shut the west gate  
4 to keep the water from going up Jones Lake, Jones Creek  
5 and into the City of Jones Creek.

6 MS. RICHARDSON: Uh-huh.

7 MR. EDWARDS: Have y'all looked at that in  
8 any way? And are you going to stabilize the banks?

9 MS. RICHARDSON: Dave, was that one of the  
10 considerations that we were looking at for modifying the  
11 channel that's out there?

12 DAVE: I -- I guess in terms of the -- the  
13 first part of the question, the San -- the Brazos was  
14 evaluated in high-flow conditions with the open channel  
15 and it's effects on the San Bernard River.

16 So that was -- that was evaluated, with --  
17 with that open channel, in -- in high flood --

18 MR. EDWARDS: Okay. Jones -- Jones Creek  
19 is before you get to the San Bernard.

20 Dave: Jones Creek itself, I don't believe,  
21 was specifically looked at in -- in the analysis.

22 In -- in terms of bank armoring, I -- I  
23 think before you had mentioned, you know, armoring the  
24 GIWW along the whole length.

25 In terms of this study, you know,

1 definitely what would be looked at is in -- as referred  
2 to feasibility and design -- is the physical footprint  
3 of the structure, and the work being done. We would  
4 evaluate the impacts to that area from a hydraulic  
5 prospective.

6 Further down the GIWW, I don't think that  
7 would be part of this study's focus at this point.

8 MS. RICHARDSON: All right. I have Tom --  
9 Tom: (Unintelligible).

10 MS. RICHARDSON: I'm not going to help you.  
11 Sorry.

12 TOM: Okay. Just two comments.

13 First is: Just adding to Roy and Jan's  
14 opposition to removal of the west gate on the Brazos.  
15 The San Bernard, in the feasibility study, one case  
16 mentioned is when the Barnard is flooding, the Brazos is  
17 not.

18 Many more days of the year, the Brazos is  
19 flowing and the Bernard is not. The mouth of the  
20 Bernard is -- is a salt water environment when it flows.  
21 It -- it, particularly with an open mouth, it -- it  
22 stops and then returns to being out of flush and returns  
23 to salt water environment.

24 But the removal of the west gate, and with  
25 the length of time that the Brazos floods -- the number

1 of days of year it's in flood -- we'll have a almost  
2 entirely fresh mouth of the San Bernard, and we'll  
3 change the ecosystem forever.

4 MS. RICHARDSON: Uh-huh.

5 TOM: The Brazos flood and the Bernard not  
6 in flood is not mentioned in the feasibility study  
7 whatsoever. And it's huge environmental impact to the  
8 mouth of the Bernard.

9 So I strongly oppose removal of the west  
10 gate and -- and not addressing that.

11 My second comment just has to do with  
12 the -- the whole approach to the problem at the Brazos  
13 gate.

14 As I see it, there -- there are two  
15 philosophy issues. One is the Bernard is in flood --

16 MS. RICHARDSON: Uh-huh.

17 TOM: -- and the -- I -- the GIWW flowing  
18 through the west gate into the Brazos creates a -- a  
19 head --

20 MS. RICHARDSON: Uh-huh.

21 TOM: -- for tows to try to -- to get  
22 through.

23 Nearly doubling the width of it and opening  
24 the mouth of the Bernard, both tend to address that --  
25 qualitatively, at least. I can't say, "quantitative," I

1 haven't read it.

2                   The other big issue is trying to make a --  
3 a sharp turn going perpendicular to the Brazos current.  
4 I see no case of the 9 cases, or sub-cases presented,  
5 that tries to impact the velocity of the diversion  
6 channel. And assuming that the velocity at that  
7 intersection of the diversion channel is dominated by  
8 upstream hydraulics --

9                   MS. RICHARDSON: Uh-huh.

10                  TOM: -- then, changes from the channel  
11 downstream would not affect flow rate. But there's  
12 tremendous opportunity to effect the velocity there.

13                   So increasing the cross-segment area from  
14 some point above the intersection of the diverted  
15 channel and the GIWW, from there to the remaining mile  
16 to the mouth would have, in my mind, a tremendous impact  
17 on the velocity there. Doubling the cross-sectional  
18 area could almost cut the velocity there in half.

19                   If that's not true, if -- if -- if  
20 increasing that cross-sectional area actually just  
21 dramatically increases the flow, then that should have  
22 been done years ago to alleviate the catastrophic floods  
23 we've had the last 2 years.

24                   So I would like to see some hydraulic and  
25 sedimentation study of directly operating on the

1 diversion channel, which is, you know, the major actor  
2 here, rather than just trying to change the pieces on  
3 either side of it.

4           And on -- on my first comment just to --  
5 to -- to support what Roy and Jan were saying. This is  
6 an aerial photo of the Brazos -- of the Colorado --  
7 excuse me, the San Bernard River crossing the  
8 Intercoastal Canal in 2012, just before the mouth  
9 closed. And it shows the muddy Brazos River water  
10 making a left turn and going out the San Bernard River  
11 cut.

12           MS. RICHARDSON: Thank you.

13           TOM: So you may have that one. I'll put  
14 it in my -- my e-mail comments as well.

15           But, you know, the -- the issue for the  
16 Bernard has historically been the mouth of the diversion  
17 channel delta impinging on it and closing it from the  
18 Gulf side.

19           With the tentatively selected plan, we will  
20 now be stilling the entire cut from the GIWW to the  
21 mouth of the San Bernard.

22           MS. RICHARDSON: Thank you for your  
23 comment. I have Dude Payne.

24           MR. PAYNE: Yes, ma'am. I'm County  
25 Commissioner, Precinct 1, Brazoria County.



1                   And I'm sure y'all are aware that 3 years  
2 ago Brazoria County hired Dannenbaum Engineering to look  
3 at Restore Act funding. And the two projects we have  
4 are opening the mouth of the San Bernard River, and  
5 Quintana.

6                   We spent over a half million dollars on  
7 those two projects getting ready to have those projects  
8 shovel-ready when the first bucket one million is ready.

9                   My concern is the same as what's being  
10 expressed here. We're going to open that mouth. And  
11 the county and the board, which the board's here, are  
12 going to be responsible for maintenance dredging on  
13 that. So if this is going to cause it to stilt up  
14 quicker, I want the Corps to take it over. If it's --  
15 this is going to cause that.

16                   Now, I -- I asked earlier if there was any  
17 studies to do -- to tell what's going to happen to the  
18 mouth of the San Bernard. Because, it's going to be  
19 opened. I can guarantee you that. We're going to get  
20 it opened.

21                   But if this is going to cause it to silt up  
22 faster, then we need to look at that. Because, we're --  
23 we're on the hook for maintenance dredging for the next  
24 25 years. We've signed on with the -- the port. And  
25 industry has expressed the desire to help us too.

1 So that's my concern of what is going on.

2 Thank you.

3 MS. RICHARDSON: Okay. I have Bob  
4 Bailiness (phonetic).

5 BOB: Yeah, I -- sort of what -- following  
6 up with what Dude said. Has there been any coordination  
7 at all between this project, and the project to open the  
8 San Bernard River?

9 MS. RICHARDSON: Is that project ongoing?  
10 Is it active? Or has it been completed?

11 MR. PAYNE: No, no. We're still trying to  
12 get the Restore Act funds.

13 BOB: We're still trying to --

14 MR. PAYNE: -- they're coming through TTP.

15 BOB: -- the Restore Act Funds. But the  
16 revised -- revised project plan, which was revised after  
17 Harvey, had to be submitted to Corps of Engineers.

18 MR. PAYNE: Engineering is complete.

19 UNIDENTIFIED SPEAKER: It's been submitted.

20 (Cross-talk)

21 BOB: It's been ongoing for 3 years, and --

22 UNIDENTIFIED SPEAKER: Your question is

23 very accurate.

24 Bob: You know, the San Bernard is closed  
25 because of the diversion of the Brazos River. Everybody

1 knows that. It's -- it's been pretty well proven, okay?

2 It seems to be that the Corps of Engineers  
3 wants to keep it closed by repeating that west gate.

4 That's all I have to say.

5 MS. RICHARDSON: Thank you, sir.

6 I have Sam --

7 SAM: Ebolt. I'll pass.

8 MS. RICHARDSON: All right. You'll pass?

9 Up next is Mike Pool.

10 MR. POOL: Yeah, Mike Pool.

11 MS. RICHARDSON: Pool? Okay.

12 MR. POOL: Couple of questions on the  
13 hydraulic study saying that the Freeport Channel is  
14 going to have a 11 percent increase in sediment.

15 I'd like to see more on that. Because, it  
16 just doesn't seem like, you know, choosing a plan that  
17 puts that much more additional silt into some place else  
18 that private industry is going to have to continually  
19 dredge just to keep opened.

20 Second comment is on Colorado River. If we  
21 have a 125 foot channel at Brazos, and we can run  
22 double-up tows through there and we're going to stay  
23 with a 75-foot gate at Colorado, just means we got to  
24 break everything apart again when we get over there.

25 So what's the point in even rehabbing it if

1 you don't gain anything?

2 ECONOMIST: Okay. I can answer that second  
3 question. I'm -- I was (inaudible) the economist on the  
4 study.

5 So the second part was regarding a 125 foot  
6 gate.

7 UNIDENTIFIED SPEAKER: That's a good idea.

8 ECONOMIST: Regarding the hundred --  
9 125-foot width gate at the Colorado, the biggest  
10 constraint there is in the benefits.

11 Because, just like you said, if we widen  
12 both sides, then we would have significantly more  
13 benefits from the traffic being able to utilize --  
14 utilize the 125-foot width gate on -- on both sides.  
15 The constraining factor there is really the cost.

16 Going to, I think, from our preliminary  
17 estimates, going from 75-foot width to 125-foot width at  
18 Colorado is going to nearly double the project costs.

19 And I think -- I think you had also said,  
20 like, what's the point, basically, of doing on one side  
21 and not the other.

22 So that, sort of, traffic-efficiency side  
23 of it is one part of the benefits that we're -- that  
24 we're showing. But another part of the benefits is just  
25 the reduction in accidents at Brazos. And there were

1 some reduction in accidents at Colorado as well.

2 But when you reduce those accidents, you  
3 slow all of the -- or you reduce all of the, sort of,  
4 queueing and all these other impacts that happen.

5 When you have an accident, then you have to  
6 close the project for some indeterminate period for  
7 repair. And you do that, sort of,  
8 10-hours-on/14-hour-off-thing.

9 What happens is, I mean, as a lot of people  
10 know -- I'm not trying to tell you stuff you already  
11 know -- but the traffic backs up. You build these long  
12 queues. And then that -- that increases. And that's  
13 sort of a cascading impact where it increase delay times  
14 for everybody, and rather than just right when that  
15 accident happens.

16 And so that -- that reduction is something  
17 we can get in just one project. And it's still a  
18 benefit we can claim.

19 And that -- I think, really, that, sort of,  
20 the story here: Is that we're able to claim that  
21 benefit for a relatively small amount of money by  
22 removing or altering existing projects.

23 Whereas grabbing that additional benefit of  
24 being able to be the doubled up barges and that sort of  
25 thing at Colorado would be great, but the -- it's --

1 it's -- isn't justifiable at a nearly double cost.

2                   So if there's a way to reduce that cost, or  
3 there's another way to, sort of, approach that, then  
4 we'd be all for it.

5                   But as of right now, it does have a high  
6 cost.

7                   And we are making model refinements, too,  
8 as we go.

9                   So there's other things. We've talked with  
10 some industry people about, I guess, some differences in  
11 current operations for empty barges, to two -- two barge  
12 estimates. And that's not currently in our model. So  
13 when we make that -- that adjustment, we'll see what --  
14 what happens to these preliminary numbers so far.

15                   MS. RICHARDSON: All right. We have Billy  
16 Burns.

17                   MR. BURNS: Yeah, my concern is with just  
18 the Brazos on the -- on the east side.

19                   I'm with the Brazos Pilots. And we're  
20 responsible for all the safe navigation (inaudible) to  
21 Freeport, and handle all the ships at DOW, for Phillips,  
22 Freeport LNG. And a lot of the same issues that the  
23 Saint Bernard people have, we're going to have on the  
24 Brazos.

25                   Right now, the Brazos is responsible for

1 90 percent of all the dredging for Freeport.

2           Back in the -- back in the eighties, there  
3 was no traffic coming through those gates. They stayed  
4 shut all the time.

5           We were on an eleven -- on a 7-year dredge  
6 cycle. Every 7 years, you have to dredge out the DOW  
7 docks, the Freeport LNG dock, and the Phillips dock.

8           Traffic increased, especially with the  
9 Formosa down there. Economic commerce increased. The  
10 barge traffic increased.

11           In the early nineties, we went to a 5-year  
12 dredge cycle. And the sole reason for that was that  
13 lock was opened. Every time that lock is opened, here  
14 comes a slug of sediment coming down that -- coming down  
15 that river.

16           Now, we're at a 3-year dredge cycle. It's  
17 gone from 7 years to 3 years. That's a lot of sediment  
18 coming through there. That's millions of dollars every  
19 3 years every one of those companies has got to dredge  
20 out.

21           At the same time, every time that east lock  
22 is opened, that's going down that San Bernard, floating  
23 up that San Bernard. And the more those gates are  
24 opened, the more sediment goes down there plugs up both  
25 ends.

1                   The other issue I have is, you've got  
2 75-foot gates on the east side of the Brazos right now.  
3 When the river is high, you -- every time you open that  
4 gate -- I'm handling ships down here. You got -- I'm  
5 sitting here with zero current.

6                   You open that gate, five miles from me, and  
7 I've got a slug of water coming at me at 3 knots with no  
8 warning. And it's going to hit the side of my ship, and  
9 it's going to move me along with no warning. I got to  
10 be ready for it all the time.

11                   Now, you're going to open that gate, it's  
12 going to be a 150 feet of water coming out with no  
13 warning. That means -- I mean, I'm already having  
14 trouble handling that with the -- with the current hits  
15 me out of nowhere already. And you're doubling that.

16                   Did anybody take any of that into  
17 consideration when they did this project?

18                   The only way you're going to fix this is a  
19 two-gate system on the east side and the west side with  
20 one gate shut all the time. That's the only way you're  
21 going to fix it. It's the only way you're going to  
22 improve it.

23                   MS. RICHARDSON: Thank you. Jim Starks.

24                   MR. STARKS: Thank you. I'm Jim Starks,  
25 with the Gulf Intercoastal Canal Association.



1           Our association has two hundred members  
2 that operate tugboats, towboats, and barge companies  
3 along the GIWW, and are -- are responsible for that  
4 traffic going through that east gate. And we're very  
5 pleased to see that gate opened up to one twenty-five,  
6 easing a little bit of the -- the angle on the -- the  
7 Brazos gates.

8           On -- on the Colorado locks though,  
9 however, we're not as pleased with the TSP. It's a lot  
10 less attractive to us than the -- than the positive  
11 changes at -- at Brazos.

12           The fact is that we would like to see that  
13 widened also to 125 feet.

14           We've talked to the study team a little bit  
15 about it. And we're willing to help and support finding  
16 more benefits, and tweaking your plan a lit bit more,  
17 and hopefully build that EC ratio. Thank you.

18           MS. RICHARDSON: Thank you. Bert Smith.

19           MR. SMITH: Among the questions that has  
20 already been asked, I've got the same one. It has a lot  
21 to do with the sediment transport.

22           And I've seen the mouth of the Brazos many  
23 times in flood stage. And it's a tremendous amount of  
24 sediment that just continues down the coastline, and  
25 plugs off the Saint Bernard.

1 My question is: Have you adequately  
2 modeled the sediment transport with this new proposed  
3 arrangement.

4 And second, what -- what are you going to  
5 do? Did it increase the sediment transport or decrease  
6 it? Does anyone here know the answer to that?

7 MS. RICHARDSON: He's asking what we did  
8 for sediment modeling and did it show a decrease or  
9 increase within that river basin.

10 DAVE: Within the -- you want to do that?

11 MR. MCLAUGHLIN: Pat McLaughlin.  
12 (Inaudible) engineers that did a study specifically  
13 regarding the Brazos, and so I can speak to the sediment  
14 transport patterns a little bit.

15 And we actually have that over there on  
16 that board if you want to talk later about in more  
17 detail about the specific patterns.

18 But what we saw for the tentatively  
19 selective plans on the west GIWW was an increase in  
20 sediment transport towards the San Bernard. But  
21 compared to our alternative plans, you know, it was  
22 slightly less excellent for one.

23 And then, similarly, on the east side,  
24 the -- the angle current alignment actually reduces some  
25 of the sediment transport that makes its way into the

1 GIWW.

2                   So if you were to look at, you know, gates  
3 on each side, with a straight alignment, you actually  
4 saw more sediment transport going into the west GIWW.

5                   MR. SMITH: Okay. Which -- which then goes  
6 in the Brazos and to the Gulf. Did you model --

7                   MR. MCLAUGHLIN: Yeah.

8                   MR. SMITH: -- what goes into the gulf?

9                   MR. MCLAUGHLIN: We did a model (inaudible)  
10 with the tidal force on the Gulf side as well. And we  
11 modeled that for all proposed alternatives.

12                   MR. SMITH: So the answer, then, is  
13 there -- well, is there a tremendous -- a lot more of  
14 sediment entering the Gulf that can work it's way down  
15 the coast?

16                   MR. MCLAUGHLIN: For the tentatively  
17 selected plan, there's actually slightly less sediment  
18 entering the Gulf.

19                   MR. SMITH: Okay. Now, all right. Well  
20 that -- that was the one of the questions.

21                   The other one, and I'm kind of hearing from  
22 the different folks in this room. I don't know how far  
23 you -- your model went. But looks like -- I hope you  
24 modeled the hydraulics all the way to the port of  
25 Freeport --

1 MR. MCLAUGHLIN: Correct.

2 MR. SMITH: -- as well as up the  
3 San Bernard. And you're shaking your head. Yes you  
4 have?

5 MR. MCLAUGHLIN: Correct. Yes, we did. We  
6 included the San Bernard River, the port of Freeport,  
7 and then east of that as well in the model as well as  
8 the (inaudible).

9 MR. SMITH: And so the results that you got  
10 from that -- I'm kind of hearing that maybe there might  
11 be some adverse impact on the port. And is -- is that  
12 the case?

13 MR. MCLAUGHLIN: There is a -- a potential  
14 for increased sedimentation in the port, which we  
15 included in our economic analysis, the cost of that.

16 MR. SMITH: Okay. So if that's the case  
17 now, the port's going to have more dredging to do,  
18 correct?

19 MR. MCLAUGHLIN: Yeah.

20 MR. SMITH: That's what I'm hearing.  
21 Now -- okay. Well, as long as that's clear. Because,  
22 I -- I just wanted to make sure that the scope of the  
23 hydraulic study was wide enough to -- for you-all to  
24 understand.

25 I think, like Jan said, there's a -- a real

1 relationship between the Bernard, the Brazos, and the  
2 port. And all that has to be modeled together.

3 MR. MCLAUGHLIN: Yeah, they're all included  
4 in the model.

5 MR. SMITH: So large scope? Okay.

6 MR. MCLAUGHLIN: Thank you.

7 MS. RICHARDSON: Thank you.

8 MR. SMITH: Can I ask a followup questions  
9 just for clarification? Did you model the -- did you do  
10 the hydraulic modeling with the San Bernard mouth opened  
11 but more close?

12 MR. MCLAUGHLIN: We modelled current  
13 conditions so (inaudible).

14 MR. SMITH: Just wanted to get that out of  
15 the way, closed.

16 MS. RICHARDSON: All right. Next person  
17 that we have on the list is: Gene West.

18 MR. WEST: I'm good.

19 MS. RICHARDSON: Your good?

20 MR. WEST: I've got my answers.

21 MS. RICHARDSON: All right. Thank you.

22 Chris Solis.

23 MR. SOLIS: So how are y'all today? So I'm  
24 Chris Solis. I'm with Dannenbaum Engineering. And I've  
25 done -- been responsible for the work that we've done

1 for Brazoria County on opening the mouth of the  
2 San Bernard River.

3           So just to reiterate what the commissioner  
4 said, we're in the process of -- of procuring a ten  
5 million dollar grant, -- Restore Act grant, okay, from  
6 the State, through the Federal Government, okay, opening  
7 up the mouth of the San Bernard River, okay?

8           Part of the requirements of that grant is  
9 you have to have a long-term operations and maintenance  
10 plan, okay? The County and the port of Freeport have  
11 come together in an MOU to do that, okay? And ensure  
12 that, at least for the next 25 years and beyond, okay?

13           Our modeling shows, you now, given the  
14 current conditions of these locks, the conditions that  
15 you guys all looked at with the gate removed, that, you  
16 know, you're still going to have to do maintenance  
17 dredging to keep the mouth of the river open, okay?

18           And the maintenance dredging is going to be  
19 on about a 3 to 5 years period, depending on what mother  
20 nature says and throws at you.

21           Removing the west gate, from what I saw on  
22 the sediment transfer, when you remove the west gate,  
23 you're increasing the amount of sediment going down the  
24 GIWW by 18 percent.

25           DAVE: Yes.

1 MR. SOLIS: Okay. So you're decreasing the  
2 amount that comes out of the Brazos, okay? Well, both  
3 of those have a factor on the siltation on the mouth of  
4 the river, okay?

5 Nick Crouse's report -- and I don't know if  
6 you looked at Nick's report for 2007. He's from  
7 (inaudible), okay? We can get you the report if you  
8 need it.

9 Nick Crouse did a great report on the  
10 dynamics of the mouth of the San Bernard River, and how  
11 that relates to the Brazos River flooding -- or Brazos  
12 River, okay?

13 So the mouth of San Bernard is subjected to  
14 sediment coming out of the Brazos that the tidal forces  
15 push up into the mouth of the river, okay?

16 With the removal of the west gate and the  
17 increased sediment, now you're going to have additional  
18 sediment coming down the GIWW to the Bernard, and coming  
19 in from the other direction, all right?

20 That's our guess. We didn't model it, but  
21 that's our guess, okay? I also notice that the surface  
22 elevation on the San Bernard is going to be slightly  
23 affected by this.

24 So when you reduce the surface elevation,  
25 you're reducing flow, right? So if the flow is

1 reducing, that means the sediment's not even -- the  
2 additional sediment is not even going to push down the  
3 river.

4 So now, what you're doing from an economic  
5 standpoint, which you probably need to look at, okay, is  
6 what is the impact on the county and the port of  
7 Freeport's budget for reoccurring dredging for the mouth  
8 of the San Bernard from a land perspective.

9 ECONOMIST: So what we -- and this is -- I  
10 might need to do some checking on this -- but I -- so  
11 what we did from an economic standpoint of all that  
12 increasing dredging and that 18 percent --

13 MR. SOLIS: For the Federal projects?

14 ECONOMIST: Right.

15 MR. SOLIS: Okay. This is --

16 DAVE: Okay. So what -- what you're  
17 referring, though, is -- is the mouth of the San Bernard  
18 from, basically, the GIWW to the Gulf --

19 MR. SOLIS: -- to the Gulf.

20 DAVE: -- dredging of that area.

21 And what we modeled in the hydraulic model  
22 was the existing condition, which is silted in. So  
23 it -- it was not evaluated with a --

24 MR. SOLIS: Yeah. Well, we're -- we're  
25 going to ask --



1                   DAVE: -- a dredge.

2                   MR. SOLIS: -- that you go back and look at  
3 that under the -- under the conditions that the mouth is  
4 opened, and what does the sediment pattern do with the  
5 west gate closed, and how does -- how does that affect,  
6 you know, our period for maintenance dredging.

7                   We'd also ask you to look at the economics  
8 of that. Because, it's a -- it's a indirect impact,  
9 okay, on the county and for Freeport that would need to  
10 be factored into that as those conditions change.

11                   From an environmental perspective, opening  
12 the mouth of the San Bernard River, as eloquently stated  
13 over here -- okay, the tidal prism, is what keeps that  
14 estuary as a salt water estuary, okay?

15                   Now, with the increased flows, do we  
16 convert from a salt water estuary to a fresh -- more  
17 fresh water estuary? Which affects, you know, the  
18 oyster generating health, et cetera.

19                   So those are things that we'd ask you to  
20 takes into consideration. Remodel, relook. Okay?

21                   Go back and evaluate your alternatives and  
22 do what's best, not just for the Brazos River  
23 floodgates, but for the whole region. Because, it's a  
24 complex region, okay, that should be looked at as a  
25 section, not one section. That's all.

1 MS. EDWARDS: Amen.

2 MR. EDWARDS: Amen.

3 MS. RICHARDSON: Thank you.

4 MR. SOLIS: Oh, I'll just add, if -- if it  
5 does come back that -- that you're going to increase the  
6 sediment in the San Bernard River, then we fully  
7 recommend that, as part of your study, okay, that you  
8 make the recommendation that the Corps take over the  
9 dredging from the GIWW to the -- to the Gulf of Mexico.  
10 Remove the county and port of Freeport of that  
11 maintenance responsibility. Thank you.

12 MS. RICHARDSON: Thank you. Vanessa Paler

13 MS. PALER: I've already had my questions  
14 answered.

15 MS. RICHARDSON: Thank you then.

16 Johnny -- I can't see. Read year last  
17 name. Johnny Glass?

18 UNIDENTIFIED MAN: Glicken.

19 MR. GLICK: Glick.

20 MS. RICHARDSON. I'm sorry.

21 MR. GLICK: I've got a question.

22 MS. RICHARDSON: Yes, sir.

23 Mr Glick: Okay. If we take out the gate  
24 and we get a river rise liked we had, water's coming  
25 down that river running 7 -- 8 miles-an-hour. It slows

1 down, it cuts it back to about a four or five when it  
2 comes time and gets down there to the mouth where the  
3 locks are -- or the floodgates.

4           If you take it out, these tows coming down  
5 the canal, they're going to be fighting this current,  
6 because that current's going to be going to the west.  
7 And what's this -- you know, you're going to be dumping  
8 all of this down. You know, they're not going to be  
9 able to push it.

10           Who's going to control the traffic? What  
11 are you going to do, stop them down past Cow Trap, down  
12 towards Sargent? You going to put in moorings for them  
13 to lay on so that they can lay there and wait for the  
14 river to stop running?

15           Now, what sets the gates, fellows, they can  
16 run in currents 3 or 4 miles-an-hour. But they can't  
17 buck it and push all the way pushing a current like that  
18 and make it across that river.

19           They can carry one barge, and get on across  
20 there and move these products that these companies need  
21 to move.

22           You need to take a look at putting a --  
23 setting another set of gates in, but make them wider.  
24 And make locks.

25           That Brazos got lots of water, and it's

1 muddy. 3 or 4 months out of year, it'll be running.

2 So -- you need to look close at that.

3 ECONOMIST: Okay. So, I guess, to your  
4 first point. So you were saying the -- regarding  
5 velocity, and --

6 MR. GLICK: The velocity is going to  
7 buildup in that riv -- in that canal --

8 ECONOMIST: Right.

9 MR. GLICK: -- between the Brazos and the  
10 San Bernard.

11 MS. EDWARDS: Yep.

12 MR. GLICK: It's going to build --

13 MS. EDWARDS: Yep.

14 MR. GLICK: -- because if you have no  
15 gates --

16 ECONOMIST: So right -- right now -- so,  
17 yeah, in the modeling we did account for -- for changes.  
18 So the hydraulic modeling --

19 MR. GLICK: So let me ask you a question.  
20 Did you look back down -- when y'all took  
21 the walls out at Brazos, changed them, back in '90 -- I  
22 believe that was '93.

23 Y'all dug a bypass around the west gate.  
24 Dug it 12-foot deep for towboats to push. Mouth of the  
25 San Bernard was opened. They could sail through there.

1 Boy, they could push your tows, two or three barges.

2 By the time they have got through  
3 rebuilding those walls, there was a channel through  
4 there 40-foot deep. The San Bernard was closed. They  
5 could not push it. They had to wait for tide change.

6 ECONOMIST: So -- so I guess -- if I'm  
7 understanding you right, I think the -- so if the issue  
8 is the velocity -- like I was saying, so we did model  
9 the changes in the flow rate, and velocity, and  
10 everything else. And I'm probably mangling terms here  
11 but --

12 MR. GLICK: But how far back did you go,  
13 see? That's what my question is.

14 UNIDENTIFIED SPEAKER: See, what -- what  
15 he's saying is: Y'all looked at models. Did y'all look  
16 at actual facts?

17 MR. GLICK: Did you look at the facts --  
18 (Multiple people speaking)

19 MR. GLICK: Back in the eighties, see this  
20 young man here, worked for me. And he come by outboard  
21 from Menard over to where had I shipyard, which is now  
22 Texas Barge and Boat. And we didn't have problems with  
23 the river running so hard back then.

24 But when y'all dug that bypass, y'all  
25 plugged up all of the channels that kept the San Bernard

1 opened. Y'all plugged it when y'all dug that bypass.  
2 Because the old canal, which dumps in just to the west  
3 of the San Bernard, plugged up. The sandbar that's all  
4 along Jones Lake, washed out.

5 MS. EDWARDS: Uh-huh.

6 MR. GLICK: It went out the Gulf. Y'all  
7 changed all of those -- countryside down there digging  
8 that bypass, and never corrected it.

9 And every since that bypass was plugged --  
10 which took a good dredge to do it by the way. Y'all had  
11 to pump lots of clay in there -- and the current has  
12 never fallen in that gate. It's always been there,  
13 because you cannot keep the San Bernard opened. Y'all  
14 won't be able to keep it opened, unless they go back and  
15 fix everything that they screwed up in the beginning.  
16 They got to fix it, you know, before y'all keep it open.  
17 It stayed open. There was a shrimp-ing fleet ran out of  
18 there.

19 But y'all need to go back and look at the  
20 study what was there and go back in the eighties.

21 MS. RICHARDSON: Thank you, sir. We will  
22 go back and look --

23 MR. STARKS: One -- one thing I want to add  
24 to what he's saying here about the velocity in that  
25 intercoastal going from east to west, did y'all study

1 how much more you're going to pay on fuel bucking that  
2 current from the west to the east?

3 UNIDENTIFIED SPEAKER: No. We haven't  
4 studied that.

5 MR. STARKS: You might want to study it,  
6 because you're going to buck current all the way from  
7 East Matagorda Bay to there. If we don't get the  
8 Bernard opened up to give it some relief there, you're  
9 going to buck that all the way from the Matagorda Bay to  
10 the Brazos River. Your cost in fuel is going to double.

11 UNIDENTIFIED SPEAKER: When you gain --  
12 lose mile-an-hour, speed, you know, you -- y'all do  
13 really need to look at it that.

14 UNIDENTIFIED SPEAKER: Fair enough.

15 UNIDENTIFIED SPEAKER: Well, here at west  
16 gate is going to be worse than that.

17 MR. GLICK: That's what I'm talking about.  
18 When you get rid of the west gate --

19 UNIDENTIFIED SPEAKER: Yep.

20 MR. GLICK: -- that velocity going through  
21 the Matagorda -- if the Brazos -- if the Barnard is not  
22 open, there's not another open place for that water to  
23 go.

24 UNIDENTIFIED SPEAKER: It's got to go  
25 somewhere.

1 MR. GLICK: So if the Brazos is on a 18 --  
2 just 18 inch rise there -- that water is going to run  
3 that direction. And they're going to fight. Them barge  
4 is going to run uphill all the way to the Brazos until  
5 you get over it.

6 MS. RICHARDSON: So, sir, let me  
7 (inaudible) you asking him to make sure that he studies  
8 what the fuel cost might be for pushing those barges --

9 MR. GLICK: Yeah, I think they need to  
10 study their fuel costs.

11 MS. RICHARDSON: All right. So --

12 MR. GLICK: That's what this is all about,  
13 is all about economics and what the towboat companies  
14 can do to increase their profits and everything. He's  
15 fixing to lose a little bit of his profit money right  
16 here.

17 UNIDENTIFIED SPEAKER: Is it better to sit  
18 awhile, or loose money traveling.

19 MS. RICHARDSON: So they will have a chance  
20 to look at those particular issues.

21 Right now, we are at Mike Goodson.

22 MR. GOODSON: Yeah. I'm sure -- sure --  
23 I'm sure somebody here had some -- something to say  
24 other than about the San Bernard, but it's not me.

25 So that -- that -- that -- that being said,



1 on any given day, the water from the San Bernard river  
2 flows to the south. And in a perfect situation, if the  
3 mouth of the river opens, a large percent of that water  
4 goes out of the mouth. Not all of it, by any means.  
5 There's a huge portion of it that, once it gets to the  
6 intercoastal, it turns to the east and goes out the west  
7 gate.

8                   When the mouth of the river is opened a  
9 hundred percent, there's still water going out the west  
10 gate, a substantial amount.

11                   Imagine a small gate. So now, we're going  
12 to increase it a hundred and four -- by a 125 feet. So  
13 we're going to reduce the flow coming out of the mouth  
14 going true a fully opened river by a substantial amount.  
15 I don't know how -- how much it is but, it's  
16 substantial, okay?

17                   The Corps of Engineers over the past years  
18 has made some detrimental -- detrimental decisions to  
19 the San Bernard River. At the time, they thought it was  
20 right. It -- it wasn't right. They tried to fix it.  
21 Sometimes it makes it worse. I'm not sure if the plan  
22 we're seeing today is going to make it better or make it  
23 worse.

24                   But, there's some good news in that.

25                   The project to open the mouth of the

1 San Bernard river by these two guys, our county  
2 commissioners, is going to come to fruition. It is  
3 going to happen. We all believe it's going to happen.

4 And it's going to happen way, way before  
5 y'all do anything with the locks, because y'all are 5 to  
6 10 years away.

7 We're 8 to 10 -- 12 months away. So the  
8 good part about it is -- thank you for the port  
9 (inaudible) for helping us with our dredging issues.

10 So the good part about it for the Corps, is  
11 you got lot's of time -- once we get the mouth of the  
12 river open -- to go back and do your modelling and see  
13 what really is going to happen with the mouth opened not  
14 closed. Because, you are years away from actually doing  
15 anything.

16 MR. GLICK: But there again, it ain't going  
17 to stay open, unless they fix what they messed up back  
18 in the eighties.

19 MR. GOODSON: I agree with that. But, at  
20 least, they'll be able to base your decision on current  
21 information with the mouth open. Because I guarantee  
22 you, the water that's going through a 75-foot gate is  
23 going to be totally different. It's going to have a  
24 different effect on the mouth of the river.

25 So the good thing for the Corps is: You're

1 going to have some time here to get it right.

2           You're, going to have two or three or four  
3 years till you can reevaluate what's really happening,  
4 because the mouth of the river will be opened. So  
5 you'll have some time to adjust your modeling. Because,  
6 I think if -- you're going to have to adjust it with the  
7 mouth open, because I think your numbers are going to be  
8 totally different.

9           MS. RICHARDSON: Thank -- thank you, Mike.  
10 I -- I -- and I would agree with you. We would have an  
11 opportunity, if this project gets funding and -- and  
12 gets approved for construction, or what-not, to do a  
13 potential reevaluation study if it's longer than a  
14 certain period.

15           So that is a good point right there. Thank  
16 you.

17           MS. EDWARDS: Can I add something to that,  
18 what he said? When they opened the mouth of the San  
19 Bernard in two thousand and nine, one of the things that  
20 they were supposed to do was keep the gates -- the west  
21 gate closed as much as possible and only open it to let  
22 traffic through.

23           That did not happen, because they took the  
24 gates out to clean them. And then, they stayed out for  
25 what two -- tree years --

1 UNIDENTIFIED SPEAKER: Two years.

2 MS. EDWARDS: -- two and a half years?

3 And -- and it ended up that the flow of the San Bernard  
4 did increase -- did -- it decreased. And it ended up  
5 that it silted up faster than they had anticipated. And  
6 it was due to that particular thing.

7 Now, that is proven. That is fact. You  
8 can go look it up. That happened --

9 MS. RICHARDSON: Thank you. Thank you,  
10 ma'am.

11 That -- that is our warning time. We have  
12 some other people here that have questions. Debbie  
13 Southerland.

14 MS. SOUTHERLAND: I have no further  
15 comments.

16 MS. RICHARDSON: Thank you. And David  
17 Linder.

18 MR. LINDER: Yes, ma'am. I'm David Linder,  
19 Brazoria County Commissioner. My colleague here is  
20 Mr. Payne. And most of my -- most of my comments have  
21 been said.

22 But I'm a pretty simple-minded guy, and I'm  
23 wondering why in the hell were these locks built in the  
24 first place, if they --

25 UNIDENTIFIED SPEAKER: Exactly.

1 MR. LINDER: -- wasn't important? I don't  
2 understand that.

3 I mean, they were built in the forties and  
4 they're going to be removed. And so that's -- that's  
5 one of my questions. Why, all of the sudden, they just  
6 were -- are -- are removed?

7 Another comment I'd like to make.

8 I don't know what this gentleman here is  
9 talking about, but I hope y'all address that. Because,  
10 apparently, he knows what he's talking about. And I --  
11 if that's a -- if that needs to be addressed, I hope  
12 we --

13 MR. GLICK: We grew up here. We watched --

14 MR. LINDER: -- whatever -- whatever you  
15 do, I hope you fix that problem.

16 MS. EDWARDS: He works on the gate.

17 MR. LINDER: Okay. Well, I -- that's a  
18 good man. He knows what he's talking about. He's wise  
19 like Commissioner Payne. Listen to him.

20 Another thing that bothers me about this,  
21 it seems like this process has moved -- been moved  
22 forward really quick, without --

23 I mean, the first I've heard about the --  
24 the locks and about what y'all are doing in just the  
25 last couple of weeks, and I -- and it just seems to me

1 that, I know you folks are aware that we had this  
2 huge -- this project going to open the mouth.

3           And it just seems to me it's been done  
4 totally in disregard to what we've been working of for  
5 3 years. And I -- I take that offensive, personally.  
6 Because we worked hard to do this. Everybody in this  
7 room. And all of our residents and -- and it's just --  
8 to me, it feels to me that it's just been -- been done  
9 in total disregard to that efforts that we've been  
10 doing.

11           And -- and I personally think if -- if  
12 there's any additional silting from your actions, that  
13 you folks need to step up and -- and take care of -- of  
14 the dredging, and not put that back on -- on the port of  
15 Freeport, or -- or us. So, I hope y'all consider that.

16           And that's all I have. I just -- I just  
17 want you to be -- and like I say, please -- please  
18 address that. And -- and the other comments that we've  
19 all had. Keep us in the loop. Thank you.

20           MS. RICHARDSON: Thank you, David.

21           One more question, and then we have to  
22 close our meeting out. So -- sir.

23           MR. EDWARDS: Two thousand eight, the mouth  
24 of the San Bernard River was closed. According to the  
25 Corps of Engineers, there were plus six hundred and

1 fifty reported accidents at the west gate.

2 In March of two thousand nine, we opened  
3 the mouth of the river as a relief valve per Assistant  
4 Secretary of the Army Woodley.

5 That dropped to twenty-four over the next  
6 9 months.

7 We have seen on your website that measures  
8 the canal, it's velocity, height, et cetera, twice a  
9 day, supposedly, heads of 6 foot above the Brazos River  
10 on the west side of the west gate. And we have seen  
11 currents going through that gate at 15 knots. A push  
12 boat does eight.

13 You got to look at that with the mouth  
14 opened. You got to remodel and take that type of thing  
15 into consideration.

16 MS. RICHARDSON: No. We -- we thank  
17 you-all for your comments.

18 We will strongly consider -- and -- and if  
19 we need to update any of our models, or -- or other  
20 analysis based on your comment, we will try to take the  
21 time to go ahead and do that.

22 I guess with that, we will conclude this  
23 meeting. And thank you all for coming out, and  
24 providing your comments. Thank you.

25 (The proceedings concluded at 7:34)

REPORTER'S CERTIFICATE

1  
2 THE STATE OF TEXAS )  
3 COUNTY OF HARRIS )  
4

5 I, Carl Richard Browning, Official Court Reporter in  
6 and for the State of Texas, do hereby certify that the above  
7 and foregoing contains a true and correct transcription of all  
8 portions of the proceedings requested to be included in the  
9 Reporter's Record, in the above proceeding, all of which were  
10 reported by me.

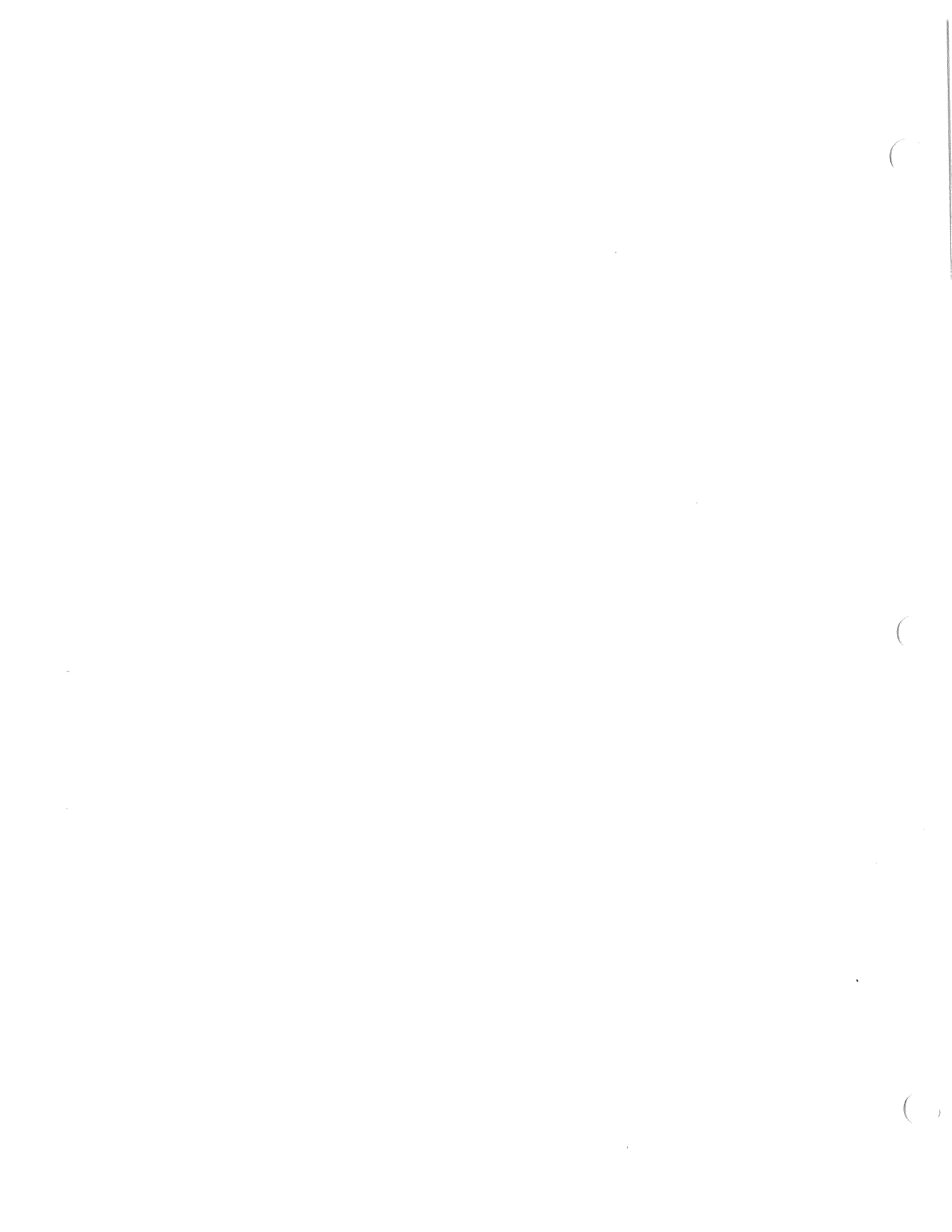
11 I further certify that this transcription of the  
12 proceedings truly and correctly reflects the exhibits, if any,  
13 offered by the respective parties.

14 WITNESS MY OFFICIAL HAND this the 19th day of March,  
15 2018.  
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19

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21 

22  
23 CARL RICHARD BROWNING, Texas CSR 4949  
24 Expiration Date: 12/31/19  
25 5200 Arboles St. Unite 3  
Houston, Texas 77035  
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Appendix C  
Sign-In Sheets





US Army Corps  
of Engineers ®

GIWW Brazos River Floodgates and  
Colorado River Locks Systems Feasibility Study

National Environmental Policy Act  
Public Meeting | March 13, 2018



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**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

**ROUTINE USES:** None. The "Blanket Routine Uses" set forth at the beginning of the Army's Compilations of Systems of Records Notices apply to this system.

**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments.

Failure to provide one's name may also result in one losing one's right to be recognized in the official record and/or the right to make a public comment during this meeting.



US Army Corps  
of Engineers ®

GIWW Brazos River Floodgates and  
Colorado River Locks Systems Feasibility Study

National Environmental Policy Act  
Public Meeting | March 13, 2018



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Roy + Jan Edwards Speak	162 Fisherman's Isle Brazoria, Texas 77422	979- 564-4332	jredwards@ brazoria.net.com	River advocate
SANDY WEEKS	110 REED RD WC TX 77486	979 345 3380	SWEENS@QUICK .COM	INTERESTED CITIZEN
Valry Maudlin	112 LINDA COL LN L.J. TX 77516	979 297-775	vmaudlin@courtsok.com	FOR
John Smircic	47 Cypress Rockwood, Tx.	979-236-4542	mmwi@SBCGLOBAL.NET	
LINDA & KEN WRIGHT	FRIENDS OF THE RIVER SIA	979-798-6629	LINDA@YELLOWSTONEBDAT.COM	
Dora Culbersow	332 Bennett	979 345 3545		
John W. DAMON II	P.O. Box 545 W. Columbia 77486	979 345 4155	NA	LAND OWNER Abst. 335 " 135
Sam Liebl	720 Main St. Ute, TX	979-237- 0151	Sam.Liebl@thefacts .com	

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Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Steve Stein	231 Schwader - Lake Jackson	979-265-1290	Steve1Stein@gmail	
ANTHONY MAREZP		979-824-3055		
Christine Thigpen	111 Loganberry #128 - Lake Jackson	(979) 388-5617	cthigpen537@gmail.com	
Y Vanessa Taylor	2909 CR 604 BZ TX	979-964-4402	—	F.O.R.
Nelson Taylor	" "	" "	—	—
Hayman Dengler	15 Lonesome Dove, Brazoria TX	979 236 94 29	hayman_72@hotmail.com	
Johnnie Glick	10101 Cr 318 Brazoria TX	979 824 1076	johnnieglick@yahoo.com	
S Johnnie Glick	10101 Cr 318 Brazoria TX 77422	979 236 6584		

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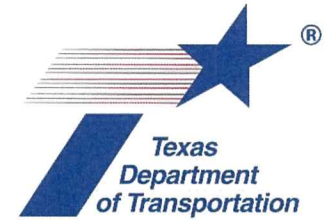
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Public Meeting | March 13, 2018



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
S Gene West	8900 C.R. 505 Brazoria			City of Suisun
S Dobbin Swinland	P.O. Box 487, West Columbia	979-345-3123	citymanager@westcolumbia.tx.org	City of West Columbia
Dan Harmon	118 E. RIVERSIDE, AUSTIN, TX 78704	512 486 934	dan.harmon@txdot.gov	TxDOT
S Mike Fewell	4501 Canyon Crest League City	281-974-9905	fewellmd@dow.com	Dow Chemical
Laurie & Kim Kincannon	1725 So. Columbia Dr W. Columbia, TX 77486	979-235-9439	ktkincannon@dow.com	City of West Columbia Dow
Nancy & Fred Kanter	2916 CR 51A BRAZORIA	979-482 6429	FredKan44@aol.com	FK
John Hoss	16 Red Oak Ct Lake Jackson	979-236-4635	Jhoss4portfreeport.com	Commissioner Port Freeport
Lou ROSSITTO	19300 W HARVEY RD. HOUSTON, TX 77073	281-799-2642	Lou@KINGFAB.COM	KING FAB.

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Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
S Mike Goodson	20044 CR 510	979 2994646	Mikegoodson38 @hotmail.	FOR John Bernard
Shane Pintle	4747 Co. Rd 652		osprey, Tx @ gmail.com	Port Freeport
S David Hinder	316 Jamison Dr Baileys Pt. TX	979 549-8785		County Commissioner
S Billy Burns	5080 Hwy 6 Missouri City	979-236-9625	burns@brazospilots.com	Pilot
S JIM STARK	PO Box 321649 Cocoa Beach FL 32932	901-450 3312	jstark@gicaonline.com	GICA
S BERT SMITH	5071 CR 631 BRAZORIA, TX 77422	979-299-3802	agsdev@earthlink.net	FOR PVT CITIZEN
VINCE ROSSITO	19300 W WARDY RD	281-684-3620	Vince@kingfab.com	FABRICATOR
S Chris Sarrese	3100 W ARABAMA Houston, TX 77098	713-527-6724	Chris.Sarrese@ Dannenbaum.com	Brazoria County Consultant

**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

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**US Army Corps  
of Engineers** ®

**GIWW Brazos River Floodgates and  
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Public Meeting | March 13, 2018**



Name	Address	Phone Number (optional)	Email Address (optional)	Affiliation
Susan Alford	8919 CR 505 Brazoria TX 77422			
Alma Spears	338 Bennett TX 77486			
Phyllis Saathoff	215 Rosemary Ln Lake Jackson TX 77566		saathoffreport@freepart.com	Part Freepart

**PRIVACY ACT STATEMENT**

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## Appendix D

### Media Releases, News Articles, and Social Media Posts

*Responses per Respondent:* 1.1, approximately.

*Annual Responses:* 94.

*Average Burden per Response:* 14.2 hours, approximately.

*Annual Response Burden Hours:* 1,334.

### Summary of Information Collection

The clause at DFARS 252.243–7002, Requests for Equitable Adjustment, is prescribed at DFARS 243.205–71 for use in solicitations and contracts, including solicitations and contracts using FAR part 12 procedures for the acquisition of commercial items that are estimated to exceed the simplified acquisition threshold. The clause requires contractors to certify that requests for equitable adjustment that exceed the simplified acquisition threshold are made in good faith and that the supporting data are accurate and complete. The clause also requires contractors to fully disclose all facts relevant to the requests for adjustment.

**Jennifer L. Hawes,**

*Regulatory Control Officer, Defense Acquisition Regulations System.*

[FR Doc. 2018–03856 Filed 2–23–18; 8:45 am]

**BILLING CODE 5001–06–P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Policy and Procedural Guidance for Processing Requests To Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to Section 408

**AGENCY:** U.S. Army Corps of Engineers, DoD.

**ACTION:** Extension of comment period.

**SUMMARY:** On February 5, 2018, the U.S. Army Corps of Engineers (USACE) published a notice announcing the availability of a draft Engineer Circular (EC), which is an agency policy document, for a 30-day comment period. This draft EC provides the proposed policies and procedures related to how USACE will process certain requests by others to alter a USACE civil works project pursuant to Section 14 of the Rivers and Harbors Act of 1899, as amended (more commonly referred to as Section 408). This notice announces the extension of the comment period by an additional 30 days. The extension of the comment period is a result of requests by entities to allow more time to submit their comments. The draft EC is available for review on the USACE Section 408 website (<http://www.usace.army.mil/>

*Missions/Civil-Works/Section408/*) and at <http://www.regulations.gov> reference docket number COE–2018–0003.

**DATES:** The public comment period that began on February 5, 2018 (83 FR 5075) is extended until April 6, 2018.

**ADDRESSES:** You may submit comments identified by docket number COE–2018–0003 by any of the following methods:

*Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

*Email:* [HQ-Section408@usace.army.mil](mailto:HQ-Section408@usace.army.mil) and include the docket number COE–2018–0003 or “EC 1165–2–220 Comments” in the subject line of the message.

*Mail:* Headquarters, U.S. Army Corps of Engineers, ATTN: CECW–CE/3E62, 441 G Street NW, Washington, DC 20314–1000.

*Hand Delivery/Courier:* Due to security requirements, we cannot receive comments by hand delivery or courier.

*Instructions:* Instructions for submitting comments are provided in the document published on February 5, 2018 (83 FR 5075). Consideration will be given to all comments received by April 6, 2018.

**FOR FURTHER INFORMATION CONTACT:** Ms. Tammy Conforti at 202–761–4649, email [HQ-Section408@usace.army.mil](mailto:HQ-Section408@usace.army.mil), or visit <http://www.usace.army.mil/Missions/Civil-Works/Section408/>.

**SUPPLEMENTARY INFORMATION:** In the February 5, 2018 issue of the **Federal Register** (83 FR 5075), the U.S. Army Corps of Engineers (USACE) published a notice announcing the availability of a draft Engineer Circular (EC), which is an agency policy document, for a 30-day comment period. This draft EC provides the proposed policies and procedures related to how USACE will process certain requests by others to alter a USACE civil works project pursuant to Section 14 of the Rivers and Harbors Act of 1899, as amended (more commonly referred to as Section 408). Several entities have requested an extension of the comment period. USACE finds that an extension of the comment period is warranted. Therefore, the comment period for the draft EC extended until April 6, 2018.

Dated: February 20, 2018.

**James C. Dalton,**

*Director of Civil Works.*

[FR Doc. 2018–03851 Filed 2–23–18; 8:45 am]

**BILLING CODE 3720–58–P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Availability of Draft Integrated Feasibility Report and Environmental Impact Statement for the Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Locks Systems Feasibility Study, Brazos and Matagorda Counties, TX

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

**ACTION:** Notice of availability.

**SUMMARY:** Pursuant to the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers, Galveston District (USACE) announces the release of the Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR–EIS) for the Recommended Plan of the Gulf Intracoastal Waterway (GIWW): Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) Systems Feasibility Study, Brazos and Matagorda Counties, TX. The DIFR–EIS documents the existing condition of environmental resources in and around areas considered for development, and potential impacts on those resources as a result of implementing the alternatives.

**DATES:** The Galveston District will hold a public meeting for the DIFR–EIS on March 13, 2018 from 6:00–8:00 p.m. USACE will accept written public comments on the DIFR–EIS from February 26, 2018 to April 11, 2018. Comments on the DIFR–EIS must be postmarked by April 11, 2018.

**ADDRESSES:** The public meeting will be held at the West Columbia Civic Center, 516 E. Brazos Ave. (State Highway 35), West Columbia, TX 77486. Comments may be submitted at the public meeting or mailed to the District Engineer, P.O. Box 1229, Galveston, TX 77553. Comments may also be sent to the District Engineer via email at [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil).

**FOR FURTHER INFORMATION CONTACT:** Galveston District Public Affairs Office at 409–766–3004 or [swgpao@usace.army.mil](mailto:swgpao@usace.army.mil).

**SUPPLEMENTARY INFORMATION:** Authority: The lead agency for this proposed action is USACE. This study has been prepared in response to the provision of funds in the Energy and Water Development Appropriations Act of 1998, under the authority of Section 216 of the 1970 Flood Control Act. The non-federal sponsor is the Texas Department of Transportation (TxDOT).



*Background:* The USACE, with input provided by the non-federal sponsor, TxDOT, and other Federal, State, and local resource agencies, prepared the GIWW BRFG/CRL DIFR-EIS. The GIWW BRFG/CRL study was recommended for feasibility level analysis after completion of a 2000 reconnaissance report entitled, (GIWW Modifications, Texas Section 905(b) Analysis, to determine federal interest. It encompassed two locations on the GIWW along the Texas Coast. The BRFG is located about 7 miles southwest of Freeport, TX, at the crossings of the Brazos River and the GIWW in Brazoria County. The CRL are located near Matagorda, TX, at the intersection of the Colorado River and the GIWW in Matagorda County.

In 1940, six 75-foot-wide gated structures, which were designed to control flows and silt into the GIWW at the Brazos and Colorado Rivers, were completed. The gates are closed during higher flow events, which generally carry more sediments, thus reducing shoaling and therefore dredging in the GIWW. Although the structural improvements on both rivers helped to reduce shoaling, they created their own set of delays to navigation. The narrow opening of the gated structure creates an impedance to the flow of water causing the water to swell and rise locally, which accelerates the water through the structure, creating hazardous navigation conditions. At a certain level of swell, or head differential, navigation is deemed too hazardous and the river crossing is closed to navigation. The 75-foot-wide opening also requires tows that are assembled to two barges wide to break down to single wide to traverse the structures. The narrow gate opening and crossing geometry create hazardous cross currents and eddies, which when coupled with winds and other drivers are the cause for numerous vessel impacts (allisions) to the structures.

These problems combine to create massive average delays to navigation, which became the single-most important economic driver and decision point for the study process. The study process includes an in-depth investigation of the existing practices and conditions for navigation as well as an extrapolation of these practices and conditions into the future to establish a baseline, or without-project condition, to which all improvements, measures/alternatives, can be measured.

*Recommended Plan:* The Recommended Plan includes structural measures for both the Brazos and Colorado River crossings. The Brazos River crossing portion of the plan will be in the existing channel alignment

with open channel on the west side and a gate structure (125 feet wide) on the east side. The open channel on the west side changes the river reactions and the overall sediment deposit distribution compared to the without-project condition. Modeling has determined that sediments will result in an increase of 8% in dredging volumes and costs above current levels. The current cost estimate for construction is approximately \$147.8 million including contingencies.

The Colorado River crossing portion of the plan will also be in the existing channel alignment and include gate removal of the riverside gate structures while retaining the outer gates, creating a wider (125 feet) channel and much longer forebay, reducing barge allisions with the guidewalls. For the Colorado crossing, full gated structures remain, resulting in minimal changes to sediment distribution patterns. The current cost estimate for construction is approximately \$36.9M including contingencies.

To quantitatively analyze and compare alternatives, monetized benefits of the alternatives were estimated using a stand-alone model developed and approved for use by this study. Benefits were compared to costs to develop benefit-cost ratios (BCR) and net benefits estimates. The system BCR for the Recommended Plan is 2.5.

*Project Impacts and Environmental Compliance:* The recommended plan would result in the loss of approximately 6.0 acres of wetlands at the BRFG and 0.7 acre of wetlands at the CRL, primarily due to excavation of temporary bypass channels. The USACE would provide onsite mitigation for the impacted wetlands in the form of wetland creation. The proposed project is not expected to adversely affect federally listed threatened or endangered species. A net increase in sedimentation would occur at the BRFG as a result of the Recommended Plan, and maintenance dredging would be needed to prevent or reduce shoaling due to natural sediment deposition processes.

Potential hazardous, toxic, and radioactive waste (HTRW) concerns may occur at the BRFG and CRL facilities, such as possible lead paint on the structures and potential for contaminants in sediment deposits in the areas. These areas will be tested as appropriate and, depending on the sediment sample results, there will be additional efforts for disposal, treatment, or additional health and safety requirements during construction.

The impact analysis determined there would be only minor impacts to soils

and waterbottoms, water quality, turbidity, protected wildlife species (*i.e.*, marine mammals, bald and golden eagles, and migratory birds), benthic organisms, commercial and recreational fisheries, essential fish habitat, coastal barrier resources, air quality, and noise. No impacts to floodplains and flood control, salinity levels, protected/managed lands, or historic and cultural resources are anticipated. No impacts to minority or low-income populations are expected, and the proposed project would provide a long-term economic benefit to the shipping industry by making travel through the BRFG and CRL more efficient. Coordination is ongoing with applicable Federal and State agencies regarding potential project impacts and environmental compliance.

*Solicitation of Comments:* The USACE is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Comments will be used in preparation of the Final Integrated Feasibility Report and Environmental Impact Statement.

*Document Availability:* Compact disc copies of the DIFR-EIS are available for viewing at the following libraries:

- Brazoria Library, 620 South Brooks, Brazoria, TX 77422
- Clute Branch Library, 215 North Shanks Street, Clute, TX 77531
- Freeport Library, 410 Brazosport Blvd., Freeport, TX 77541
- Lake Jackson Library, 250 Circle Way, Lake Jackson, TX 77566
- West Columbia Branch Library, 518 East Brazos, West Columbia, TX 77486
- Bay City Public Library, 1100 7th Street, Bay City, TX 77414
- Matagorda Branch Library, 800 Fisher Street, Matagorda, TX 77457

The document can also be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>.

**Arnold R. Newman,**

*Acting Director, Regional Planning and Environmental Center.*

[FR Doc. 2018-03852 Filed 2-23-18; 8:45 am]

**BILLING CODE 3720-58-P**

## USACE: DIFR-EIS for Gulf Intracoastal Waterway on the Table



Image source: USACE

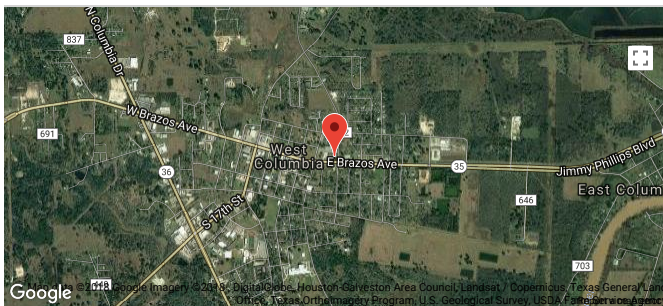
The U.S. Army Corps of Engineers, Galveston District, announces the release of the Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Recommended Plan of the Gulf Intracoastal Waterway (GIWW): Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) Systems Feasibility Study, Brazos and Matagorda Counties, TX.

The DIFR-EIS documents the existing condition of environmental resources in and around areas considered for development, and potential impacts on those resources as a result of implementing the alternatives.

This study has been prepared in response to the provision of funds in the Energy and Water Development Appropriations Act of 1998, under the authority of Section 216 of the 1970 Flood Control Act. The non-federal sponsor is the Texas Department of Transportation (TxDOT).

The Galveston District will hold a public meeting for the DIFR-EIS on March 13, 2018 from 6:00–8:00 p.m. at the West Columbia Civic Center, 516 E. Brazos Ave. (State Highway 35), West Columbia, TX.

USACE will accept written public comments on the DIFR-EIS until April 11, 2018.



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TOP STORY

## Corps of Engineers unveils floodgate plans

By SAM LIEBL [sam.liebl@thefacts.com](mailto:sam.liebl@thefacts.com) Mar 12, 2018

At a public meeting Tuesday the U.S. Army Corps of Engineers will outline a plan that aims to improve commerce and safety on the Gulf Intracoastal Waterway by remaking the floodgates that alter the flows of the Brazos and Colorado rivers.

The plan, described in a 183-page Brazos River Floodgates and Colorado River Locks Systems Feasibility Study that the Corps and the Texas Department of Transportation published in late February, calls for the demolition of the floodgate on the west side of the Brazos River and the construction of a new 125-foot gate on the east side of the river.

At the mouth of the Colorado River in Matagorda County, the plan calls for building new 125-foot floodgates on both sides of the river.

The study estimated the total cost of the improvements on the Brazos River would come to \$147.8 million and the cost of the work on the Colorado River would add up to \$36.9 million.

Once completed, the new floodgate systems would reduce shipping delays by 78 percent and bring a net benefit of about \$11 million each year to the Gulf Intracoastal Waterway, according to the study.

After tearing down the west Brazos River floodgate, the Corps of Engineers proposes to leave the west intersection of the river mouth and the Gulf Intracoastal Waterway open.

Since 1943, when floodgates were constructed on the east and west sides of the Brazos River, the Corps has attempted to control silt and flows from the river into the Intracoastal Waterway from the river. The opening of the west side would bring that era to an end, and allow the Brazos and San Bernard rivers to flow with less impediment in that location, according to the study.

Shipping barges would benefit from that opening because transit times would be reduced and the risk of collisions with west Brazos River floodgate structures would be eliminated if the west gate was removed, the study states.

The opening of the west side would also bring “some flood relief on the San Bernard River,” according to the Corps analysis.

The downside of the open west side, however, would be increased sedimentation of the Gulf Intracoastal Waterway. The study estimates an 8 percent increase in dredging volumes and costs.

The release of the study in February comes 18 years after the Army Corps of Engineers began assessing the feasibility of major modifications to Texas’ portion of the Gulf Intracoastal Waterway, which stretches from the Florida Panhandle to Brownsville.

The agency looked at changes to the Brazos River and Colorado River and in 2004 modeled potential changes, but, according to the study, the results of that effort “languished for a number of years” until the Texas transportation department provided the impetus to continue analysis in 2014.

In the meantime, the condition of the Brazos River Floodgates has continued to deteriorate, a problem the study details. Vessels collide with the floodgates on average 65 times each year, and that has led to “8 feet deep scour holes along the steel sheet pile guide walls” and the “guide wall timber bumpers and steel tangent plates are missing or damaged from constant barge impact.”

The study also outlines the degraded condition of the Brazos River Floodgates: no dependable backup power, leaking buildings and “panel boards that have deteriorated to the point of exposed wiring.”

Although the existing infrastructure on the two rivers is “not conducive to safe barge navigation,” approximately 21 million tons of freight pass through the floodgates each year.

The study can be downloaded online at [www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/](http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/).

Hard copies of the study are also available at public libraries in Brazoria, Lake Jackson, Clute, Freeport and West Columbia.

A 45-day public comment period on the study began Feb. 26 and runs through April 11. Comments can be sent to [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil) or mailed to the U.S. Army Corps of Engineers office in Galveston, P.O. Box 1229, Galveston, Texas 77553.

Sam Liebl is a reporter at The Facts. Contact him at 979-237-0152.

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## Just The Facts

What: Public meeting on Brazos River and Colorado River floodgate study

Where: West Columbia Civic Center, 516 E. Brazos Avenue.

When: 6 p.m.

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samliebl



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**Monday, March 12, 2018**

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**USACE Public Meeting**

**Location:** West Columbia Civic Center, 516 E. Brazos Ave, West Columbia, TX

**Start Time:** 6pm to 8pm

**Description:** The U.S. Army Corps of Engineers (USACE) Galveston District has announced a public meeting regarding proposed projects of modifications to the existing Brazos River Floodgates and Colorado River Locks to improve navigation along the Gulf Intracoastal Waterway. A brief overview of the proposed project, an opportunity to view maps, presentation boards, ask questions and provide written comments about the project will be provided. A public comment period on the project starts Mon Feb 26th through Wed Apr 11th.

[http://thefacts.com/opinion/article\\_a4bd9c1d-e391-5aa8-b26d-262a1149ea2a.html](http://thefacts.com/opinion/article_a4bd9c1d-e391-5aa8-b26d-262a1149ea2a.html)

## OUR VIEWPOINT: Key meeting set tonight on new floodgates project

DALE DIMITRI Mar 13, 2018

The U.S. Army Corps of Engineers will host an important public hearing this evening where people can learn about — and offer input about — a \$184.7 million plan to build new floodgates to improve commerce and safety on the Gulf Intracoastal Waterway.

During the 6 p.m. hearing at the West Columbia Civic Center, 516 E. Brazos Ave., the Corps will detail its 183-page Brazos River Floodgates and Colorado River Locks Systems Feasibility Study. The plan calls for tearing down the floodgate on the west side of the Brazos River, then building a new 125-foot gate on the east side. That project is expected to cost \$147.8 million.

But that's not all. The Corps' plan also calls for building new 125-foot floodgates on both sides of the Colorado River in Matagorda County, which carries a \$36.9 million estimated price tag.

It's important local leaders and residents know all the ins and outs of this complex plan, and have some input in how it unfolds.

The benefits are expected to be plentiful in areas of improving safety, mitigating flooding, preventing silting and speeding up vessel transit times. The Corps says its study shows the new floodgate system will reduce shipping delays by 78 percent and bring a net benefit of about \$11 million a year to the Intracoastal Waterway.

Once it demolishes the existing floodgate on the Brazos, the Corps of Engineers plans to leave the west crossing of the river and the Intracoastal Waterway open, which will represent a big change for a system that has been in place since 1943, when the floodgates were constructed. Since that time, the Corps has had to try to control silt and flows from the river into the Intracoastal Waterway. The opening of the west side will end that long-time situation, and allow the Brazos and San Bernard rivers to flow with less impediment in that location, according to the study.

Fewer shipping accidents are expected because transit times in the waterway will be reduced dramatically, and the Corps study says the opening will create “some flood relief on the San Bernard River.”

It has been 18 years since the Army Corps of Engineers began assessing the feasibility of major modifications to Texas' portion of the Gulf Intracoastal Waterway, which stretches from the Florida Panhandle to Brownsville.

The study, released last month, can be downloaded at [www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/](http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/).

Hard copies of the study are also available at public libraries in Brazoria, Lake Jackson, Clute, Freeport and West Columbia.

A 45-day public comment period on the study runs through April 11. Comments can be sent to [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil) or mailed to the U.S. Army Corps of Engineers office in Galveston, P.O. Box 1229, Galveston, TX 77553.

Now is the time to learn more about the floodgate project and speak up about what it will mean for our region.

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This editorial was written by Dale Dimitri, news editor for The Facts.



[http://thefacts.com/news/article\\_60e235a4-301d-57af-9760-231a6cad72b8.html](http://thefacts.com/news/article_60e235a4-301d-57af-9760-231a6cad72b8.html)

TOP STORY

## Collision course: Critics voice opposition to floodgate plan

By SAM LIEBL [sam.liebl@thefacts.com](mailto:sam.liebl@thefacts.com) Mar 19, 2018



Burt Smith stands to comment on how the U.S. Army Corps of Engineers' proposed plan to remove the west Brazos River Floodgate would affect the San Bernard River.

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SAM LIEBL/The Facts

WEST COLUMBIA — The U.S. Army Corps of Engineers in 2016 launched a multi-million dollar planning process to address the dozens of ship collisions caused each year on the Gulf Intracoastal Waterway by the deteriorating Brazos River Floodgates, structures old enough to be listed on the National Register of Historic Places.

But during a public comment meeting Tuesday night at the city's Civic Center it became clear the Corps was on a collision course of its own. By excluding from its analysis the potential re-opening of the San Bernard River to the west of the floodgates, the Corps drew the ire of both conservation and

industry advocates who said the Corps' plan runs counter to the re-opening effort.

The federal agency's plan calls for the demolition of the West Brazos River Floodgate and for the width of the waterway to be doubled at that location, actions that critics said would encourage flows of water and sediment that have been linked to silt piling up in the Intracoastal Waterway, in the Port of Freeport and at the mouth of the San Bernard River.

The Corps plan is the latest issue in a debate that stretches back to 1929, when the agency diverted the Brazos River to the west of Freeport. That diversion shifted the delta of the Brazos and contributed to the periodic silting in the San Bernard River's mouth.

To this day, much of the San Bernard River takes a left-hand turn at the waterway and enters the Gulf via the West Brazos River Floodgate rather than through its natural river mouth. The Corp's plan to remove the west floodgate and double the width of the waterway there would potentially divert even more San Bernard River flows from the natural mouth, according to the same Corps study that proposed the plan.

After a lobbying campaign by the Friends of the River San Bernard, the Corps undertook a \$2.4 million dredging operation to re-open the river mouth in 2009, but consecutive years of low river flows led the mouth to close again in 2013.

Floodwaters from Hurricane Harvey, however, forced it open in September and Brazoria County groups have continued pushing for funds to more permanently keep the mouth open in order to prevent flooding problems for residents along the river, navigation problems for shippers on the waterway and silting issues near the Port of Freeport.

Just hours before the public comment meeting Tuesday, Brazoria County Commissioners approved a 25-year agreement with the Port of Freeport to split with the costs of the dredging that would be needed to keep the mouth of the San Bernard River open. That agreement dovetails with a pending application for millions of dollars in federal funds to widen and deepen the mouth.

While engineers and planners from the Texas Department of Transportation and the Corps said they doubted the application for federal funds would be approved anytime soon, County Commissioner Dude Payne stood up at the Civic Center to tell Corps representatives the mouth re-opening is going to happen and soon.

“We’re going to get it open. But if this is going to cause it to silt up faster we need to look at that, because we are on the hook for maintenance dredging for the next 25 years,” Payne said

County Commissioner David Linder told Corps representatives he found the agency’s lack of communication with local leaders to be “offensive.”

“I know you folks are aware that we have this huge project going to open the mouth, and it just seems to me that it has been done in total disregard for what we’ve done for three years,” he said.

Friends of the River San Bernard board member Bob Bailey said, “The San Bernard closed because of the diversion of the Brazos River. Everybody knows that. It’s pretty well-proven.”

“It seems to me that the Corps of Engineers wants to keep it closed by removing that west gate.”

Chris Sallese, an engineer with Dannenbaum Engineering, which has worked with Brazoria County on plans to re-open the mouth of the San Bernard River, told Corps representatives the additional dredging costs at the mouth would need to be considered in the Corps’ plan.

“It’s an indirect impact on the county and Port Freeport that would need to be factored into that as conditions change,” Sallese said. “Remodel, re-look, go back and re-evaluate your alternatives and do what’s best for not only the Brazos River Floodgates but for the region, because it’s a complex region that should be looked at as a system rather than one section.”

Despite the pushback the Corps plan has received, there is little chance the plan will be changed in a major way prior to approval, said Matt Mahoney, TXDOT’s project manager on the study.

The study is on track to cost more than \$3 million and take three years to complete. At this point, planners are looking to make “refinements” rather than consider significantly different proposals, Mahoney said.

Pat McLaughlin, the lead hydrologist who has worked on the study, said even if the mouth of the San Bernard were open, it would not affect hydraulic models to the extent the Corps would choose a different plan.

“I don’t think our proposed solution would change because the flows of the San Bernard compared to the Brazos are so much less,” McLaughlin said.

Danny Allen, the lead Corps environmental planner on the study, said the Corps would have a chance to re-evaluate the plan in light of significant environmental changes, like the re-opening of the San Bernard River's mouth. But that re-evaluation could only take place after the plan to alter the Brazos River Floodgates is approved, he said.

"It's kind of a catch-22, but not really," Allen said.

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Sam Liebl is a reporter at The Facts. Contact him at 979-237-0152.

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samliebl

Appendix E  
Pamphlet and Comment Form

## What will happen next?

Following the comment period, the study team will process the comments received on the DIFR-EIS, prepare responses to the comments, and revise the documents as appropriate. The TSP will also be refined and analyzed. During this stage, the agency will have considered all impacts from the proposed plan and compared alternatives before making the final recommendation and documentation.

A Notice of Availability for the Final Integrated Feasibility Report and EIS (FIFR-EIS) will be published in the Federal Register. The FIFR-EIS will then be submitted to the Corps Headquarters for signature. A draft Record of Decision (ROD) will be included as part of the Chief's Report package. The ROD will then be signed by the Assistant Secretary of the Army for Civil Works.

## Upcoming Study Milestones

- Public comment period for DIFR-EIS ends April 11, 2018
- Concurrent agency review (Spring 2018)
- Refine Tentatively Selected Plan and address comments on DIFR-EIS (Summer-Fall 2018)
- Final Integrated Feasibility Report and EIS (2018-2019)

**We welcome your comments on the Draft Integrated Feasibility Report and Environmental Impact Statement!**

## How can I provide comments?



Mail: District Engineer  
Galveston District  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553

Email: [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil)

**Comments will be accepted through April 11, 2018**

## How do I participate?

You may participate in this process by providing comments for consideration by the study team. The Corps encourages full participation to promote open communication on the issues surrounding the study. In addition, coordination with Federal, State, and local agencies, and other interested organizations is ongoing.

The purpose of this public meeting is to inform the public of the Tentatively Selected Plan (TSP) at the Brazos River Floodgates and Colorado River Locks, and to provide an opportunity to comment on the TSP. The Draft Integrated Feasibility Report and Environmental Impact Statement can be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>

## The report is also available on CD for viewing at the following libraries:

- Brazoria Library, 620 South Brooks, Brazoria, TX 77422
- Clute Branch Library, 215 North Shanks Street, Clute, TX 77531
- Freeport Library, 410 Brazosport Blvd., Freeport, TX 77541
- Lake Jackson Library, 250 Circle Way, Lake Jackson, TX 77566
- West Columbia Branch Library, 518 East Brazos, West Columbia, TX 77486
- Bay City Public Library, 1100 7th Street, Bay City, TX 77414
- Matagorda Branch Library, 800 Fisher Street, Matagorda, TX 77457

# GIWW Brazos River Floodgates and Colorado River Locks Systems Feasibility Study

## Current Study Information

Public Meeting, March 13, 2018



US Army Corps of Engineers



## About the Study

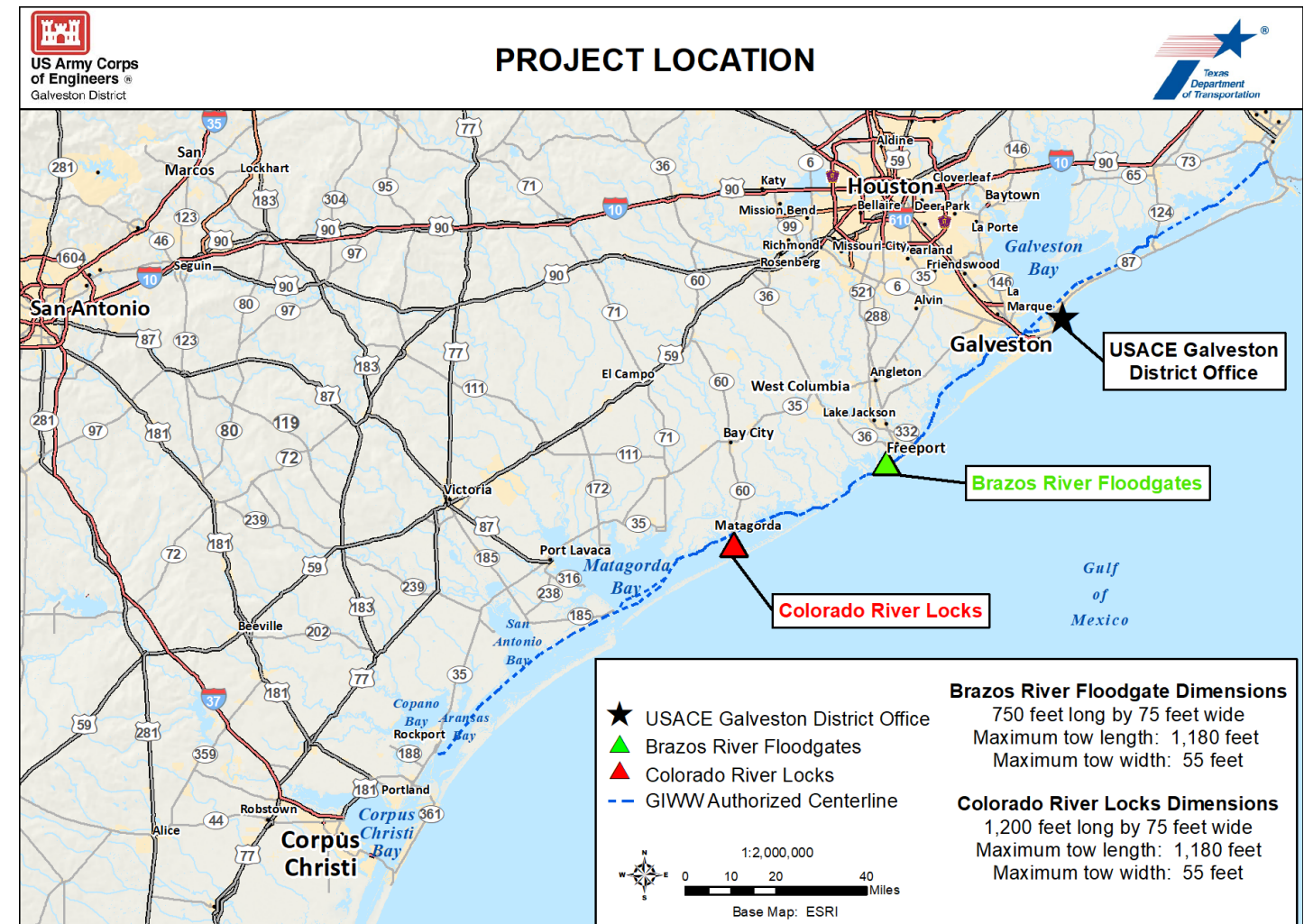
The U.S. Army Corps of Engineers (Corps), along with the study partner, the Texas Department of Transportation (TxDOT), has prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates and Colorado River Locks Systems.

The DIFR-EIS includes analysis of several alternatives and presents the Tentatively Selected Plan (TSP), which proposes structural modifications to the existing Brazos River Floodgates and Colorado River Locks to improve safety and navigation along the GIWW. The DIFR-EIS also documents the existing condition of environmental

resources in and around areas considered for development, and potential impacts on those resources as a result of implementing the alternatives.

On February 26, 2018, a Notice of Availability for the DIFR-EIS was published in the Federal Register. The DIFR-EIS can be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>

Comments on the DIFR-EIS will be accepted through April 11, 2018.



## What is the purpose and need of the study?

The **purpose** of the Feasibility Study is to develop alternatives to determine the feasibility of undertaking modifications to the Brazos and Colorado River crossings of the GIWW. There is a **need** to reduce navigation impacts and costly waterborne traffic delays that are a result of permanently altered tow arrangements and barge sizes, changed transiting procedures, hazardous approaches and exits to structures, overall aging of infrastructure, narrow openings at structures, and complex hydraulic conditions.

## Study Opportunities:

- Improve navigation efficiency through the system and on the GIWW by updating structures, channel alignments, and improving flow characteristics at the river crossings
- Reduce potential accidents that results from vessels

striking guidewalls, thus reducing potential hazardous material spills into the waterway

- Improve navigation tracking systems and records management to help determine future trends and to allow for adjustments to accommodate traffic changes

## Study Objectives:

- Reduce navigation delays, tripping, and allisions of vessels traveling through the structures
- Improve channel alignments and hydraulic flows for vessels approaching structures and traveling through crossings during high river periods
- Improve overall operations/functions of the floodgate/lock structures, which experience frequent mechanical failures due to age and outdated systems
- Manage sediment in the GIWW

## About the Study Process

### What is a Feasibility Study?

All major Federal water resource projects, including navigation, must follow a study process that evaluates proposed solutions to problems, such as inefficient navigation, by analyzing the engineering, economic, environmental, cost, real estate, and other impacts and aspects of alternative solutions. This study process, consisting of six major steps, is used to identify a plan of most value to the national economy, consistent with protecting the nation's environment and follows principles and guidelines in Federal water resource law and Corps regulations.

### What is an Environmental Impact Statement (EIS)?

A Federal agency must prepare an EIS if it is proposing a major federal action that may significantly affect the quality of the natural and human environment to comply with the National Environmental Policy Act (NEPA). NEPA established our country's national environmental policies in 1969.

The environmental review process incorporates reviews from the public and various agencies to facilitate better-informed decisions. The EIS is integrated into the DIFR-EIS prepared for this study.

**We Are  
HERE**

### Where are we in the study process?

We have developed alternatives, analyzed potential impacts of each alternative, and identified the Tentatively Selected Plan (TSP). The TSP and other alternatives are presented in the DIFR-EIS for public and agency review. After the comment period, we will process the comments received, prepare responses to the comments, refine the TSP design, and prepare to draft the Final IFR-EIS.

## The NEPA Process

1. Develop non-Federal Sponsor Agreement
2. Notice of Intent
3. Public Scoping Period
4. Alternatives Development
5. Impact Evaluation
6. Preparation of Draft EIS
7. Public Review of Draft EIS
8. Preparation of Final EIS
9. Notice of Availability of Final EIS
10. Record of Decision and Project Implementation

## Alternative Analysis & Tentatively Selected Plan

The Corps identified an array of alternative plans to meet the study objectives, then conducted analyses including hydraulic analysis, economic modeling, and environmental impact analysis, to identify the Tentatively Selected Plan described below. Engineering analyses included hydraulic analysis of salinity, sedimentation volumes and patterns, and velocities at the river crossings. The hydraulic model was re-calibrated following Hurricane Harvey to better estimate sedimentation from high-flow events. Selection of the Tentatively Selected Plan was based on economic modeling and cost estimates, including the benefit-cost ratio for each alternative, and took into consideration potential risks and uncertainties of environmental, navigation, and system impacts of the various alternatives.

### Tentatively Selected Plan for Brazos River Floodgates

- Remove existing 75-foot-wide east and west floodgates
- Construct new 125-foot-wide east floodgate (set back from river for longer approach channel)
- Leave open channel on west side of the Brazos River
- Temporary bypass channel will result in an open channel throughout construction: estimated 2 years

### Tentatively Selected Plan for Colorado River Locks

- Remove existing 75-foot-wide east and west river-side floodgates
- Rehabilitate existing 75-foot-wide GIWW-side floodgates
- Temporary bypass channel will result in an open channel throughout construction: estimated 1.25 years

## Information on the Tentatively Selected Plan

- The TSP (including set back of new east floodgates at Brazos River and long forebay at Colorado River) will reduce delays and accidents in these locations.
- The preliminary cost estimate for both facilities is \$184,680,000
  - \$147,818,000 at BRFG
  - \$36,862,000 at CRL
- Under the TSP, there will be an overall 8% increase in dredging volumes and costs in the vicinity of the Brazos River Floodgates. Dredging changes at the Colorado River Locks would be minor.
- Based on riverine modeling conducted during the study, water surface elevations along the San Bernard River would be similar to slightly reduced when compared to existing conditions.
- No significant environmental impacts are anticipated. Impacted wetlands would be restored and/or mitigated.
- The Corps is coordinating with natural resource agencies. The project will comply with applicable environmental laws and regulations.





Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

Comments on the DIFR-EIS may be placed in the comment box today or sent to:

Mail: District Engineer, Galveston District  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553

Email: BRFG\_CRL\_FeasibilityStudy@usace.army.mil

**Comments will be accepted through April 11, 2018.**

#### **PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

**ROUTINE USES:** None. The "Blanket Routine Uses" set forth at the beginning of the Army's Compilations of Systems of Records Notices apply to this system.

**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments. Failure to provide one's name may also result in one losing one's right to be recognized in the official record and/or the right to make a public comment during this meeting.

## Appendix F

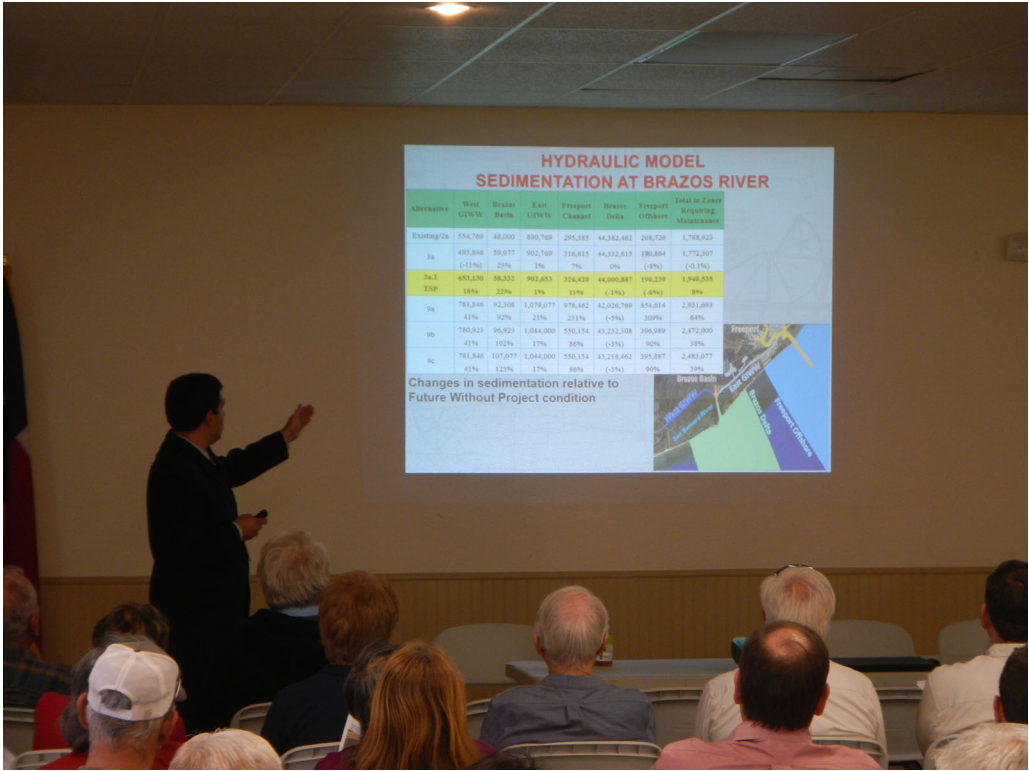
### Photographs











## Appendix G

### Summary of Public Comments and Responses



**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
<b>Summary of Comments Related to the Brazos River Floodgates (BRFG)</b>		
<b>Comments of Support</b>		
1	Industry generally supports upgrades to the outdated and increasingly unreliable infrastructure but has concerns and questions related to the Tentatively Selected Plan (TSP).	Comment noted.
2	Commend the U.S., Army Corps of Engineers (USACE) in taking on an effort to study efficiency improvements in our interstate commerce through improving barge transit efficiencies in the Gulf Intracoastal Waterway (GIWW). Such efforts benefit both private industry and our country's citizens, and Freeport LNG appreciates the USACE dedicating its limited resources to such an important task.	Comment noted.
3	Gulf Intracoastal Canal Association (GICA) is generally pleased with the navigation improvements proposed by the TSP. Removing the west floodgate, increasing the size of the east forebay by moving the east gate further east, and widening the east gate to 125 feet are certain to result in safer, more efficient towboat and barge operations. With these modifications, we can expect fewer costly accidents and delays than experienced with the present configuration.	Comment noted.
4	Safe and efficient navigation along the GIWW is a critical priority, and the TSP serves to ensure the BRFG will not continue to deteriorate to the extent that safety and efficient navigation are compromised.	Comment noted.
<b>Adverse Effects on the San Bernard River (SBR)</b>		
5	The study had little to no knowledge of the project to open the SBR, including the permit application submitted to USACE Regulatory Branch.	USACE is aware of the project to open the SBR. Since there was no approved permit for the SBR opening, the study focused on the existing conditions at the time of the study, a closed SBR mouth.
6	All modeling studies were conducted assuming the mouth of SBR would stay closed.	See response to Comment # 5. The hydraulic models were revised to examine the sedimentation patterns in the GIWW if the SBR were opened, and the results will be incorporated into the Final Integrated Feasibility Report and Environmental Impact Statement (FIFR-EIS).
7	The study did not consider studies on water flow and barge/gate collision rates conducted prior to and after the SBR opening in 2009.	The engineering and economic analysis considered flow and accident rates before and after the SBR opening in 2009.
8	An open channel west of the Brazos River will adversely affect the SBR ecosystem by transforming it into a freshwater estuary rather than a saltwater estuary, adversely affecting natural habitat.	Evaluation of modeled existing and projected salinities at the SBR indicate that, under the TSP, the area would still function as a saltwater estuary and would not result in major habitat changes.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
9	The SBR mouth has been opened/closed only twice, not “several” times.	Comment noted.
10	The study ignored the history of the Brazos Diversion Channel and SBR.	The study focus was improving navigation along the GIWW at the Brazos River crossing. The team studied the history of the Brazos Diversion Channel and SBR prior to TSP selection.
11	Reconsider keeping a gate on the west side of the Brazos River, and ideally two sets of gates (a locks system).	The team considered a gate on the west side of the Brazos River, but that alternative had less net economic benefits than the currently selected TSP.
12	Increased sediment flow in the West GIWW will have an adverse effect on the SBR outlet channel from the GIWW to the Gulf of Mexico (Gulf) and the SBR estuary.	The hydraulic models were revised to examine sedimentation patterns in the GIWW if the SBR were opened, and the results will be incorporated into the FIFR-EIS. In general, the open SBR condition resulted in increased sedimentation in the SBR outlet channel from the GIWW to the Gulf under existing conditions and the TSP. Wave-driven sediment transport was not included in the model, and the model results only reflect sedimentation due to river deposition. Much of the SBR mouth morphology is governed by littoral processes (e.g., sediment transport in the Gulf), so the model results should not be used to make conclusions about the TSP’s impact on the duration that the SBR mouth will remain open; they should only be used to assess impacts of the open SBR on sedimentation in the GIWW.
13	Opening the SBR and keeping it open has positive operational impacts at the BFRG.	Additional sedimentation modeling shows that, in general, the open SBR condition resulted in increased sedimentation in the SBR outlet channel from the GIWW to the Gulf under existing conditions and the TSP. Therefore, an open SBR has the potential to have negative operational impacts along the GIWW.
14	Removing the west floodgate will not allow free tidal flow from the Gulf into and out of the SBR. Every effort should be made to allow the SBR to freely flow into and out of the Gulf, as this is the natural flow pattern.	Comment noted.
15	The SBR, Brazos River, and GIWW are a system – what is done to one affects the other two.	The hydraulic models developed include the SBR, GIWW, Brazos River, and Gulf. The model considers varied flow rates along the SBR and Brazos River, as well as tidal fluctuations in the Gulf. See response to Comment #12 regarding additional modeling, the results of which will be incorporated into the FIFR-EIS.
16	An increase of “only” 18-22% in siltation in the GIWW is unacceptable.	Increased dredging costs were factored into the economic analysis and TSP selection. Potential environmental effects of the sedimentation changes were considered.
17	Please review and rethink your study to include the opening of the SBR.	The study’s focus was improving navigation along the GIWW at the Brazos River crossing, not investigating ways to open the SBR, which in its existing condition is closed.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
18	The full impacts to the SBR should be evaluated before removing the west floodgate.	See response to Comment #12. Results of additional hydraulic modeling and economic and environmental analyses will be incorporated into the FIFR-EIS.
19	The fact that there are no floodgates at the SBR today is a “design deficiency” of the GIWW.	Comment noted. The study’s focus was improving navigation along the GIWW at the Brazos River crossing.
20	The only way to keep the SBR mouth open is to return the GIWW condition that existed before the 1990s bypass channel was dug. Doing this would include the following: <ul style="list-style-type: none"> <li>• Reclose most of the GIWW bank to Jones Lake where the sandbar has been washed out, leaving an entrance to Jones Lake on the west end as it was before the channel.</li> <li>• Deepen the old GIWW entrance at Cedar Lakes, near the SBR mouth.</li> <li>• Reclose the cut at the west end of Cedar Lakes going into the Gulf.</li> <li>• Keep the west floodgate at the BRFG, even if wider gates must be installed further west of the current location.</li> </ul>	Comment noted.
21	The study devotes a single paragraph to the environmental impact on the SBR mouth and ignores the case where the Brazos River is flowing and the SBR is not, the dominant situation given the relative size of their watersheds.	Further hydraulic modeling and environmental analyses indicate the TSP will not result in significant adverse effects on the SBR mouth. Results of additional analyses will be incorporated into the FIFR-EIS.
22	With the Brazos River fresh water flowing almost constantly toward the SBR except during SBR floods, the SBR mouth will be permanently transformed from a saltwater to a freshwater estuary.	See response to Comment #8.
23	The SBR and the interest of the entire area (economically, recreationally, and environmentally) should be considered.	The study’s focus was improving navigation along the GIWW at the Brazos River crossing. The study considered the TSP’s impacts on the SBR, and the FIFR-EIS will include results of additional analyses.
24	Would the new open structure “starve” the SBR mouth and adjacent refuge of sediment for beach nourishment and starve piping plover, red knot, etc.	Modeling showed minimal reduction (less than 1%) in sediment reaching the Brazos Delta for the TSP compared to existing conditions. Therefore, minimal to no changes in sediment supply to the SBR and nearby beach habitats via wave-driven transport are expected.
<b>Adverse Effects on Navigation/Safety</b>		
25	The study did not consider the effect of the larger channel on the west side of the Brazos River without a gate on the following during high water on the Brazos River: <ul style="list-style-type: none"> <li>• Jones Creek;</li> <li>• barges attempting to moor; or</li> <li>• fuel usage of barges operating “against the flow”.</li> </ul>	The team consulted with navigation interests that transit the GIWW about the larger, open channel on the west side of the Brazos River, and no significant concerns were raised. Results of additional environmental analyses, including effects on Jones Creek, will be incorporated into the FIFR-EIS.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
26	The study did not consider the effect of the larger channel on the east side of the Brazos River on shipping entering or leaving Port Freeport during high water on the Brazos River.	Maximum depth-averaged current velocities at the Freeport Channel crossing were extracted from the hydraulic model for existing conditions and the TSP. The velocity increase due to the wider gate on the east side of the Brazos River was minimal.
27	Increasing the east gate width to 125 feet will substantially increase the effect of unpredictable water currents experienced by Pilots when handling ships in the Freeport Channel intersection of the GIWW.	See response to Comment #26.
28	The increase in water current has not been modeled for ship handling.	The maximum depth-averaged current velocity during the simulation period was extracted from the 2D circulation model results. The hydraulic models' results indicate minimal increases in the maximum depth-averaged velocity at Freeport.
29	A 10-year project to export LNG from a ship maneuvering area that includes the Freeport Channel-GIWW intersection is in its final year of construction. Current modeling, design, and permits are completed, and millions have been spent to insure the LNG export project is as safe as possible. None of the planning accounted for a substantial increase in the size and strength of currents from the east floodgate.	See response to Comment #28.
30	The study did not address the impact of the east floodgate proposal would have on safety of maneuvering ships in the GIWW intersection and Freeport LNG maneuvering area.	See response to Comment #28.
31	The project will put restrictions on current Brazos Pilots operations at Freeport Channel and be a hardship on Freeport Channel users.	See response to Comment #28.
32	The project greatly reduces the safety margin of vessel traffic and will have major safety impacts on handling ships in the Freeport Channel-GIWW intersection in the future during times when the Brazos River is in flood stage.	See response to Comment #28.
33	The temporary bypass channel will create an open channel condition for 2 years during construction. Residents and industry will have no flood control protection, no sedimentation control protection, and nothing to stop the full force of the Brazos River current from freely flowing into the Freeport Channel 24 hours a day for 2 years.	The TSP was refined to realign the GIWW south of the existing alignment, which allows the existing floodgates to operate throughout construction and eliminates the temporary bypass channel and resulting open channel during construction.
34	At the Freeport Channel, all ship moorings and vessel operations, policies, and procedures are written for a tidal estuary harbor, free of river currents. The temporary bypass channel will result in an open channel that will allow river currents to freely flow to the Freeport Channel for 2 years during construction, which will affect ship operations, require restrictions, and make operations more dangerous.	See response to Comment #33.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
35	The Draft Report does not appear to analyze post-installation safety performance to any significant degree to show that the 125-foot-wide gates would reduce allisions in a two-barge wide arrangement. As such, Freeport LNG questions whether safety would be materially increased with the TSP.	Expert elicitation from industry that transits the BRFG was received from meetings held in February and October 2017. Additionally, multiple conference calls were held with GICA and other industry representatives to discuss the proposed 125-foot-wide gate. Industry indicated that the 125-foot-wide gate would reduce allisions. A slight refinement of the TSP, as recommend by industry, will further reduce the risk of allisions.
36	The Draft Report does not perform any quantitative analysis on the safety issues the TSP could create due to increased water flow rates through the GIWW during construction and thereafter with a wider floodgate. <ul style="list-style-type: none"> <li>• Increased crossflow currents would be experienced at the Freeport Channel-GIWW intersection, which could impair the safe maneuvering of vessels in the Freeport Channel, including LNG ships calling on Freeport LNG.</li> <li>• Stronger current increases the likelihood of delays in pilotage due to reduced safe operating envelope in Freeport Channel.</li> </ul>	See responses to Comments #33 and #28 for construction and operation effects, respectively.
37	Any plan implemented needs to consider downstream impacts to safety and deep-water port efficiency.	See responses to Comments #33 and #28 for construction and operation effects, respectively.
38	Increased floating tree logs and debris will be released into the GIWW during Brazos River runoff events, causing navigation hazards.	Comment noted.
39	It does not appear the Federal ship channel on the SBR was evaluated in the study.	The study's focus was improving navigation along the GIWW at the Brazos River crossing, not investigating the Federal ship channel on the SBR. Hydraulic analysis indicates minimal impacts to current and stage along the SBR.
<b>Additional Dredging Needs/Financial Burden</b>		
40	The study did not consider the potential increase in dredging requirements at private moorings in Port Freeport and at the SBR mouth.	Increased dredging costs at Port Freeport were considered in the development of the Benefit-Cost Ratio (BCR) See response to Comment #12 regarding effects on the SBR mouth.
41	Increased sediment flow will increase the frequency Brazoria County will be required to perform maintenance dredging at the SBR. This will have a negative economic impact on the County and Port Freeport. The TSP places an additional financial burden on Brazoria County and the Port. The BCR for the TSP should account for this impact.	See response to Comment #12.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
42	The USACE, through this study effort, should recommend federalizing the SBR reach from the GIWW to the Gulf and relieve Brazoria County of responsibility for future operations and maintenance costs.	Comment noted. The study's focus was improving navigation along the GIWW at the Brazos River crossing, not investigating opening and maintaining the SBR, which in its existing condition is closed. See response to Comment #12 regarding additional hydraulic analyses to examine sedimentation patterns if the SBR were open.
43	The project will have a significant impact on the amount of dredging required to maintain the current project depth at Freeport Channel.	See response to Comment #40.
44	It's not clear if the USACE will be responsible for dredging at private docks impacted during construction due to additional sedimentation resulting from the temporary open channel.	USACE is not authorized to dredge private facilities; however, please see response to Comment #33 regarding refinement of the TSP to eliminate the temporary open bypass channel during construction.
<b>Economic Analysis</b>		
45	Sedimentation in Port Freeport will increase by 11%. It is not clear to what extent resulting additional dredging costs and potential navigational delays/hazards have been factored into the overall cost analysis.	See response to Comment #40.
46	During construction, the temporary bypass channel will cause increased silting in the Port of Freeport at an undetermined rate. It's not clear to what extent resulting additional dredging costs have been factored into the overall cost analysis.	See response to Comment #33 regarding refinement of the TSP to eliminate the temporary open bypass channel during construction.
47	Does the BCR calculation include additional dredging costs for both the USACE and private dock owners in the Freeport channel? Due to the shortened dredging frequency over the last decade, this needs serious and methodical consideration.	See response to Comment #40.
48	Draft Report does not appear to fully evaluate the increase in maintenance dredging costs that will be caused by the TSP (particularly during construction, but also after installation).	Increased costs for dredging during construction have been added to the cost estimates. The economic analysis of the TSP and other alternatives includes additional dredging costs in the BCRs calculated.
49	The cost increases within the Draft Report do not account for the increased dredging costs incurred by the USACE, Port Freeport, or private terminal industry during the 2-year construction period when the GIWW will be exposed to the full flow of the Brazos River.	See response to Comment #33 regarding refinement of the TSP to eliminate the temporary open bypass channel during construction.
50	The Draft Report does not account for increased maintenance dredging costs of the private terminal industry in the area after construction.	The economic analysis of the TSP and other alternatives includes additional dredging costs in the BCRs calculated.
51	It is not apparent that the Draft Report evaluated the increased maintenance dredging costs to Port Freeport, which would be a burden assumed by local area taxpayers.	See response to Comment #50.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
52	The benefits analysis needs to be updated to incorporate the adverse impacts of increased dredging costs during and after construction.	See response to Comment #50.
53	Draft Report failed to consider increases in navigation delays for deep-water draft vessels resulting from the TSP which results in a skewed economic analysis recommending the TSP.	A ship simulation will be performed during PED, but the hydraulic models indicate negligible increases in velocity at Freeport.
<b>Environmental Impacts not Considered</b>		
54	The TSP will send large amounts of fresh water from the BR to the SBR, negatively mitigating the benefits achieved by opening the mouth of the SBR.	See response to Comment #8.
55	The study devotes a single paragraph to the environmental impact on the mouth of the SBR.	See response to Comment #21.
<b>Recommendations to Rerun Models and/or Reassess Study</b>		
56	Rerun the hydrodynamic model based on the condition that the mouth of the SBR is fully open.	See response to Comment #12.
57	Rerun the sediment transfer model with an open SBR mouth to refine and determine the amount of sediment deposition that will travel through the GIWW and into the SBR estuary.	See response to Comment #12.
58	Reevaluate your environmental impacts to fully consider the impacts that the proposed TSP will have on the SBR estuary with the SBR open to the Gulf.	See response to Comment #12. Results of additional hydraulic modeling and economic and environmental analyses will be incorporated into the FIFR-EIS.
59	Consider doing more work on modeling the SBR, GIWW, and Brazos River as a system.	The hydraulic models developed include the SBR, GIWW, Brazos River, and Gulf. The model considers varied flowrates along the SBR and Brazos River, as well as tidal fluctuations in the Gulf.
<b>Purpose and Need</b>		
60	The BRFG were originally installed to control flows and silt into the GIWW from the Brazos River. Its original purpose was not to ensure traffic efficiency of barge traffic in the GIWW; as such, a feasibility study with a stated primary goal to improve traffic efficiency is essentially a repurposing of the primary responsibility of the floodgates. Given the historic, sole purpose of the floodgates, mitigating siltation (to the same, or better, degree as with the existing floodgates) should carry equal weight, if not more weight, when considering alternatives for improvement.	The purpose of the structures has not changed; they still manage sediment through the structures for navigation purposes. This study changes the way in which sediment management is achieved, from using structural measures to dredging measures.
<b>Stakeholders</b>		

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
61	The Brazos Pilots were not consulted during the study period.	The team consulted with pilots throughout the study and at a face-to-face meeting in October 2017.
62	The evaluation of the TSP and other alternatives in the Draft Report does not seem to adequately account for several significant adverse impacts to local stakeholders, including Freeport LNG.	See responses to Comment #26 and 40. The USACE did not look at changes or proposed new projects that are not currently funded for construction. The team assumed some changes in the system and did not differentiate between federal and private.
63	Table 3.18 of the Draft Report indicates the TSP has “acceptability” from TxDOT, the barge navigation industry, and USACE. However, there was no acceptability concurrence from locate private terminal owners, Port Freeport, or the Brazos Pilots Association, which would be the most directly impacted stakeholders. Vessel safety and transit efficiencies of local stakeholders should not be materially diminished simply to increase transit efficiency for barge traffic in the GIWW.	See response to Comment #26.
64	In Scoping Process, should have identified “public interest groups and native communities that have concerns about possible impacts to environmental, social or economic resources.” EIS is flawed.	Stakeholders were identified during the scoping process, and stakeholder input was obtained throughout project development.
65	Scoping did not appear to identify the proposed reopening of the SBR mouth, even though Brazoria County, along with several state agencies and concerned citizens groups, have been steadily working towards reopening the SBR mouth for several years.	See response to Comment #5.
<b>Consider Other Alternatives</b>		
66	Two sets of gates (a locks system) would seem to be the best way to protect the interests of the Port of Freeport, the barge industry, and preservation of the SBR.	Thank you for your recommendation. It has been documented and will receive appropriate consideration as the team continues to refine the TSP.
67	A two-gate system on each side of the Brazos River, spaced several thousand feet apart, would silence most criticism of the project. They could be as wide as needed because one gate would always be closed.	See response to Comment #66.
68	A true locks system would eliminate silting issues in Port Freeport, enhance flood control, protect coastal wetlands, and preserve a very productive marine fisheries ecosystem.	See response to Comment #66.
69	Two sets of locks on both sides to allow for two-way traffic crossing the river.	See response to Comment #66.
70	“Dual-Gate Alternative” on the east side of Brazos River will control sedimentation into the GIWW while still allowing more efficient barge access across the Brazos River.	See response to Comment #66.



**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
71	Re-engage in the alternatives analysis to address concerns of Freeport LNG, Port Freeport, Brazos Pilots Association, and other private deep-water terminal owners.	See response to Comment #66.
72	GICA towboat operators would like to see an easing of the severe turning angle to make transits across the Brazos River even safer.	See response to Comment #66.
73	GICA would support additional examination of alternatives that reduce Freeport Channel silting and continue to provide sufficient flow to keep the SBR mouth open at the Gulf. However, that examination appears to be outside the scope of this study's primary objective – to improve navigability of the GIWW at the Brazos and Colorado River crossings.	See response to Comment #66.
74	A potential solution to the Freeport Channel silting problem could include a second (125-foot-wide) east gate resulting in an elongated silt control structure whereby, under high flow conditions, at least one gate could be closed at all times. To maintain SBR flows, retaining the west gate (at 125 feet wide and further west to increase the forebay size) could be considered. However, neither of these additional solutions is required for navigation safety and efficiency.	See response to Comment #66.
75	We would like the USACE to consider alternative plans to ensure the safe and efficient movement of barges on the GIWW and SBR while ensuring the same for ship and barge traffic in the Freeport Channel.	See response to Comment #66.
76	The study did not address reducing the Brazos River current. Increasing the flow area of the Diversion Channel by widening and/or deepening it could dramatically reduce the current velocity the barges must cross.	See response to Comment #66.
<b>Project Costs</b>		
77	Please do not spend the \$180M of taxpayer's money assigned for this project and leave Freeport Channel users worse off.	Comment noted.
78	Any additional project costs associated with alternatives focusing on silt reduction and river flows on the SBR should not be cost shared with the Inland Waterways Trust Fund.	Comment noted.
<b>General</b>		
79	Removing the west floodgates defeats the original goals/objectives of the floodgates and creates additional impacts on the ecosystem in the region, especially along the reach of the SBR from the GIWW to the Gulf.	Comment noted.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
80	Any solution that the USACE decides upon must be good for all industry partners and not at the expense of others.	Comment noted.
81	Improvements must not come at the expense of the local population, local industry, and the local economy.	Comment noted.
82	This is a very local issue, and it is in the best public interest if Brazoria and Matagorda County residents control the direction of this project.	Comment noted.
83	If local industry were involved, we could develop a plan that would significantly improve the tug/barge industry's safety and efficiency, as well as improve flood control, sediment control, and current control at the mouth of the Brazos River.	Comment noted.
84	The TSP plan will have significant negative impacts to deep-water private ports and Port Freeport in the Brazos River area.	Comment noted.
<b>Previous Studies not Used</b>		
85	Feasibility Study did not use past studies.	Past studies were analyzed and included in the analysis and formulation of alternatives.
86	Dr. Nick Kraus, USACE ERDC researcher, concluded: The Brazos River diversion in 1929 increased sediment transport to the SBR mouth via longshore currents. The extension of the GIWW across the Brazos River and SBR in 1941 further reduced the SBR flow rate at its mouth, rendering it helpless in combatting the increased sediment loading from the Brazos River. This cut off the connection between the SBR and the Gulf, which has had numerous implications for habitat within the watershed (Kraus, N. C. and L. Lin. 2002. Coastal Processes Study of the San Bernard River Mouth, Texas: Stability and Maintenance of Mouth. Coastal and Hydraulics Laboratory, U.S. Army Engineer Research and Development Center. Report No. ERDC/CHL TR-02-10).	Comment noted.
<b>Summary of Comments Related to the Colorado River Locks (CRL)</b>		
<b>Comments of Support</b>		
87	Industry generally supports upgrades to the outdated and increasingly unreliable infrastructure, but has concerns and unanswered questions related to the TSP.	Comment noted.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

<b>Comment Number</b>	<b>Comment</b>	<b>Response</b>
<b>Effects on Navigation/Safety</b>		
91	Commercial barge companies do not consider the CRL to be an impedance on their business except during major flood events. The TSP will increase delays due to differential issues which occur on a frequent basis not related to major flood events.	Analysis indicates that while delays will increase slightly due to the inability to lock during high head conditions, shutdowns due to differential head with the locks removed will occur only approximately 2-3% of the time.
92	The TSP will not significantly reduce delays or improve navigation efficiency and may reduce safety. While removing the river-side gates and widening the existing lock chambers would decrease the allision risk, leaving the canal side gates at their present 75-foot width would make transiting the canal gates more challenging than it is today, in that the absence of the river gates would require mariners to contend with a current through the canal gates during that portion of the transit.	The costs and benefits associated with a wider gate were investigated after TSP selection, and the TSP has been refined to provide wider gates (125 feet).
93	On this GIWW reach, crosswinds are frequently a challenge and mariners often mitigate risk by transiting with two empty 300' x 54' barges abreast instead of "strung out" with the barges in line. Having to break the tow down to transit the lock one barge at a time increases risk to two personnel and increases delay and congestion near the lock.	See response to Comment #92.
<b>Consider Other Alternatives</b>		
94	A widened true lock structure is the best solution for the Colorado River crossing on both sides, as it eliminates silting issues, facilitates safer navigation, enhances flood control, protects coastal wetlands, and preserves a very productive marine fisheries ecosystem.	A widened lock structure was investigated at the onset of the study, but there were not adequate benefits to support the construction costs.
95	Widening the canal-side gate in combination with removing the river-side gate and widening the chamber achieves several objectives: <ul style="list-style-type: none"> <li>• the wider gate will reduce the current velocity through the gate compared to a 75-foot-wide gate, enhancing safety;</li> <li>• the wider opening will allow greater margin of error as mariners transit the gate;</li> <li>• the wider gate will facilitate transits by "doubled up tows" where empty barges are being pushed abreast.</li> </ul>	See response to Comment #92.
<b>Project Costs</b>		
96	Dow Chemical cannot support spending \$38M on a project that does nothing to correct the issues we have today and will only increase navigation delays.	Comment noted.
<b>General</b>		
97	Replacing a lock structure with floodgates appears to be a giant step backwards.	Comment noted.

**Summary of Public Comments on the Draft Integrated Feasibility Report and Environmental Impact Statement  
Gulf Intracoastal Waterway, Brazos River Floodgates and Colorado River Locks Feasibility Study**

Comment Number	Comment	Response
98	It is difficult to understand the logic of replacing a 75-foot-wide structure with a new 75-foot-wide structure, especially when the when the BRFG will be increased to 125 feet and the GIWW is maintained to 125 feet on either side of the CRL.	See response to Comment #92.
99	The additional space in the TSP to facilitate breaking up/making tows seems to only reinforce the inefficiencies of the 75-foot-wide gates.	Comment noted.

## Appendix H

### Written Comments Received During Public Meeting and Public Comment Period



**US Army Corps  
of Engineers** ®

**GIWW Brazos River Floodgates and  
Colorado River Locks Systems Feasibility Study**

**National Environmental Policy Act**

**Public Meeting**

**March 13, 2018**



The U.S. Army Corps of Engineers (Corps) along with the study partner, the Texas Department of Transportation (TxDOT), has prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates and Colorado River Locks Systems. The DIFR-EIS can be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>.

The purpose of this public meeting is to inform the public of the Tentatively Selected Plan (TSP) and to provide an opportunity to comment on the TSP. Your comments are very important in the National Environmental Policy Act (NEPA) process, and the Corps and TxDOT welcome your comments on the TSP and DIFR-EIS. Comments on the DIFR-EIS will be accepted through April 11, 2018.

Speaker list.

**COMMENTS:**

Roy & Jan Edwards

Tom Ronayne

Dude Payne

Bob Bailey

Sam Liebl-

Mike Fewel

Billy Burns

Jim Stark

Bert Smith

Gene West

Chris Saltese-

Vanessa Taylor

Johnnie Glicks

~~Mike~~ Mike Goodson

Debbie Sutherland

David Under

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:51 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Concerns for the San Bernard River and Surrounding Areas

Same email just different sender.

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Bob Bailey [mailto:bob.bailey1941@gmail.com]  
Sent: Wednesday, March 28, 2018 12:07 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Concerns for the San Bernard River and Surrounding Areas

Attn: Danny Allen, Environmental Compliance Branch, Regional Planning and Environmental Center

As a stakeholder concerned with the restoration of the San Bernard River, I have several concerns the USACE plans to widen the channel at the Brazos River and to eliminate the gates on the West side of the river. I feel that this will adversely affect the ecosystem that is the San Bernard River and surrounding areas. Specifically I agree with the following comments that came out of the Tuesday, March 13th public meeting on the project:

- . There was little or no knowledge of the project to open the mouth of the San Bernard, including the submission to the USACE on March 6 of the project plan that was revised to take into account the effects of Harvey.
- . All modelling studies were done assuming the mouth of the San Bernard would stay closed.
- . None of the studies on water flow and barge and gate collision rates done prior to and after the opening of the San Bernard in 2009 were considered in the feasibility study.
- . The open mouth of the San Bernard would be transformed into a freshwater estuary rather than a saltwater estuary adversely affecting natural habitat.
- . The study stated that the mouth of the San Bernard had been opened and closed "several" times, but it has only happened twice. Maybe Cedar Lake and the San Bernard got mixed up.
- . The history of the relationship between the Brazos Diversion Channel and San Bernard River was ignored.
- . The effect of the larger channel on the west side of the Brazos without a gate on Jones Creek during high water on the Brazos was not considered.

. The effect of the larger channel on the west side of the Brazos without a gate on barges attempting to moor during high water on the Brazos was not considered.

. The effect of the larger channel on the west side of the Brazos without a gate on fuel usage of barges operating "against the flow" during high water on the Brazos was not considered.

. The effect of the larger channel and gate on the east side of the Brazos on shipping entering or leaving the Port of Freeport during high water on the Brazos was not considered.

. The potential increase in dredging requirements at the private moorings in the Port of Freeport and mouth of San Bernard was not considered.

I respectfully request that the USCOE reconsider, at the least, keeping a gate on the West side of the Brazos, Ideally, two sets of gates (a locks system), would seem to be the best way to protect the interests of the Port of Freeport, the barge industry, and for the preservation of the San Bernard River.

Thank you for your consideration,

Bob Bailey

331 Lazy Oak Ranch St., Brazoria, TX



## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:54 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew; McLaughlin, Patrick W  
**Subject:** FW: Brazoria County Resolution - Gulf Intracoastal Waterway Brazos River Flood Gates  
**Attachments:** image002.png; image004.png; image006.png; Certified Copy Order No. 7.A.1.pdf; Resolution - Gulf Intracoastal Waterway Brazos River Flood Gates.pdf

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: LaceyP@brazoria-county.com [mailto:LaceyP@brazoria-county.com]  
Sent: Wednesday, March 28, 2018 10:23 AM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazoria County Resolution - Gulf Intracoastal Waterway Brazos River Flood Gates

Good morning,

I have attached a copy of a certified court order from Commissioners' Court meeting on March 27, 2018.

If you should need further assistance please feel free to contact me.

Lacey Powell

979-864-1200

Office Assistant

Office of County Judge Matt Sebesta

111 E. Locust, Ste 102A

Angleton, TX 77515

<Blocked<https://www.facebook.com/BCCommuniuty>> <Blocked<https://twitter.com/BrazoriaCounty>>

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**CERTIFIED COPY  
BRAZORIA COUNTY COMMISSIONERS' COURT**

**ORDER NO. 7.A.1**

**RE: RESOLUTION - GULF INTRACOASTAL  
WATERWAY BRAZOS RIVER FLOOD  
GATES**

The Court hereby approves the attached resolution in regards to the Gulf Intracoastal Waterway recommendations.

<b>RESULT:</b>	<b>PASSED BY CONSENT VOTE [UNANIMOUS]</b>
<b>MOVER:</b>	Ryan Cade, Commissioner
<b>SECONDER:</b>	Donald "Dude" Payne, Commissioner
<b>AYES:</b>	Judge Sebesta, Commissioner Payne, Commissioner Cade, Commissioner Adams, Commissioner Linder

**STATE OF TEXAS           §**

**COUNTY OF BRAZORIA   §**

**I, Joyce Hudman, Clerk County Court and Ex-Officio Clerk of the Commissioners' Court of Brazoria County, Texas, do hereby certify that the foregoing is a true and correct copy of that certain:**

**ORDER NO. 7.A.1**

**RE: RESOLUTION - GULF INTRACOASTAL  
WATERWAY BRAZOS RIVER FLOOD  
GATES**

as passed by the Commissioners' Court on the 27th day of MARCH, A.D., 2018, Special Meeting Term of Commissioners' Court and as the same appear(s) in the Commissioners' Court Records of Brazoria County, Texas.

**GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 27th DAY OF MARCH, A. D., 2018.**

JOYCE HUDMAN, Clerk County Court  
and Ex-Officio Member of the Commissioners'  
Court of Brazoria County, Texas

By:   
\_\_\_\_\_  
T. Reynolds, Deputy



## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 11:00 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** McLaughlin, Patrick W; Mahoney, Matthew; Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] COMMENT LETTER to Gulf Intracoastal Waterway: Brazos River Floodgates & Colorado River Locks Systems Draft Integrated Feasibility Report and Environmental Impact  
**Attachments:** 2018 Brazos Floodgate Public meeting.jpg; letter CORP floodgates 040918.pdf

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Tammy Moss [mailto:office@brazospilots.com]  
Sent: Monday, April 9, 2018 12:55 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Cc: Billy J. Burns <burns@brazospilots.com>  
Subject: [Non-DoD Source] COMMENT LETTER to Gulf Intracoastal Waterway: Brazos River Floodgates & Colorado River Locks Systems Draft Integrated Feasibility Report and Environmental Impact

Mr. Allen,

Please find attached copy of letter from Brazos Pilots with comments on the reference study. Same will be sent via mail for your records.

Regards,

Tammy Moss  
Office Manager





Danny Allen  
Environmental Compliance Branch  
Regional Planning & Environmental Center  
[BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil)

April 6, 2018

Re: Gulf Intracoastal Waterway; Brazos River Floodgates & Colorado River Locks Systems  
Draft Integrated Feasibility Report and Environmental Impact

Dear Mr. Allen,

We the Brazos Pilots are State Commissioned pilots appointed by the Governor of Texas, responsible for the safe navigation of ships transiting the New Brazos River, Old Brazos River and the Intracoastal Waterway (ICW) in Brazoria County. Our mandate from the Governor is safe and efficient transit of vessels in Brazoria County including vessel traffic in the ICW east and west of the current Brazos River floodgates as well as the Freeport Ship Channel.

It is the opinion of the Brazos Pilots the primary mission and main reason for the existence of the Brazos River floodgates is to protect & serve the interests of Brazoria County residents and industry by providing flood control, sediment load control, debris control and river current control. However, the safe transiting of vessel traffic across the Brazos River is important to local industry as well. Any solution that the USACOE decides upon must be good for all industry partners and not at the expense of others. This is a very local issue, and it is in the best public interest if Brazoria and Matagorda county residents control the direction of this project.

The amount of sediment and debris load from the Brazos River into the ICW traveling through the Brazos east floodgates is quite significant. Each time the Brazos east floodgate is opened to allow barge traffic to pass, a significant amount of sedimentation is allowed to travel eastward up the ICW into the Freeport Ship Channel. In the 1980's the floodgate was closed the majority of the time with very little barge traffic. The dredging of private and public docks was on a 7-year cycle. At the end of the 1990's barge traffic had increased resulting in the floodgate being frequently opened and closed. At that time the public and private docks in the Freeport Ship Channel began seeing an increase in sedimentation and the dredge cycle was shortened to 5 years to maintain proper water depth for handling ships. With the start of the new decade and increased economic activity south of the Brazos River barge traffic continued to increase. In 2010 sediment was building so quickly dredging was required every 3 years. Today private docks such as the four Dow Chemical docks, two Enterprise Products docks and the Freeport

LNG basin are being dredged every 22 months to maintain proper water depth for handling ship traffic. Even the federal channel around the ICW and Freeport Ship Channel intersection has seen a major increase in required dredging. In the 1990's all dredging by the USACE upriver from the Freeport ICW was only contracted to pipeline dredges and scheduled to be dredged when the rest of the up-river section was dredged. However, after 2000 hopper dredges were increasing used yearly to maintain the proper water depth in the ICW intersection and Brazosport Turning Basin. Each year since then, the hopper dredges go further up the Old Brazos River. For the last eight years this has been an add on to the outer bar buoy channel contracts. This year the hopper dredges spent twice as long dredging the ICW intersection and Brazosport Turning Basin as they did dredging the outer bar. By the Brazos Pilots calculation 90% of all dredging done in the Port of Freeport for private docks, public docks and the Federal channel is due to leakage from the Brazos River east floodgates. By our estimation there was over \$25M spent on dredging public and private docks and the federal channel in just the last 22 months.

As it is now, when the 75' gate is open the Pilots experience increased unpredictable water current when handling ships in the Freeport Intersection. This current is nearly as strong as the Brazos river current itself. Increasing the gate width to 125' would substantially increase the effect of the current. This increase in water current has not been modeled for ship handling, nor have the Pilots been consulted during the study period. We are presently in the last year of construction on a ten year project to export LNG from a ship maneuvering area that includes the Freeport ICW intersection. All the current modeling, design and permits are done. Millions have been spent making sure this LNG export project is as safe as it can be. Nowhere in our planning did we account for a substantial increase of the size and strength of the current coming from the Brazos River east floodgate. I find it completely irresponsible the feasibility study did not to include a section on what the impact of the Brazos east floodgate proposal would do to the safety of maneuvering ships in the ICW intersection and Freeport LNG maneuvering area.

In the Brazos River Floodgates & Colorado River Locks Systems Draft Integrated Feasibility report it proposes digging a diversion channel around the current locks and diverting passing barge traffic thru the diversion channel during the two years you estimate it will take to construct the new floodgates. In this diversion channel there will be nothing to stop the full effect of the Brazos River current from freely flowing east thru the ICW into the Freeport Ship Channel. So, by your own planning, residents and industry in Brazoria County will have no flood control protection, no sedimentation control protection, and nothing to stop the full effect of the Brazos River current from freely flowing into the Freeport Ship Channel twenty-four hours a day for two years. The Freeport Ship Channel has been a tidal estuary harbor, free of river currents for over 80 years. All ship moorings and vessel operations, policies and procedures are written and established on this assumption. If the USACOE plans on changing the Freeport Ship Channel from a tidal estuary harbor to a river delta port everything we do will have to be reviewed. Operating in a river delta environment means every policy will have to be reexamined. Many ship movements we do now will have to be restricted during times when the Brazos River is in flood stage. We operate now with minimum under keel clearance because we have only tidal currents. However, under keel clearance policies will have to be changed as the excess current from the Brazos River will require us to increase our under keel clearance. When operating in a strong current environment vessel squat is more pronounced and requires a larger squat factor. River delta ports worldwide have a significant higher accident rate than tidal estuary ports. The

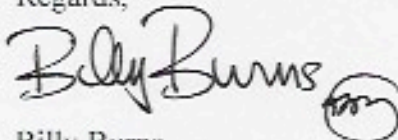


main reason Freeport is one of the safest ports in the nation is because we operate in a tidal estuary environment. Adding the Brazos River current to our harbor will make ship transits and vessel operations more dangerous. The larger the river the more dangerous it is to operate ship traffic in. The Brazos River is the largest, dirtiest and most powerful river in Texas.

The Brazos Pilots realize that the present floodgates are severely out dated and in need of a major upgrade to support modern day vessel traffic. We are always willing to support improvements to the flood gate system that make sense. But those improvements must not come at the expense of the local population, local industry and the local economy of the area. There are several proposals and engineering options that would give the barge industry greater efficiency and greater safety that doesn't come at the expense of others. A two gate system on each side of the Brazos River, that were spaced several thousand feet apart, where one gate would always be closed, is an option that would silence most criticism of your project. If there were two gates then they could be as wide as needed because one gate would always be closed. Spacing them further apart allows for tugs never to stop but just keep pushing through. Another plan that would significantly speed up barge crossings is to have two sets of locks on both sides. This would make for two-way traffic crossing the river. Each crossing would have its own double set of gates. There are an array of new creative designs and engineering plans that make a lot more sense than what is presented in this plan. The Brazos Pilots look forward to working with the Corps on a different plan for the Brazos River Floodgates. I am certain if local industry was involved we could develop a plan that would significantly improve the tug/barge industry's safety and efficiency, as well as improve flood control, sediment control and current control at the mouth of the Brazos River.

The Brazos Pilots collectively oppose the Gulf Intracoastal Waterway, Brazos River Floodgates & Colorado River Locks Systems Draft Integrated Feasibility Report and Environmental Impact as proposed. It is our belief it greatly reduces the safety margin of vessel traffic and will have a significant impact on the amount of dredging required to maintain our current project depth. It will have major safety impacts on handling ships in the ICW intersection in the future during times when the Brazos river is in flood stage. This project will put restrictions on operations that we currently do and be a hardship to Freeport Ship Channel users. Please do not spend the \$180M of taxpayer's money assigned for this project and leave us worse off. We consider this project as proposed as reckless, ill-conceived and a danger to the growth of the Freeport Ship Channel in the future.

Regards,

A handwritten signature in black ink that reads "Billy Burns" in a cursive style. To the right of the signature is a small circular stamp or mark.

Billy Burns  
President

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Executive Vice President

**KRISTY COURS**  
Administrative Secretary

**EDITH FISCHER**  
Director of Tourism

April 3, 2018

District Engineer  
Galveston District  
U.S. Army Corps of Engineers  
P. O. Box 1229  
Galveston, TX 77553

REF: San Bernard River

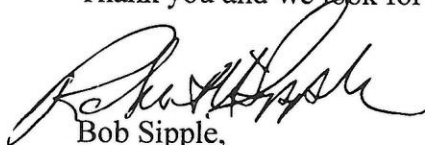
The Brazosport Area Chamber of Commerce recommends the USACE return the Hydrodynamic model based on the condition that the mouth of the San Barnard River is fully open. This is the future condition given the County's commitment to restoring the flow in the river and it should be fully considered.

Rerun your sediment transfer model with the mouth of the river open in order to refine and determine the amount of sediment deposition that will travel through the GIWW and into the San Bernard estuary. The increased sediment load will negatively impact the estuary and the actions of the county.

Reevaluate your environmental impacts to fully consider the impacts that the proposed TSP will have on the San Bernard estuary with the river open to the GoM, and federalize the San Bernard from the GIWW to the GoM.

The main reason for reopening the San Bernard, which is currently closed, to the GoM is to restore the tidal flow to the estuary. This would enable the estuary to normalize back to its historic conditions and reduces significantly the flow of water from the San Bernard that would be diverted toward the west gate. This has a positive impact on wetlands and aquatic species throughout the region as well as positive operational impacts at the flood gates.

Thank you and we look forward to your response.

  
Bob Sipple,  
2018 Chairman of the Board

## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:50 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); McLaughlin, Patrick W; Mahoney, Matthew  
**Subject:** FW: [Non-DoD Source] Brazos River West Gate Removal

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Jim Cooper [mailto:jimcooper1954@yahoo.com]  
Sent: Monday, March 12, 2018 8:46 AM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos River West Gate Removal

I am opposed to removing the West flood gates on the Brazos River because it will not allow free tidal flow from the Gulf of Mexico into and out of the San Bernard River. Without a West gate on the Brazos, the San Bernard will flow into and out of the Brazos River. This is not the natural flow pattern of the Bernard and only because of the Inter-Coastal Waterway.

Any funds should be utilized to insure our rivers flow naturally without human intervention. Every effort should be made to allow the San Bernard to freely flow into and out of the Gulf of Mexico. I hope this all make sense. If not, please feel free to call me or reply via email.

Jim Cooper  
979-236-0704

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## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:51 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Brazos River Floodgates Modifications

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Jim Cooper [mailto:jimcooper1954@yahoo.com]  
Sent: Wednesday, March 28, 2018 1:08 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos River Floodgates Modifications

Please do not remove the West flood gate on the Brazos River/Intercoastal Waterway intersection. The intercoastal waterway interferes with the natural flow of the San Bernard river in and out of the Gulf of Mexico. We need the natural tidal movement to keep the mouth open for the San Bernard. Please do whatever you can to keep the San Bernard river mouth open and removing the West floodgate on the Brazos River will make this silting in of the Bernard, much worse. This is a huge environmental travesty.

Sincerely

Jim Cooper  
1069 Riverview Ranch  
Brazoria, TX 77422  
979-236-0704

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## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:59 AM  
**To:** McLaughlin, Patrick W; Mahoney, Matthew; Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); Jason Schindler; Portia Osborne; Lovett, David P Jr CIV USARMY CEMVN (US)  
**Subject:** FW: Brazos/Colorado River TSP comments  
**Attachments:** image003.jpg; USACE Brazos\_Colorado River locks 04\_06\_18 FINAL.pdf

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Womack, Daniel (D) [mailto:DWomack@dow.com]  
Sent: Monday, April 9, 2018 6:18 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Cc: Nunez, Lance (LE) <LENunez@dow.com>; Fewell, Mike (M) <fewellmd@dow.com>  
Subject: [Non-DoD Source] Brazos/Colorado River TSP comments

April 9, 2018

Via Email to BRFG\_CRL\_FeasibilityStudy@usace.army.mil <mailto:BRFG\_CRL\_FeasibilityStudy@usace.army.mil>

To Whom It May Concern:

This letter is in response to the request for inland waterway user comments on the Brazos River Floodgates/Colorado River Lock Tentatively Selected Plan (TSP). We appreciate that the USACE is asking for/considering feedback from inland waterway users. These comments are also attached here.

The Dow Chemical Company is a diversified chemical company that harnesses the power of innovation, science and technology to constantly improve what is essential to human progress.

As background, The Dow Chemical Company is a major manufacturer with 4 manufacturing sites that would be directly impacted by the TSP. In addition, Dow is a top tier exporter storing and shipping materials from various third party managed facilities on the Houston Ship Channel to destinations world-wide via bulk chemical tankers and container vessels who would also be affected by the TSP. Domestically, Dow is one of the largest shippers of chemicals by inland barge in the United States.

Dow relies heavily on the safety and sustainability of the inland water system. As such, we have been a vested and active stakeholder participating in dredging, security, port efficiency and barge industry group discussions for many years. While Dow sees the Tentatively Selected Plan (TSP) as a positive step for the safety and sustainability of this vital waterway, we also maintain numerous concerns which are detailed below.

### Brazos River Floodgates

While Dow Chemical fully supports upgrades to the outdated and increasingly unreliable infrastructure at Brazos River Floodgates there are concerns and unanswered questions related to the TSP.

Dow agrees that the proposed east side 125' gate being set back 1,300' from its current location will allow double up tows to transit without tripping. These changes will increase efficiency and safety. However, the original floodgates were also designed to control flows and silt into the Gulf Intracoastal Waterway. Similarly, one of the TSP project objectives is to manage silting in the Intracoastal Waterway and the Port of Freeport. According to the TSP hydraulic models, the 125' gate, with its corresponding 66% increase in size, will increase the amount of sediment being dropped in the Port of Freeport by 11%.

The increased dredging costs and frequency of required dredging will be borne by both taxpayers (federal channel) and private dock owners in the Port of Freeport. It's not clear to what extent these additional dredging costs and potential navigational delays/hazards have been factored into the overall cost analysis.

During construction of the proposed changes, the temporary open channel will cause increased silting in the Port of Freeport at an undetermined rate. The USACE will be responsible for keeping the federal channel dredged to its proscribed depth during this time. This will also accelerate the frequency of maintenance dredging at all docks in the Port of Freeport. It's not clear to what extent these additional dredging costs have been factored into the overall cost analysis and whether the USACE will also be responsible for dredging at private docks impacted due to construction.

Silting on the west side of the Brazos River will also increase. Complete removal of the west side gate in the TSP did not consider an approved project using Restore Act funds to dredge the mouth of the San Bernard River where it meets the Gulf of Mexico and is currently silted in. The objective of the Restore project is to restore historical flows and protect the natural resources of the area. This project may start by end of 2018. All of the TSP models were done with the

mouth of the San Bernard River silted in. New models need to be developed with consideration of San Bernard River historical flows or when the Restore project is complete for most accurate results.

Does the benefits to cost ratio calculation include the additional dredging costs for both the USACE and private dock owners in the Port of Freeport channel? Due to the shortened dredging frequency over the last decade, this needs serious and methodical consideration.

Dow Chemical believes that a true lock structure needs to be evaluated as the best solution for the Brazos River crossing on both sides as it eliminates silting issues in the Port of Freeport, enhances flood control, protects coastal wetlands, and maintains the preservation of a very productive marine fisheries ecosystem.

### Colorado River Locks

While Dow Chemical fully supports upgrades to the outdated and increasingly unreliable infrastructure at Colorado River Locks there are concerns and unanswered questions related to the TSP.

The first navigation structures built for the Colorado River Crossing were 2 floodgates built in 1944. The floodgates proved effective in the reduction of silt deposition in the waterway but delays to navigation were experienced due to frequent and excessive head differential caused by floodwaters in the Colorado River. In 1954 the floodgates were converted to navigational locks which effectively managed silting issues and eliminated navigation delays except during major flood events. Replacing a lock structure with floodgates appears to be a giant step backwards.

Commercial barge companies do not consider the Colorado River Locks to be an impedance on their business except during major flood events. The TSP will increase delays due to differential issues which occur on a frequent basis not related to major flood events.

It is difficult to understand the logic of replacing a 75' wide structure with a new 75' wide structure at Colorado River when the Brazos River crossing will be increased to 125'. This means a double up tow that can transit Brazos River without tripping will then travel 40 miles and have to break their tow apart at the Colorado River. The Intracoastal Waterway will be maintained at 125' on both sides of the Colorado River so this restriction is again hard to understand.

The additional space in the TPS to facilitate breaking up/making tows seems to only reinforce the inefficiencies of the 75' gates.

Dow Chemical cannot support spending \$38MM on a project that does nothing to correct the issues we have today and will only increase navigation delays.

Dow Chemical believes a widened true lock structure to be the best solution for the Colorado River crossing on both sides as it eliminates silting issues facilitates safer navigation, enhances flood control, protects coastal wetlands, and maintains the preservation of a very productive marine fisheries ecosystem.

Should you have any questions, please contact Mike Fewell, Barge Operations Manager, at (281)-974-9905 or [fewellmd@dow.com](mailto:fewellmd@dow.com) <<mailto:fewellmd@dow.com>> ; or Daniel Womack, Government Affairs, at (512) 636-6243 or [dwomack@dow.com](mailto:dwomack@dow.com) <<mailto:dwomack@dow.com>> .





April 9, 2018

Via Email to [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil)

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The increased dredging costs and frequency of required dredging will be borne by both taxpayers (federal channel) and private dock owners in the Port of Freeport. It's not clear to what extent these additional dredging costs and potential navigational delays/hazards have been factored into the overall cost analysis.

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Dow Chemical cannot support spending \$38MM on a project that does nothing to correct the issues we have today and will only increase navigation delays.

Dow Chemical believes a widened true lock structure to be the best solution for the Colorado River crossing on both sides as it eliminates silting issues facilitates safer navigation, enhances flood control, protects coastal wetlands, and maintains the preservation of a very productive marine fisheries ecosystem.

Should you have any questions, please contact Mike Fewell, Barge Operations Manager, at (281)-974-9905 or [fewellmd@dow.com](mailto:fewellmd@dow.com); or Daniel Womack, Government Affairs, at (512) 636-6243 or [dwomack@dow.com](mailto:dwomack@dow.com).



## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:53 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** McLaughlin, Patrick W; Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew  
**Subject:** FW: [Non-DoD Source] Public Comment GIWW Brazos River Floodgates and Colorado River Locks Systems Feasibility Study

**Importance:** High

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
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409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Monday, March 19, 2018 6:08 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public Comment GIWW Brazos River Floodgates and Colorado River Locks Systems Feasibility Study  
Importance: High

Gentlemen - here is a slide show that the COE put together after the San Bernard River was opened in 2009. Please note the data re the san Bernard flow. Blocked[http://www.hgac.com/community/water/watershed\\_protection/sanbernard/documents/HGCA%20MSBR%202011%2006%2022.pdf](http://www.hgac.com/community/water/watershed_protection/sanbernard/documents/HGCA%20MSBR%202011%2006%2022.pdf) It puts in a nutshell what happened and why. It is a COE slide show put together by your own Karl Brown. I urge you to consider the data within. I do not feel you have utilized past studies in the current Brazos Floodgate Feasibility Study. The San Bernard, the Brazos and the GIWW are a system - what you do to one affects the other two. PLEASE do more modeling with the San Bernard River open AND with it closed. This slide show proves that the hydrology of the Bernard, the GIWW and the Brazos is affected when the mouth of the San Bernard is open - or closed.

Regards,

Roy and Jan Edwards

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Blockedwww.sanbernardtx.com <Blockedhttp://www.sanbernardtx.com>

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:56 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] San Bernard Mouth Photos 3-20-18  
**Attachments:** 3-20-18 San Bernard Mouth North view.jpg; 3-20-18 San Bernard Mouth NW view.jpg; 3-20-18 Brazos River Mouth NE view.jpg; 3-20-18 San Bernard Mouth SW view.jpg; 3-20-18 Cedar Lanes Cut SE view.jpg; 3-20-18 Cedar Lakes cut estuary.jpg

**Importance:** High

Franchelle E. Craft  
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409-766-3187 Office Phone  
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-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoria.net.com]  
Sent: Wednesday, March 21, 2018 12:05 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] San Bernard Mouth Photos 3-20-18  
Importance: High

Don't know if you all got these pictures from Bert Smith, but they are important. Please note that the mouth of the Bernard is DEFINITELY starting its march toward Sargent - again. Please also note the cut in Cedar Lake #4 is also trying to cut a path west to Sargent to be able to stay open and the sand bar forming offshore from the Brazos River mouth. Please note that this area is a SYSTEM - the Brazos affects this whole system. Your modeling of the Brazos floodgates needs to include modeling of the Brazos gates with and without an open San Bernard River mouth. Right now, it is open. Your suggested plan for the west gate of the Brazos will hurt the San Bernard - not help it. Please go back and remodel your hydrodynamics of the system before you make final plans.

We need to continue to fight to get the mouth of the San Bernard River open on a permanent basis. These pictures will go up on [Blockedwww.sanbernardtx.com](http://Blockedwww.sanbernardtx.com) <Blockedhttp://www.sanbernardtx.com> sometime today.

Regards,

Jan and Roy Edwards

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From: agsdev@earthlink.net <mailto:agsdev@earthlink.net> <agsdev@earthlink.net <mailto:agsdev@earthlink.net> >  
Sent: Wednesday, March 21, 2018 10:48 AM  
To: agsdev@earthlink.net <mailto:agsdev@earthlink.net>  
Subject: San Bernard Mouth Photos 3-20-18

Here are several views taken yesterday 3/20/18 over the San Bernard mouth.

Also a couple shots of the Cedar Lake #4 cut into the Gulf ...and one at the mouth of the Brazos....note the offshore bar.

The good flying weather has returned!!

Bert

Sincerely,

A.G. "Bert" Smith

Cell: 979-299-3802

email: agsdev@earthlink.net <mailto:agsdev@earthlink.net>















## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 6:58 PM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Public Comment re Brazos Floodgates

**Importance:** High

Franchelle E. Craft  
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-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Wednesday, March 21, 2018 2:39 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public Comment re Brazos Floodgates  
Importance: High

Below is an article Roy and I put together to explain the relationship between the San Bernard and the Brazos for our website: Blockedwww.sanbernardtx.com <Blockedhttp://www.sanbernardtx.com> in 2013. It quotes the sources listed. Please consider doing more work on modeling the San Bernard, the GIWW and the Brazos as a system. In our opinion, your current proposed plan for the Brazos floodgates is lacking perspective.

Regards,

Jan and Roy Edwards

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The Dawn of the Delta

Too thick to drink - but too thin to plow was how the early settlers of Brazoria County described the Brazos River waters.

In 1929, the Brazos River Diversion Canal was opened to the Gulf of Mexico. This "new Brazos" gave Port Freeport a "dead water harbor". No more rain generated floods, drifting trees, or heavy siltation for the port. The diversion dam is under Brazosport Blvd. at the Freeport Municipal Park. The red and white shrimp boat, the Mystery, is positioned over the "old river" channel.

The construction of the Brazos River Diversion Canal moved the mouth of the Brazos River from just under 10 miles east of the mouth of the San Bernard to within less than 3.5 miles east of its mouth. Initially, nothing happened.

Nothing happened because the Brazos, like most rivers, needed a delta. The Brazos wanted a BIG delta.

"As the new Brazos River delta approached equilibrium, it began functioning as a natural by-pass route for sediment transported alongshore by waves. In the 1960's, the delta appears to have approached full bypassing potential. After the 1992 flood, this extra supply of sediment in the form of a channel-mouth bar began to attach to the southwest shore sometime around 1995, creating a sediment rich unstable shore face with sand readily mobilized by waves and transported by alongshore toward the San Bernard River mouth. From 1989 to about 1995, the spit at the San Bernard River mouth migrated to the southwest at a rate of approximately 1.2 ft./day. The average - annual net rate of longshore sediment transport, which is directed to the southwest is about 176,000 cubic yards per year." Source: USACE report ERDC/CHL TR-02-10, August 2002.

Aerial photos from 1954 show that the Brazos River Delta had extended over 2 miles into the Gulf of Mexico. The delta continues to grow today, but at a very slow rate.

Now, we have 176,000 cubic yards per year of washed, small grain, yellow sand (about 98% pure sand) which is beach quality sand across the mouth of the San Bernard every normal year. Heavy freshwater floods on the Brazos can increase the flow of sediment to 400,000 cubic yards per year.

At 176,000 cubic yards per year, the sand mass is equivalent to 1 full size, double axel, 14 yard dump truck loads of sand every 84 minutes, going across the mouth of the San Bernard. If you have ever moved a dump truck load of sand with a wheel barrow and a shovel, you can imagine how big a pile of sand of 176,000 cubic yards would be and how hard that mass of sand is to move by the water pressure of the San Bernard River. Add three years of severe to extreme drought in the San Bernard watershed. Then add the fact that the west floodgate was out of service for almost 20 months - March 2011 until November 2012. Can you see why the San Bernard, which had been stable in its original location for thousands of years is now sanding closed?

"The discharge, including tidal exchange of the San Bernard River to the Gulf of Mexico is not sufficient to maintain the positional and cross-sectional stability of the river mouth. Migration and gradual closure can be expected." - Source: USACE study ERDC/CHL TR-02-10, August 2002.

"Abstract: This paper presents results of hydrodynamic and geomorphologic study of the river and the tidal flow at the intersection of the Gulf Intracoastal Waterway (GIWW) and the San Bernard River, Texas, to develop alternatives for reducing the current in the GIWW. The hydronamic modeling indicates that the presently elongated and constricted river mouth has greatly reduced the flow as compared to a channel running straight into the Gulf of Mexico, the historic orientation. The recommended alternative is to restore the migrating river mouth to its historic position." - Source: Reduction of Unanticipated Intracoastal Waterway Current by Relocating the San Bernard River Mouth, Texas; Conference Proceeding, Part of Dredging '02: Key Technologies for Global Prosperity.

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 6:59 PM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Public comment re Brazos Floodgates  
**Attachments:** image001.jpg

**Importance:** High

Franchelle E. Craft  
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2000 Fort Point Road  
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409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Wednesday, March 21, 2018 2:52 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public comment re Brazos Floodgates  
Importance: High

Below is another article written by Roy Edwards for our website Blockedwww.sanbernardtx.com <Blockedhttp://www.sanbernardtx.com> in 2013. It also shows the relationship of the San Bernard to the Brazos. The source of the material is noted:

Regards,

Jan and Roy Edwards

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Tripping 101 - What is Tripping?



The process, known as "tripping", is an inefficient and costly problem for both commercial and recreational navigation of a fixed structure. In this case we're talking about trying to get through the west floodgate intersection of the Brazos River. When current and water level differences between the Intracoastal Canal and the "new" Brazos River are above normal, "tripping" is necessary to navigate the west gate. To move through this structure, commercial operators must park their tows, break the barges apart, and move them through the floodgates in smaller sets or individually, and then put them back together on the other side.

"The back up of tidal flows and flood waters in the Gulf Intracoastal Waterway at the Brazos floodgates resulted in delays and damages to shippers and barge carriers of over \$3 million annually . . . immediately afterward (after the mouth was opened in March 2009), heavy rains caused flooding along the Brazos and Colorado Rivers, but navigation delays were minimal at the Brazos floodgates thanks to the San Bernard River mouth being opened." - from The Connecting Link, a publication of the Gulf Intracoastal Canal Association, Vol. 9, Issue 2.

The attached photo, courtesy of the Kirby Corporation, shows two 1600 HP push boats "pushing the current", "tripping" a west bound barge containing 142,000 gallons of a chemical through the west flood gate at the Brazos River.



## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 6:59 PM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Public Comment re Feasibility Study for Brazos Floodgates and Colorado Locks

**Importance:** High

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-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Wednesday, March 21, 2018 3:10 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public Comment re Feasibility Study for Brazos Floodgates and Colorado Locks  
Importance: High

Below is still another article written by Roy and Jan Edwards for our website Blocked[www.sanbernardriver.com](http://www.sanbernardriver.com) <Blocked<http://www.sanbernardriver.com>> in 2013 that illustrates the relationship between the San Bernard, the GIWW and the Brazos. It speaks to what I was referring to at the public meeting in Brazoria about the San Bernard Waters widening the GIWW between the west floodgate of the Brazos and the intersection of the GIWW and the San Bernard. The website it refers to is the COE's monitoring of the Brazos floodgates - and to this day, sometimes they work, and sometimes (even when we need them the worst) they don't. Here is the link to that website: Blocked<http://www.swg.usace.army.mil/Business-With-Us/Operations-Division/Brazos-River-Floodgates-Summary/> We have done our homework.

Regards,

Jan and Roy Edwards

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Blocked[www.sanbernardriver.com](http://www.sanbernardriver.com) <Blocked<http://www.sanbernardriver.com>>

## Tripping 102 - Why?

As the mouth of the San Bernard River begins to close, the flow of the water has to try another route to get to the Gulf of Mexico. The water flows eastward, through the Intracoastal Canal, through the west floodgate of the Brazos River into the Brazos River proper, and then to the Gulf of Mexico. This short, less than 4 mile journey from the San Bernard/Intracoastal Canal intersection through the west floodgate, is the only place in Texas where the waters in the Intracoastal Canal flow eastward. The flow increases until, at the closure of the San Bernard River Mouth, almost 100% of its waters must go through the west floodgate.

The Intracoastal Canal was originally completed from the Brazos to Corpus Christi in 1943, 100 feet wide by 8 feet deep. The USACE now maintains the Intracoastal (at a minimum) of 150 feet wide by 12 feet deep. In the 2002 Texas Parks and Wildlife study, Tracing Shoreline Change in the Mouth of the San Bernard River, Texas, this 4 mile section of the Intracoastal Waterway was 272 feet wide due to erosion caused by boat wakes, wind driven waves, and the currents produced by the waters of the San Bernard River. In the same study, rapid erosion of the canal banks increased the width to 515 feet. In 2002 the canal was 535 feet wide.

When this mass of water, 535 feet wide and up to 12 feet deep, reaches the west end of the west floodgate which is 75 feet wide by plus 12 feet deep, two circumstances arise that make barge navigation dangerous and difficult - if not impossible.

\* Circumstance 1 - Water rises at the restriction - On the USACE website, that monitored the gates, the water level at the west end of the west gate has been shown to be 6 feet higher than the water level at the east end of the floodgate structure or at the Brazos River.

\* Circumstance 2 - The Velocity Increases - This can be likened to putting a quarter inch jet nozzle on a five/eights inch garden hose. Although the pressure at the facet remains the same, the speed at which the water exits the jet nozzle increases greatly. The USACE website has previously posted currents of 15 knots (18 mph) east bound toward the Brazos River through the west gate structure. Most push boats have a maximum speed of 8 knots or 9.6 mph.

The website that gave this information is currently non-functional. If the website becomes operational again, it may again measure current speed and direction in the Brazos, current speed and direction inside the east and west floodgates, and water height differences at either end of each floodgate structure. The website was historically updated every 12 hours. If and when the website becomes viable, we will post a link on [Blockedhttp://www.sanbernardtx.com](http://www.sanbernardtx.com) <Blockedhttp://www.sanbernardtx.com> .

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 7:00 PM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Public comment for Brazos Floodgates and Colorado Locks Feasibility Study

**Importance:** High

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409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Wednesday, March 21, 2018 3:28 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public comment for Brazos Floodgates and Colorado Locks Feasibility Study  
Importance: High

Below is yet another article written by Roy and me in 2013 concerning the relationship between the GIWW,, the San Bernard and the Brazos floodgate. Please reconsider modeling the system before you submit the final plan. The sources for the information are noted.

Regards,

Jan and Roy Edwards

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Tripping 103 - All About Barge Traffic

"It is the firm belief of the Gulf Intracoastal Waterway Association's operator-members that the closure that has been slowly taking place at the mouth of the San Bernard River is indeed having some serious negative impacts on the Intracoastal Waterway and its safe, efficient operation. Water that would otherwise reach the Gulf of Mexico at the natural river outlet has increasingly been flowing into the GIWW as the natural river mouth silts closed. This

phenomenon has increased currents at the Brazos Floodgates to levels that prevent tow passage through the floodgate structure on an increasing frequency. This fact also increases risk of serious accident at the floodgates as tows attempt to help each other 'push the current'. In fact, within recent months, there have been a number of accidents caused from this, and one very serious accident that could have resulted in a total waterway closure had the floodgate mechanism been damaged beyond operation."

Source - letter from Raymond Butler, Executive Director, Gulf Intracoastal Waterway Association, June 27, 2005.

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"Water transportation is the most fuel efficient mode of transportation and produces the smallest amount of air pollutants per ton of cargo carried. In 2006, 74.16 million short tons (1 short ton = 2,000 pounds) of goods were moved on the Texas GIWW. The estimated value of these goods was over \$25 billion. The majority of this cargo, 64.7 millions short tons, or 87%, is classified as petroleum or chemical related products. This was accomplished by approximately 109,588 barge one-way trips.

In 2006, the GIWW facilitated commercial entities to catch an estimated 12.7 million pounds of shrimp, oysters, crabs, and finfish within Texas bay systems, amounting to a wholesale's value of \$28.7 million,

The capacity of one barge is equivalent to 15 rail cars or 60 trucks.

One gallon of fuel moves 1 ton of cargo 576 miles on the inland waterways, 413 miles on rail, and 155 miles on truck.

Barge transportation produces 40% less air emission than truck. Barge transportation produces 16% less air emission than rail.

The movement of goods by barge is a safe mode of transportation. In 2006, according to the Office of Hazardous Materials Safety, the number of documented hazardous spills in Texas was 54 by air, 1,382 by highway, 100 by railway, and 3 by water transportation.

A serious safety hazard has arisen at the Brazos River Floodgates."

Source - Gulf Intracoastal Waterway, Texas Department of Transportation, Legislative Report, 81st Legislature.

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 7:00 PM  
**To:** Portia Osborne; Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Public Comment Re Feasibility Study Brazos Floodgates and Colorado Locks

**Importance:** High

Franchelle E. Craft  
Project Manager  
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409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Wednesday, March 21, 2018 3:48 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public Comment Re Feasibility Study Brazos Floodgates and Colorado Locks  
Importance: High

Here is yet another article Roy and I wrote for Blockedwww.sanbernardtx.co <Blockedhttp://www.sanbernardtx.co> in 2013 explaining the relationship between the San Bernard, the GIWW and the Brazos. Please consider the relationship between these 3 bodies of water as one system and model it with and without a closed mouth of the San Bernard. To do otherwise will create other problems.

FYI - The Texas Stream Team (for which we have been submitting water quality data on the Lower San Bernard to once a month since late 2008, is planning to do a Watershed Data Report on the San Bernard. We think you should also consider that data which has been collected with the mouth open and closed, in your research before you submit your final plan. This study has been on-going longer than your hydrology study and should be considered.

Regards,

Jan and Roy Edwards

979-964-4332

13-628-8991

jredwards@brazoriainet.com <mailto:jredwards@brazoriainet.com>

## Tripping 104 - Dangers at the West Gate

Webster defines "collision" as a sudden, violent contact between moving bodies. In marine terms, "lision" is defined as sudden violent contact between a moving marine vessel and a fixed object.

According to the USACE, the average fixed structure monitored by them has less than 35 lisions per year, most of which are minor "bump and go" occurrences. In 2008, the west flood gate of the Intracoastal Canal at the Brazos River (the new Brazos) had over 650 lisions. That was an increase over the national average of over 1,850 per cent.

If you live or work within 100 miles of the west floodgate, you are within the danger zone.

Of the 74.16 million short tons (a short ton equals 2000 pounds) transported by barge in Texas in 2006, 87 per cent, or 64.7 million short tons was either petroleum or chemical related products. In 2012, 45 million short tons were moved by barge between the Brazos floodgates and the Colorado locks. A single liquid petroleum/chemical barge (52 ½ feet wide x 162 feet long) loaded to capacity and drawing 12 feet of water at the keel contains 142,000 gallons. If that cargo is benzene, the vapors are extremely hazardous, a known carcinogen, and highly explosive. Liquid benzene is worse. Some other chemical cargos are even more dangerous than benzene.

Barge traffic is the safest and most economical form of bulk cargo transportation, but just like freeway driving, some parts of a journey are more dangerous than others. THE WEST FLOODGATE AT THE BRAZOS RIVER IS THE MOST DANGEROUS STRUCTURE TO NAVIGATE ON THE INTRACOASTAL CANAL IN TEXAS. The more the waters of the San Bernard River are diverted to the Brazos, the worse the navigation hazards become. The mouth of the San Bernard River is now closed completely. The greatest majority of the flow of the river is now diverted through the west floodgate.

A serious non-chemical lision within the gate structure could close the Intracoastal to all traffic. Closure would cost \$194 million per day to Texas industry.

A serious lision of a chemical barge, rupturing the hull and releasing liquids and vapors is unmanageable. Hazardous, explosive vapors carried at 10 miles per hour by the prevailing southern wind currents would have the following cause/effect timeline:

- \* Vapors in Freeport in 20 minutes
- \* Vapors in Jones Creek in 30 minutes
- \* Vapors in Clute within 45 minutes
- \* Vapors in Lake Jackson within 60 minutes
- \* Vapors in Angleton within 75 minutes
- \* Vapors in Alvin within 4 hours
- \* Vapors in Houston above Beltway 8 South within 6 hours

Do you live or work within the potential vapor cloud area?

Can you leave work, collect your family, and out run a potential vapor cloud?

Please contact your local, state and federal elected officials. Express your concerns for yourself and your family about the real dangers at the west floodgate of the Brazos. Immediate emergency federal funding for the USACE to dredge open the closed mouth of the San Bernard River is mandatory for YOUR safety.





## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:56 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Public Comment re Brazos Floodgates and Colorado Locks Feasibility Study  
**Attachments:** image001.jpg

**Importance:** High

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-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Wednesday, March 21, 2018 3:58 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Public Comment re Brazos Floodgates and Colorado Locks Feasibility Study  
Importance: High

Here's yet another source of information you should consider when making your final hydrology model. We posted this information on Blocked[www.sanbernardtx.com](http://www.sanbernardtx.com) <Blocked<http://www.sanbernardtx.com>> again in 2013 and the report still has an active link. Please reconsider your hydrology model with the mouth of the Bernard open as well. There is so much data out there that indicates you should, but from your feasibility report, it doesn't look like any of it was accessed.

Regards,

Jan and Roy Edwards

979-964-4332

713-628-8991

jredwards@brazoriainet.com <mailto:jredwards@brazoriainet.com>

Blocked[www.sanbernardtx.com](http://www.sanbernardtx.com) <Blocked<http://www.sanbernardtx.com>>

San Bernard vs. Brazos, David vs. Goliath

By Roy Edwards

I just finished reading a study entitled: Hydrology of the Gulf Intra Coastal Waterway in the San Bernard - Brazos Rivers Estuaries by Kiseong Hyeong and James R. Lawrence - March 2003

Blocked[http://www.sanbernardtx.com/attachments/File/Links/San\\_Bernard\\_Hydrology\\_of\\_the\\_Guld\\_Geosciences\\_Journal.pdf](http://www.sanbernardtx.com/attachments/File/Links/San_Bernard_Hydrology_of_the_Guld_Geosciences_Journal.pdf)

<Blocked[http://www.sanbernardtx.com/attachments/File/Links/San\\_Bernard\\_Hydrology\\_of\\_the\\_Guld\\_Geosciences\\_Journal.pdf](http://www.sanbernardtx.com/attachments/File/Links/San_Bernard_Hydrology_of_the_Guld_Geosciences_Journal.pdf)>

Below is some interesting pertinent data quoted from that report:

- \* The San Bernard discharge rate is 40 to 100 times less than that of the Brazos River.
- \* The flow of the San Bernard River toward the larger Brazos River is due to the shallowing (closure) of the San Bernard River at the River mouth which restricts free discharge of the River water to open sea and diverts the flow toward the GIW on both sides of the river.
- \* The results of this study are also useful for tracing of contaminants in the studied GIW.
- \* The Brazos River drainage basin comprises 15% of Texas land area and extends further north across the border to New Mexico.
- \* The Brazos River is the third largest contributor of suspended sediment to the Gulf of Mexico.
- \* The San Bernard River has a small drainage basin that extends to only 150 km northwest of the estuary.
- \* Depth of the Brazos River is relatively uniform at around 7 meters through the studied parts of the river.
- \* Depth of the San Bernard River varies from 5 to 7 meters near the confluence with the GIW, but decreases drastically to less than 0.5 meters near the river mouth. (The river is now totally closed).
- \* The Brazos River discharge on December 19, 2001 reached its maximum at around 60,000 cubic feet per second which is 6 times higher than the 10 year average of 10,600 cubic feet per second. The water discharge in the San Bernard River was about 700 cubic feet per second, close to the 10 year average of 760 feet per second.
- \* On the other hand, discharge rates of these two rivers on January 18 and March 4, 2002 when the second and third samplings were undertaken were very low at 3,000 cubic feet per second and 3,200 cubic feet per second in the Brazos River, and 70 cubic feet per second and 32 feet per second in the San Bernard River...
- \* The westerly flow of the San Bernard River was not expected because of its minor discharge that accounts for only 1 to 10 % of the Brazos River.

**Table 1.** Discharge rates (feet<sup>3</sup>/sec) of the Brazos and San Bernard Rivers and tidal cycles during sampling periods.

	12/19/01	1/28/02	3/4/02	A 10-year average <sup>1</sup>
Brazos river <sup>2</sup>	60,000	3,000	3,200	10600
San bernard river <sup>2</sup>	700	70	32	760
Tidal cycle <sup>3</sup>	Low	Low	High	

<sup>1</sup>An average of monthly discharge rates from 1991 to 2000 (USGS, 1992–2001).

<sup>2</sup>Obtained from <http://waterdata.usgs.gov/tx/nwis/rt>. The Brazos River data are from the Rosharon site (08116650) and the San Bernard River data are from the Boiling site (08117500).

<sup>3</sup>Obtained from <http://dnr.cbi.tamucc.edu>.

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:48 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Brazos Floodgates Feasibility Study  
**Attachments:** San Bernard Mouth Long Shore currents 6-1-15.pub; San Bernard and ICW 6-6-15.pub

**Importance:** High

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Tuesday, April 3, 2018 12:44 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos Floodgates Feasibility Study  
Importance: High

Here is more evidence that the Brazos, the San Bernard and the GIWW are interconnected. You cannot do something to one without affecting the other 2. Please consider re-modeling your study of the west gate of the Brazos with the San Bernard Open.

Regards,

Jan and Roy Edwards

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Blockedwww.sanbernardtx.com <Blockedhttp://www.sanbernardtx.com>



Brazos River Mouth

San Bernard River Mouth

**Long shore currents from Brazos  
to San Bernard River**

**Taken 6-1-15**

**By Bert Smith**

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)



Intersection of ICW and San Bernard  
River

Taken 6-6-15

By Bert Smith

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)

Please note water color change at  
The intersection - fresh water coming  
down the San Bernard meeting the water  
coming from the Brazos down the ICW .

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:58 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Mahoney, Matthew; Richardson, Jerica M CIV USARMY CESWF (US); McLaughlin, Patrick W  
**Subject:** FW: [Non-DoD Source] April Water Quality for Lower San Bernard River  
**Attachments:** TX\_Stream\_Team\_Data\_Form 4-10-18.docx; 2018 WATER TESTS SAN BERNARD RIVER sanbernardtx.xlsx; San Bernard and ICW 6-6-15.pub

**Importance:** High

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Tuesday, April 10, 2018 1:46 PM  
To: Hrametz, Joseph J CIV USARMY CESWG (US) <Joseph.J.Hrametz@usace.army.mil>; Brown, Karl B CIV USARMY CESWG (US) <karl.b.brown@usace.army.mil>; CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Cc: Rea, Alicia D CIV USARMY CESWG (US) <Alicia.D.Rea@usace.army.mil>; Frabotta, Chris C CIV USARMY CESWG (US) <Christopher.C.Frabotta@usace.army.mil>; Sandra Arnold <sandra.arnold@usace.army.mil>  
Subject: [Non-DoD Source] April Water Quality for Lower San Bernard River  
Importance: High

Good afternoon - attached please find April's water quality report for the lower San Bernard River. It's been an active month. The Spoonbills, Cormorants and White Pelicans have moved on - none are across the river now leaving only gulls and a few Black skimmers. The strong North wind from the latest cold snap has the river muddied up and the heavy rains upstream last week has the salinity down. When the cold front hit the area on Saturday, the difference in temperature of the river and the cold air created a mist rising from the river making the river (and indeed all of River's End) appear to be on fire. Our Purple Martins have again found the new houses and are nesting. Though we have seen a few Barn Swallows, they are not yet nesting under our house in their traditional locations.

The Public Comment period re the Feasibility Study of the Brazos Floodgates and the Colorado locks ends tomorrow. We have sent in many reasons why we think their solution for the Brazos Floodgates is wrong and if continued without considering the San Bernard River mouth being open (Ongoing plans utilizing the RESTORE Act funding), will result in sanding in the San Bernard from both the Gul side and the GIWW side. I have included a graphic illustrating this happening with the gates open in 2015 with the Brazos flood. The current plan put forth by the Corps of Engineers will allow for double the size opening of the west gate, will leave it open and adding, per the COE, "only" 18 - 22% more



siltation in the GIWW. This plan, as it currently modeled, is unacceptable to those of us fighting to re-open the San Bernard River.

We will be posting this information to Blockedwww.sanbernardtx.com <Blockedhttp://www.sanbernardtx.com> sometime today.

Regards,

Jan and Roy Edwards

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713-628-8991

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Blockedwww.sanbernardtx.com <Blockedhttp://www.sanbernardtx.com>



# Texas Stream Team

Caring for Our Waters

Submit to:  
Houston-Galveston Area  
Council Clean Rivers Program  
P.O. Box 22777  
Houston TX 77227-2777  
832-681-2516

## WATER QUALITY MONITORING FORM

<b>Group ID</b>	ZV	<b>Monitors ID #</b>	9845			
<b>Site ID #</b>	80509	<b>Site Description</b>	San Bernard at Fisherman's Isle			
<b>Sample Date</b> MM-DD-YY	04-10-18	<b>Sample Time</b> (military: HHMM)	11:10 a.m.	<b>Sample Depth</b> Meters [not total depth]	.15	
<b>Meter Calibration: (Within 24 hours of sampling.)</b>			N/A	N/A	NO	
Calibration	Date	Time	Standard Value	Standard Temp (C <sup>0</sup> )	Initial Meter Reading	Meter Adjusted To
Conductivity	N/A					
pH						
<b>Core Test and Measurements</b>			<b>Reagents: Are any reagents expired?</b>		No	
N/A	Conductivity					
	TDS 3	TDS 4				
21	Air Temperature (C <sup>0</sup> )					
18	Water Temperature (C <sup>0</sup> )		<b>Additional Test Conducted</b> (nutrients, fecals, etc.)			
7.8	Dissolved Oxygen (mg/L)		1. Type	n/a	Reading	
Average	7.8	2 <sup>nd</sup> titration	2. Type		Reading	
7.5	pH (Standard Units)		3. Fecal Coliform or E.Coli		n/a	colonies 100 mL
0.15	SECCHI Disk Transparency (Meters)		Sources of Readings	Certified Lab		Monitor
0.50	<b>Total Depth (meters)</b>					
<b>Field Observations</b>			<b>Coastal Area Salinity Test and Observations</b>			
2	FLOW SEVERITY 1-no flow 2-low 3-normal 4-flood 5-high 6-dry		1.0040	= initial reading	example: 1. 0 _ _ _ _	
1	ALGAE COVER 1-absent 2-rare(<25%) 3-common (26-50%) 4-abundant (51-75%) 5-dominant (>75%)		<u>- . 0 0 10</u>	Water temp. =	18	°C
4	WATER COLOR 1-no color 2-light green 3-dark green 4-tan 5-red 6-green/brown 7-black		1.0030	Example: _ . _ _ _ _		
2	WATER CLARITY 1-clear 2-cloudy 3-turbid		( + or - )	+ .0004	<b>correction factor Table 210.I</b>	
1	WATER SURFACE 1-clear 2-scum 3-foam 4-debris 5-sheen		1.0034	= corrected density	example: 1. 0 _ _ _ _	
3	WATER CONDITIONS 1-calm 2-ripples 3-waves 4-white caps					
1	WATER ODOR 1-none 2-oil 3-acrid (pungent) 4-sewage 5-rotten egg 6-fishy 7-musky		5.5	SALINITY (ppt)	18	SAMPLE TEMP °C
2	PRESENT WEATHER 1-clear 2-cloudy 3-overcast 4-rain		2	TIDE STAGE: 1-low 2-falling 3-slack 4-rising 5-high		
5	<b>DAYS SINCE LAST SIGNIFICANT PRECIPITATION</b> (runoff)		<b>Measurement Comments and Field Observations</b>			
¼"	inches RAINFALL ACCUMULATION (last 3 days)		The strong north wind has river muddied up and heavy rains upstream last week has the salinity down. Birds across the river have been reduced to mostly gulls and some black skimmers. The Purple Martins have returned to our new boxes and are nesting. We have seen a few Barn Swallows, but none are actively nesting under our house. The cold front that blew through Saturday made quite a display. The difference in the air temperature and the water temperature caused the river to appear to be on fire giving off "smoke". You don't see this often and it made River's End appear to be on fire.			
78	<b>MINUTES TOTAL TIME SPENT SAMPLING AND TRAVELING</b>		0.1	<b>MILES TOTAL ROUNDTRIP DISTANCE TRAVELED</b>		2
			9845		DATE	4-10-18
			9844		DATE	4-10-18

SAN BERNARD RIVER WATER TEST RESULTS.  
 SAMPLES TAKEN AT THE VILLAGE OF RIVERS' END, LOWER SAN BERNARD, SOUTHWEST BRAZORIA COUNTY, TEXAS.  
 SAMPLES TAKEN ON THE SECOND MONDAY OF EACH MONTH.

DATE	DISSOLVED OXYGEN MG/L	WATER TEMP. (CELSIUS)	WATER TEMP. (F)	PH DISTILLED WATER EQUALS 7.0	SALINITY (PPT) OFF SHORE GULF WATER ABOUT 35
Apr-18	7.8	18	64	7.5	5.5
Mar-18	8.6	19	66	7.5	7.1
Feb - 18	7.4	16	61	7	25
Jan - 18	10.9	9	48	8	20.9
Dec - 17	9.2	13	55	8	12.4
Nov - 17	8	20	68	7.8	19.3
Oct - 17	6.1	30	86	8	4.6
Sep - 17	5.7	30	86	8	3.7
Aug - 17	5.2	32	90	7.8	18
Jul - 17	4.5	31	88	7.5	17.8
Jun-17	4.6	30	86	8	5.2
May - 17	6.3	25	77	8	2.1
Apr-17	5.8	23	73	7.5	1.6
Mar-17	6.8	19	66	7	0.6
Feb - 17	7.2	22	72	7.5	10.6
Jan - 17	10	14	67	8	4.8
Dec - 16	7.5	17	63	7	0.9994
Nov - 16	6.1	21	70	7.5	14.2
Oct - 16	5.95	24	75	7.5	2.4
Sep - 16	5.8	31	88	7.3	4.3
Aug - 16	4.45	32	90	7.5	5.1
Jul - 16	6	31	88	7.2	4.3
Jun-16	4	29	84	6.7	0.9
May - 16	6.6	23	73	7	1.7
Apr-16	7	23	73	7.5	14.9
Mar-16	5.2	24	75	7.1	Too Fresh to measure
Feb - 16	8.8	13	55	7.5	4.7
Jan - 16	6.6	13	55	7	3.4
Dec - 15	7	19	66	7	4.5
Nov - 15	5.4	21	70	7	1.1
15-Oct	6.4	28	82	7	23.3
15-Sep	5.2	27	81	7	9.6
Aug - 15	5.77	31	88	7.5	21.8
Jul - 15	5.6	32	90	7	Too Fresh to measure
Jun-15	4.65	30	86	7	Too Fresh to measure
May - 15	6.2	25	77	7.6	0.25
Apr-15	4.7	22	72	7.4	Too Fresh to measure
Mar-15	7.6	14	57	8	23
Feb-15	7.4	16	61	7.5	7.9
Jan - 15	9.2	10	50	7.5	5.5
Dec - 14	7.5	17	63	7.8	17.2
Nov - 14	6.25	18	64	7.8	28
Oct - 14	4.95	28	82	7.6	24.1
Sep - 14	4.2	31	88	7.5	34.9
Aug - 14	4.4	32	90	7.8	32.9
Jul - 14	4.75	31	88	7.8	24.6
Jun - 14	5.2	28	82.4	7.5	7.2
May - 14	5.7	26	78.8	8	33.2
Apr-14	7.2	22	72	7.8	21.2

Mar-14	9.1	16	61	7.5	20.9
Feb - 14	9.4	14	57	7.6	13.9
Jan - 14	8.3	17	63	7.5	17.1
Dec - 13	9.4	12	54	7.5	5.8
Nov - 13	5.8	20	68	7	2.1
Oct - 13	4.45	27	81	7.5	33.6
Sep - 13	4.1	30	86	7.8	33.1
Aug - 13	4	31	88	7.5	40.6
Jul - 13	4.20	30	86	7.6	37.5
Jun - 13	4.80	29	84.2	7.7	21
May - 13	5.30	24	75	7.8	21.6
Apr-13	6.40	22	72	7.5	25.2
Mar-13	7.30	18	64	7.3	29.3
Feb-13	7.70	14	57	7.7	17.4
Jan -13	7.95	14	57	7.4	4.8
Dec - 12	6.80	20	68	7.8	33.8
Nov - 12	6.25	21	70	7.5	34.1
Oct - 12	6.45	23	74	8	21.6
Sep - 12	4.60	29	84	8	35.1
Aug - 12	4.80	33	91	7.9	25.9
Jul -12	4.10	30	86	7.5	32.1
Jun - 12	5.40	30	86	8.0 (sea water)	13.3
May - 12	6.80	29	84	7.5	5.9
Apr -12	6.40	25	77	7.6	6.2
Mar - 12	5.25	19	66	7.1	0.7
Feb - 12	8.60	14	57	7.5	15.2
Jan -12	7.00	18	64	7.5	26.7



**Intersection of ICW and San Bernard  
River**

**Taken 6-6-15**

**By Bert Smith**

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)

Please note water color change at  
The intersection - fresh water coming  
down the San Bernard meeting the water  
coming from the Brazos down the ICW .

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:56 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** McLaughlin, Patrick W; Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew  
**Subject:** FW: [Non-DoD Source] Brazos gates and Colorado lock Feasibility Study public comment  
**Attachments:** jpegSan Bernard and ICW 6-6-15.jpg; jpegSan Bernard Mouth Long Shore currents 6-1-15.jpg

**Importance:** High

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Janice Edwards [mailto:jredwards@brazoriainet.com]  
Sent: Tuesday, April 10, 2018 3:17 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos gates and Colorado lock Feasibility Study public comment  
Importance: High

Gentlemen - please reference your Public Notice SWG-2015-00603 ( Blocked<http://www.swg.usace.army.mil/Portals/26/docs/regulatory/PN%20August/PN.201500603.pdf?ver=2017-08-22-104142-710> ). This proves that the Corps of Engineers was aware that Brazoria County was in the process of opening the mouth of the San Bernard River mouth and had already done background work to get to the point of the Public Notice issued March 6, 2018 re the adjustments made to the project as a result of Hurricane Harvey. The applicant had previously proposed dredging to open the mouth of the San Bernard River and a Public Notice describing this work was issued on August 15, 2017.

The COE, therefore SHOULD have known this project was imminent and SHOULD have modeled their plans on the Brazos floodgates with and without an open mouth of the San Bernard. Instead your own documentation was ignored, and your current plans are unacceptable.

Attached, please note pictures taken during the 2015 flood which shows what happens between the San Bernard and the Brazos during a flood when the mouth of the San Bernard is closed and the 74' of the West gate of the Brazos was open (the gate was pulled for repairs). This is not theory - THIS HAPPENED. Your current plans would increase the width of the opening on the west side of the Brazos to from 74' to 125'. Please note the siltation in the GIWW as it actually occurred with a missing west gate. An increase of "only" (your words) 18 - 22% in siltation in the GIWW is totally unacceptable. More research into existing studies and additional modeling should be done before the current Brazos feasibility study move forward. Your current plan would do more harm than good. And, at a minimum, your work should be like a medical doctor's oath, "First, do no harm".

Regards,

Jan and Roy Edwards

979-964-4332

713-628-8991

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Blocked[www.sanbernardtx.com](http://www.sanbernardtx.com) <Blocked<http://www.sanbernardtx.com>>



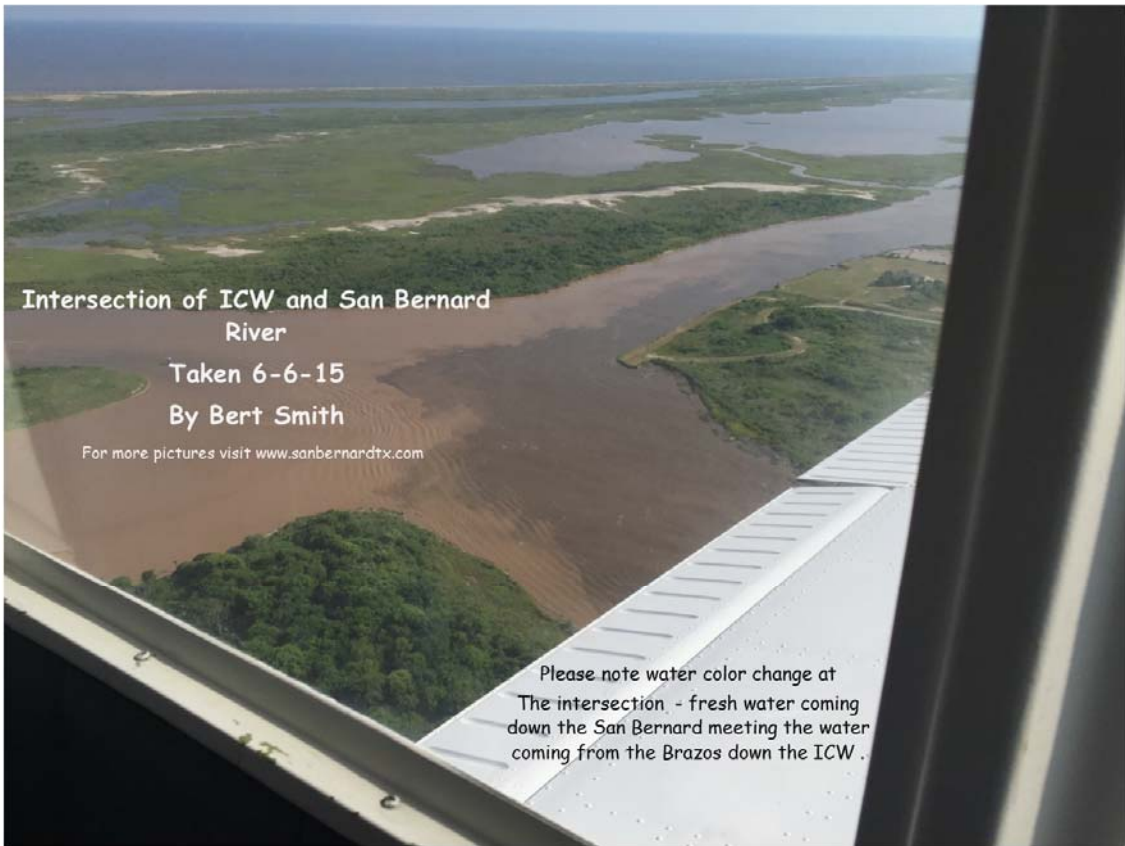
Long shore currents from Brazos  
to San Bernard River

Taken 6-1-15

By Bert Smith

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)





Intersection of ICW and San Bernard  
River

Taken 6-6-15

By Bert Smith

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)

Please note water color change at  
The intersection - fresh water coming  
down the San Bernard meeting the water  
coming from the Brazos down the ICW .



April 10, 2018

**Via Certified Mail and Email to Ms. Franchelle Craft (Franchelle.E.Craft@usace.army.mil)**

Colonel Lars Zetterstrom, P.E.  
District Engineer  
U.S. Army Corps of Engineers  
Galveston District  
P.O. Box 1229  
Galveston, Texas 77553

**RE: Freeport LNG Development, L.P. Comments to Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Lock Systems Feasibility Study, Draft Report dated February 19, 2018**

Dear Colonel Zetterstrom,

Freeport LNG Development, L.P. ("*FLNG*") respectfully submits this letter to provide comments to the Draft Report, dated February 19, 2018, for the Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Lock System Feasibility Study (the "*Draft Report*"). FLNG is an interested party, at least with respect to the Brazos River floodgates, as it operates a liquefied natural gas (LNG) terminal in Freeport, Texas. Our facility is located on Quintana Island along the Gulf Intracoastal Waterway (GIWW) and its docks and turning basin are located at the intersection of the GIWW and the Freeport Channel.

At present, FLNG is well over halfway completed with the construction of a three-train natural gas liquefaction expansion at its terminal through a capital investment of approximately \$14 billion. At full utilization, FLNG estimates LNG ship traffic to include up to 250 LNG ship-calls per year through the Freeport Channel and into FLNG's dock basin in order to load LNG onto the ships and export LNG to other countries. At capacity, our liquefaction expansion is estimated to sustain approximately 30,000 natural gas production and related jobs in Texas and the greater United States. The estimated LNG exports would result in a multi-billion dollar reduction in the U.S. annual trade deficit while providing a clean-burning fuel to reduce global air emissions. Use of LNG-derived gas for power production decreases carbon emissions by an estimated 50% where such gas replaces coal. Based upon the foregoing, the safe, efficient and cost-effective operations of our terminal facilities clearly produces wide-ranging economic and environmental benefits for the United States. However, these benefits are contingent upon the ability to safely transport LNG ships into and out of our dock basin with minimal delays and downtime.

As an initial matter, FLNG would like to commend the U.S. Army Corps of Engineers (USACE) in taking on an effort to study efficiency improvements in our interstate commerce through improving barge transit efficiencies in the GIWW. Such efforts benefit both private industry and our country's citizens, and FLNG appreciates the USACE dedicating its limited resources to such an important task. To that end, however, in reviewing the Draft Report, FLNG has concerns that the TSP Plan proposed therein will have significant negative impacts to deep-water private ports and Port Freeport in the Brazos River area. As discussed in more detail below, the evaluation of the TSP Plan and other alternatives in the Draft Report do not seem to adequately account for several significant adverse impacts to local stakeholders, including FLNG. As such, and while we are keenly aware of the tremendous time and effort that has

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**Freeport LNG Development, L.P.**

333 Clay Street, Suite 5050 • Houston, Texas 77002-4173

Phone: 713-980-2888 • Fax: 713-980-2903



already been spent to develop the Draft Report, FLNG respectfully requests that the USACE reengage in alternatives analysis, particularly considering the benefits that could be derived from the use of dual 125-foot floodgates on the East side of the Brazos River that could be spaced appropriately to not impede barge traffic during transit between the gates and built in phases to ensure that the Brazos River is never at risk of free flowing into the GIWW (the “*Dual-Gate Alternative*”). The Dual-Gate Alternative will control sedimentation into the GIWW while still allowing more efficient barge access across the Brazos River.

1. *TSP Plan Will Increase Local Maintenance Dredging Costs to the Detriment of Private Terminal Owners, Port Freeport and Local Taxpayers*

FLNG has considerable concern that the Draft Study’s primary goal, decreasing delays to navigation, is recommending an alternative that materially impairs the only purpose for which the floodgates were originally built—to mitigate the flow of silt into the GIWW from the Brazos River. As stated in the Draft Report, specifically with respect to the Brazos River floodgates, the floodgates were originally installed to control flows and silt into the GIWW from the Brazos River, which has the highest water and sediment load discharge of all Texas rivers and the second highest sediment load discharge to the entire Gulf of Mexico (behind the Mississippi River). Its original purpose was not to ensure efficient barge traffic in the GIWW; as such, a feasibility study with a stated primary goal to improve traffic efficiency is essentially a repurposing of the primary responsibility of the floodgates. Given the historic, sole purpose of the floodgate, mitigating siltation (to the same, or better, degree as with the existing floodgates) should carry equal weight, if not more weight, when considering alternatives for improvement.

Based upon the information provided in the Draft Report, the TSP Plan, which increases the width of the floodgates to 125 feet, will increase sedimentation by 11% at the Freeport Channel (see Table 3.10 in Chapter 3 of the Draft Report). The Draft Report goes on to identify anticipated increases in GIWW maintenance dredging costs as a result of the TSP Plan. However, the Draft Report does not appear to fully evaluate the increase in maintenance dredging costs that will be caused by the TSP Plan (particularly during construction, but also after installation). The cost increases within the Draft Report do not account for the increased dredging costs to be incurred by USACE, Port Freeport or private terminal industry during the two-year construction period (when the GIWW will be exposed to the full flow of the Brazos River). It also does not account for the increased maintenance dredging costs of the private terminal industry in the area after construction, notwithstanding that the calculation of the benefits from the TSP Plan do account for benefits to the private barge transport industry through more efficient navigation (see Table 3.10). It is not apparent to FLNG that the Draft Report evaluated the increased maintenance dredging costs to Port Freeport either, which would be a burden substantially assumed by local area taxpayers. FLNG believes the benefits analysis needs to be updated incorporating the above adverse impacts.

2. *No Assurance that TSP Plan Will Increase Safe Transit Through the Brazos River Floodgates*

While the Draft Report states that the single most important reason for the study was to determine alternatives to reduce barge traffic delays to navigation, a secondary objective, stated as having been achieved with the TSP Plan, was increased safety at the floodgates and the reduction of the number of allisions. From the Draft Report, the allisions were attributable to, among other things, the narrow passageway in the 75-foot wide floodgate at the Brazos River. To traverse the 75-foot wide floodgate, barge operators need to “trip” the barges to break them down into single-wide barges, which contributes to the delays to navigation, but assists in minimizing the risk of allisions.



It would seem to be assumed that the proposed TSP Plan would allow the barge operators to keep their barges assembled two barges wide in order to increase the efficiency of the barge traffic and reduce the delays to navigation to meet the primary reason for the feasibility study. However, based upon the Draft Report, it does not seem that post-installation safety performance has been analyzed to any significant degree to show that the 125-foot wide floodgate would reduce collisions in a two-barge wide arrangement, which would be double the width of barges that had been tripped out to single wide in order to traverse the 75-foot wide floodgate. As such, FLNG questions whether safety would be materially increased with the TSP Plan. If not, the increased benefits stated in the economic analysis, which were derived from navigation efficiencies through better safety, would be unrealized.

3. *An Increase to Safety Hazards and Deep-Water Draft Inefficiencies at GIWW/Freeport Channel Has Not Been Sufficiently Analyzed*

While the Draft Report does discuss and quantify safety benefits for vessels navigating through the floodgates (and uses those benefits within its economic analysis), the report does not perform any quantitative analysis on the safety issues the TSP Plan could create due to the increased water flow rates through the GIWW during construction and thereafter when the floodgate width is considerably increased. The Draft Study recognizes that traffic impediments could result from increased crosscurrents, but does not quantify this in its economic analysis, nor does it take the increased safety hazards into account in the selection of the TSP Plan (other than to reject an open channel design due to the amount of uncertainty in such alternative). Of particular concern to FLNG, and presumably the Brazos Pilots Association, Port Freeport and other private port owners in the area, would be the increased crossflow currents that would be experienced at the intersection of the GIWW and the Freeport Channel. Such increased currents could impair the safe maneuvering of vessels in the Freeport Channel, including LNG ships calling upon FLNG's terminal. At a minimum, the stronger current increases the likelihood of delays in pilotage due to the reduced safe operating envelope in the Freeport Channel. The TSP Plan's economic analysis was based upon the benefits of decreases to delays in navigation to barge traffic but failed to consider increases in delays in navigation to deep-water draft vessels. It is critical that any plan implemented to address the concerns at the Brazos River floodgates also consider downstream impacts to safety and deep-water port efficiency. The Draft Report fails to do this for the TSP Plan which, in turn, results in a skewed economic analysis recommending the TSP Plan.

4. *Local Stakeholders Disproportionately Bear the Burden of the Adverse Effects of the TSP Plan Without Adequate Representation in the Alternatives Analysis*

The selection of the TSP Plan does not account for increased safety risks within the GIWW near the Brazos River for deep-water draft vessels (particularly at the intersection of the GIWW and the Freeport Channel), nor does it adequately account for increased maintenance dredging costs by Port Freeport and local private terminal owners from incremental siltation that will occur during construction and operation of the TSP Plan. FLNG notes in Table 3.18 of the Draft Report that the TSP Plan has "acceptability" from TXDOT, the barge navigation industry and USACE. However, there was no acceptability concurrence from local private terminal owners, Port Freeport or the Brazos Pilots Association, which would be the most directly impacted stakeholders by the TSP Plan. Thus, a fundamental limitation of the alternatives analysis in recommending the TSP Plan is that it fails to adequately engage and represent local stakeholders and take their concerns into account in order to create an acceptable alternative. The vessel safety and transit efficiencies of the local stakeholders should not be materially diminished simply to increase transit efficiency for barge traffic in the GIWW.



Based upon the above, FLNG believes the Draft Report and the TSP Plan does not adequately consider certain critical subjects, which FLNG believes would result in the TSP Plan being viewed unfavorably based upon the totality of the circumstances. FLNG respectfully requests that the USACE reengage in its alternatives analysis to address the above concerns and in particular, consider the above-described Dual-Gate Alternative.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "S. L. Cornelius".

S. L. Cornelius  
President, Freeport LNG Development, L.P.

cc: Ms. Franchelle Craft; Franchelle.E.Craft@usace.army.mil

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:48 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] GICA Comments on BRFG CRL Draft Feasibility Study dated 19 February 2018  
**Attachments:** GICA Cmts BRFG CRL Feasibility Study 3.28.2018.pdf

**Importance:** High

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Jim Stark [mailto:jstark@gicaonline.com]  
Sent: Tuesday, April 3, 2018 8:25 AM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] GICA Comments on BRFG CRL Draft Feasibility Study dated 19 February 2018  
Importance: High

On behalf of the Gulf Intracoastal Canal Association, I am submitting comments (attached and reproduced below) on the referenced draft Feasibility Report.

GICA is a 112-year-old trade association representing 200 industry member companies involved in towboat and barge operations, shipping, shipyards, and associated waterways industries which use the 1300 miles of the GIWW between Brownsville, TX and St. Marks, FL. GICA is committed to facilitating commerce through ensuring safe, reliable, and efficient Gulf Coast waterways.

GICA is pleased to offer comments on this important study which focuses on improving GIWW navigation safety and efficiency. As you know GICA members participated in several planning sessions with your staff, and the Study Team, in an effort to provide expert towing industry inputs and advice regarding safe operations at both Brazos River Floodgates (BRFG) and Colorado River Locks (CRL). The comments below are informed by those inputs and by comments presented by the public at the 13 March 2018 Public Meeting in West Columbia, TX.

BRFG: GICA is generally pleased with the navigation improvements proposed in the TSP. Removing the west floodgate, significantly increasing the size of the east forebay by moving the east gate further east in the GIWW, and widening the east gate to 125' are certain to result in safer, more efficient towboat and barge operations. With these modifications we can expect fewer costly accidents and fewer delays than we experience with the present configuration. Additionally, our towboat operators would like to see an easing of the severe turning angle to make transits across the River even safer; I understand the Study Team plans to include this work as it works to refine the TSP.

At the recent public meeting, considerable input was presented regarding the TSP resulting in additional silting of Freeport Channel (due to a wider east gate) and potential problems associated with flows diverted from the future open mouth of the San Bernard River (by the absence of a west gate). GICA understands these concerns and would support additional examination of alternatives that reduce Freeport Channel silting and continue to provide sufficient flow on the San Bernard River to keep the mouth open at the Gulf of Mexico. However, that examination appears to be outside the scope of the primary objective of this study - to improve navigability of the GIWW at the crossing of the Brazos and Colorado Rivers. Likewise, any additional project costs associated with alternatives focusing on silt reduction and river flows on the San Bernard should not be cost shared with the Inland Waterways Trust Fund.

As discussed at the Public Meeting, a potential solution to the Freeport Channel silting problem could include a second (125' wide) east gate resulting in an elongated silt control structure whereby, under flow conditions, at least one gate could be closed at all times. To maintain San Bernard River flows, retaining the west gate (at 125' wide and further west to increase the forebay size) could be considered. However, neither of these additional solutions is required for navigation safety and efficiency.

CRL: GICA members feel the TSP will not result in significant delay reductions and improvements to navigation efficiency and may in fact reduce safety compared to the current condition. While removing the river side gates and widening the existing lock chambers would decrease the risk of allisions as vessels transition from the river crossing back into the canal, leaving the canal side gates at their present 75' width would make transiting the canal gates more challenging than it is today, in that the absence of the river gates would require mariners to contend with a current through the canal gates during that portions of the transit.

GICA believes that widening the canal side gate in combination with removing the river side gate and widening the chamber achieves several objectives. First, the wider gate will reduce the current velocity through the gate compared to a 75' gate, enhancing safety. Second, the wider opening will allow greater margin of error as mariners transit the gate. Third, the wider gate will facilitate transits by "doubled up tows" where empty barges are being pushed abreast.

On this reach of the GIWW, crosswinds are frequently a challenge and mariners will often mitigate risk by transiting with two empty 300' X 54' barges abreast as opposed to "strung out" with the barges in line. Excepting the Long Island swing bridge in Port Isabel, which is in a lower use portion of the waterway, the Brazos and Colorado crossings are the only spots on the GIWW in Texas where a doubled up tow cannot transit. Having to break the tow down to transit the lock one barge at a time increases risk to personnel who have to do tow work and increases delay and congestion in the vicinity of the lock.

The best alternative to improve safety and efficiency at the Colorado crossing would be to remove the river gate, widen the chamber area and build new 125' wide canal side gates set back from the river sufficiently that tows will not be impacted by river currents when transiting the gate. This will facilitate safer crossings with less frequent need to "trip" barges or reconfigure tows for the crossing. If this cannot be done, maintaining the existing configuration offers the benefit of allowing tows to transit through the locks without having to overcome currents or head differentials as they transit the gates. GICA understands that widening the existing 75' gates to a preferred 125' means additional construction costs. Our members will continue to work with the Study Team to refine and monetize the benefits associated with the wider gates.

Thank you for focusing on GIWW improvement and for the opportunity to comment and work with your Study Team on these critical refinements.

Jim Stark  
President,

Gulf Intracoastal Canal Association

P.O. Box 321649

Cocoa Beach, FL 32932

901-490-3312

[jstark@gicaonline.com](mailto:jstark@gicaonline.com) <<mailto:jstark@gicaonline.com>>





Gulf Intracoastal Canal Association  
PO Box 321649  
Cocoa Beach, FL 32932  
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28 March 2018

Colonel Lars Zetterstrom  
District Engineer,  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553-1229

RE: Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Lock Systems  
Feasibility Study – Draft Report dated 19 February 2018

Dear Colonel Zetterstrom:

On behalf of the Gulf Intracoastal Canal Association (GICA), I am submitting comments on referenced Draft Report. GICA is a 112-year-old trade association representing 200 industry member companies involved in towboat and barge operations, shipping, shipyards, and associated waterways industries which use the 1300 miles of the GIWW between Brownsville, TX and St. Marks, FL. GICA is committed to facilitating commerce through ensuring safe, reliable, and efficient Gulf Coast waterways.

GICA is pleased to offer comments on this important study which focuses on improving GIWW navigation safety and efficiency. As you know GICA members participated in several planning sessions with your staff, and the Study Team, in an effort to provide expert towing industry inputs and advice regarding safe operations at both Brazos River Floodgates (BRFG) and Colorado River Locks (CRL). The comments below are informed by those inputs and by comments presented by the public at the 13 March 2018 Public Meeting in West Columbia, TX.

**BRFG:** GICA is generally pleased with the navigation improvements proposed in the TSP. Removing the west floodgate, significantly increasing the size of the east forebay by moving the east gate further east in the GIWW, and widening the east gate to 125' are certain to result in safer, more efficient towboat and barge operations. With these modifications we can expect fewer costly accidents and fewer delays than we experience with the present configuration. Additionally, our towboat operators would like to see an easing of the severe turning angle to make transits across the River even safer; I understand the Study Team plans to include this work as it works to refine the TSP.

At the recent public meeting, considerable input was presented regarding the TSP resulting in additional silting of Freeport Channel (due to a wider east gate) and potential problems associated with flows diverted from the future open mouth of the San Bernard River (by the absence of a west gate). GICA understands these concerns and would support additional examination of alternatives that reduce Freeport Channel silting and continue to provide sufficient flow on the San Bernard River to keep the mouth open at the Gulf of Mexico. However, that examination appears to be outside the scope of the primary objective of this study – to improve navigability of the GIWW at the crossing of the Brazos and Colorado Rivers. Likewise, any additional project costs associated with alternatives focusing on silt reduction and river flows on the San Bernard should not be cost shared with the Inland Waterways Trust Fund.

As discussed at the Public Meeting, a potential solution to the Freeport Channel silting problem could include a second (125' wide) east gate resulting in an elongated silt control structure whereby, under flow conditions, at least one gate could be closed at all times. To maintain San Bernard River flows, retaining the west gate (at 125' wide and further west to increase the forebay size) could be considered. However, neither of these additional solutions is required for navigation safety and efficiency.

**CRL:** GICA members feel the TSP will not result in significant delay reductions and improvements to navigation efficiency and may in fact reduce safety compared to the current condition. While removing the river side gates and widening the existing lock chambers would decrease the risk of allisions as vessels transition from the river crossing back into the canal, leaving the canal side gates at their present 75' width would make transiting the canal gates more challenging than it is today, in that the absence of the river gates would require mariners to contend with a current through the canal gates during that portions of the transit.

GICA believes that widening the canal side gate in combination with removing the river side gate and widening the chamber achieves several objectives. First, the wider gate will reduce the current velocity through the gate compared to a 75' gate, enhancing safety. Second, the wider opening will allow greater margin of error as mariners transit the gate. Third, the wider gate will facilitate transits by “doubled up tows” where empty barges are being pushed abreast.

On this reach of the GIWW, crosswinds are frequently a challenge and mariners will often mitigate risk by transiting with two empty 300' X 54' barges abreast as opposed to “strung out” with the barges in line. Excepting the Long Island swing bridge in Port Isabel, which is in a lower use portion of the waterway, the Brazos and Colorado crossings are the only spots on the GIWW in Texas where a doubled up tow cannot transit. Having to break the tow down to transit the lock one barge at a time increases risk to personnel who have to do tow work and increases delay and congestion in the vicinity of the lock.

The best alternative to improve safety and efficiency at the Colorado crossing would be to remove the river gate, widen the chamber area and build new 125' wide canal side gates set back from the river sufficiently that tows will not be impacted by river currents when transiting the gate. This will facilitate safer crossings with less frequent need to “trip” barges or reconfigure tows for the crossing. If this cannot be done, maintaining the existing configuration offers the benefit of allowing tows to transit through the locks without having to overcome currents or head

differentials as they transit the gates. GICA understands that widening the existing 75' gates to a preferred 125' means additional construction costs. Our members will continue to work with the Study Team to refine and monetize the benefits associated with the wider gates.

Thank you for focusing on GIWW improvement and for the opportunity to comment and work with your Study Team on these critical refinements.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Stark", with a stylized flourish extending to the right.

Jim Stark,  
President

Gulf Intracoastal Canal Association

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 11:00 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew; McLaughlin, Patrick W  
**Subject:** FW: [Non-DoD Source] Opening San Bernard Mouth/Removing gates at BRFG

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Johnnie D. Glick [mailto:johnniedglick@aol.com]  
Sent: Monday, April 9, 2018 2:08 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Opening San Bernard Mouth/Removing gates at BRFG

It has come to my attention that there is discussion on trying to reopen the mouth of the San Bernard River. As a property owner on the San Bernard, a business owner in the marine industry and as a taxpayer & resident of the county, I would like to bring to your attention the current plan that will increase our taxes without providing a long-term solution.

Our County Commissioners and Port Freeport have signed on to open the mouth of the San Bernard River and to take care of maintenance dredging in the future. Having the mouth of the San Bernard reopened is a great deal for the fishermen and those that live along the river upstream, but it is going to be impossible to keep it open if the Corps of Engineers goes through with their proposal. Our Commissioners and the Port have signed on to pay for the opening of the mouth as well as the maintenance dredging, with our taxes, without knowing that the US Army Corps of Engineers is planning to remove the West Gates of the Brazos River Floodgates.

As you may or may not be aware, in the 1990's, the Corps of Engineers dug a bypass channel around the West Gates of the Brazos River Floodgates, to be able to replace the steel sheet pile walls but not stop boat traffic. Before the channel was dug, the San Bernard River had an opening of 100'+. The channel was dug to a depth of 12' and the channel stayed open for traffic for about a year. During this time, the depth went to around 40' deep with a current that tow boats could not push. While the channel was washing out, other problems arose, which led to the closing of the mouth of the San Bernard River.

The problems that came from the channel include: washing out the sandbar & opening the Jones Lake on the Intercoastal Waterway (ICWW), shallowed the old Intercoastal Waterway on the east end of the Cedar Lakes near the mouth and opened the cut that is now at the west end of the Cedar Lakes going into the Gulf.

The only way to solve the problem of keeping the mouth of the San Bernard River open is to return the Intercoastal Waterway to how it was before the channel was dug. Doing this would include the following:

1. Reclose off most of the Intercoastal Waterway bank to Jones Lake where the sandbar has been washed out, leaving an entrance to Jones Lake on the west end as it was before the channel.
2. Deepen the old Intercoastal Waterway entrance at Cedar Lakes, near the mouth of the San Bernard.
3. Reclose the cut at the west end of Cedar Lakes going into the Gulf.
4. Keep the West Gates at the Brazos River Floodgates, even if wider gates must be installed further to the west than the current location.

These four steps would provide the water and pressure needed to keep the mouth of the San Bernard open.

Others and myself have watched all of this unfold and see a huge problem to shipping with the removal of the West Gates when a flood comes on the Brazos. We know this typically happens about 3-4 times a year. With no gates on the west side, these floods will play havoc on fishing along the San Bernard.

I personally would prefer our tax money to be spent on a solution not an ongoing-never ending patch.

Sincerely  
Johnnie D Glick  
10101 CR 318  
Brazoria, TX 77422  
johnniedglick@aol.com

## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:50 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Brazos River Floodgates Modifications

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

**From:** Rayford High [mailto:rayford.high@edfw.org]  
**Sent:** Wednesday, March 28, 2018 1:37 PM  
**To:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Subject:** [Non-DoD Source] Brazos River Floodgates Modifications

I have written to you before as one who has spent all of my life in and around the San Bernard River. My older cousin, Elmer Krause, who owned the original Churchill store at the draw bridge, owned property on the river and ultimately my sister and I have inherited it. I have seen the changes in the river over my 77 years and especially the change in the mouth. I would urge you to please consider the resolution of the Brazoria County Commissioners of March 27th and take their advice. We need your help in restoring the mouth and keeping it open. I would be happy to visit with you about this issue any time. My cell # is 713-299-7408. I am a retired Episcopal Bishop who lives in Fort Worth, and spends as much time as possible at my house along the banks of the San Bernard. Thanks for reading this note.  
+Rayford B. High, Jr., Retired Bishop Suffragan of Diocese of Texas and Bishop of Fort Worth

## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 11:01 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Mahoney, Matthew; Richardson, Jerica M CIV USARMY CESWF (US); McLaughlin, Patrick W  
**Subject:** FW: [Non-DoD Source] USACOE 2/19/18 Draft Report re: Brazos River Gate Revision

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Gary Hurta [mailto:ghurta@swbell.net]  
Sent: Monday, April 9, 2018 12:41 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] USACOE 2/19/18 Draft Report re: Brazos River Gate Revision

Attention: Danny Allen

I and my wife, retired, live along the San Bernard river in the Rio Vista community. We have enjoyed the river together since the 1970's; I have enjoyed it since the 1950's with my parents as we lived in its immediate area. It is over this period of time that I have sadly witnessed the slow degradation of the San Bernard river resulting from the 1929 rerouting of the Brazos River. It is well documented in many reports generated in both the private and government sectors that the "unintended consequences" of this 1929 rerouting of the Brazos River, the "Brazos River Diversion Channel", has had negative impacts on the Gulf Coast area. This area extends from Freeport Surfside Beach down to the Cedar Lakes and beyond. This, of course, includes the San Bernard River. The San Bernard River, along with the other mentioned areas have become collateral damage areas. The 1929 rerouting of the Brazos was driven singularly by commercial interest to develop the Port of Freeport, which it did indeed do. No unintended consequences were evaluated, hence, all the collateral damage that followed(s).

Now, you appear ready to plow forward with actions defined in the subject report without taking consideration of other recent reports on collateral damage and more importantly, the plan to re-open the mouth of the San Bernard River to the Gulf of Mexico. This plan will also maintain the open flow well into the future. The plans and financing to do the San Bernard dredging is firming up targeting completion by the end of this year (next year latest).

I think it important that you redo the study, noted above, considering the perpetual opening of the San Bernard River. This I think will have an impact on the consequences of actions with regard to the relocation/removal of the Brazos Flood Gates. Lets not get ourselves in a position of having to deal with any unintended consequences resulting from poor or incomplete planning.

Regards,

Gary L Hurta

Vice President-Engineering (Ret.)

Dril-Quip, Inc.

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 4:33 PM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); McLaughlin, Patrick W; Mahoney, Matthew  
**Subject:** FW: [Non-DoD Source] DIFR-EIS GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Fred Kanter [mailto:fredkan44@aol.com]  
Sent: Tuesday, March 27, 2018 12:55 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] DIFR-EIS GIWW Brazos River Floodgates and Colorado River Locks Feasibility Study

I am a business owner and resident on the San Bernard River and attended your meeting in West Columbia on March 13, 2018. The meeting room was full of county officials, port authorities, commercial boat operators, members of Friends of the River San Bernard and many other concerned citizens. They all had one thing in common—they had just learned of this study.

I do not pretend to be an expert on Environmental Impact Studies but I have participated in enough of them to know that there should have been a significant number of “stakeholders “ among the many potential ones in this audience, yet I did not see ONE. How is it possible that this could have occurred had you followed the guidelines set forth to run an EIS? In your “Scoping Process “, as I understand it, you should have identified “public interest groups and native communities that have concerns about possible impacts to environmental, social, or economic resources”. That would have involved many of the folks in this room in some aspect of the decision making process and possibly avoided some of the mistakes that have been pointed out at the meeting as well as by the many comments you have received.

An Environmental Impact Study is required to avoid exactly what occurred in this case and that is to try to change or fix something without proper regard to its effects on the area in question and those that inhabit it; both mankind and animal. I believe your EIS is flawed and you need to go back to the drawing board before proceeding beyond this point. Your TSP should be revisited because it is grossly inadequate to achieve your goals.

Fred Kanter  
Sent from my iPad



## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:52 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** McLaughlin, Patrick W; Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew  
**Subject:** FW: SAN BERNARD RIVER

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Little Bit [mailto:klngaman3030@msn.com]  
Sent: Sunday, March 18, 2018 2:26 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] SAN BERNARD RIVER

PLEASE STOP!!! Re-think your Study to include the mouth of the San Bernard River TO BE RE-OPENED.

We made an appeal (in the form of an email) to the San Bernard River Restoration Project on May 7th, 2018 ... to get the funding necessary to re-open the mouth of the San Bernard River...WELL,

Now you have the funding! Look at your study AGAIN and include the San Bernard River. And then,

DO IT THE RIGHT WAY THIS TIME. Let's not have a repeat of the \$2 million dollar waste in 2009....DO NOT NEGLECT CORRECTION FOR THE SAKE OF A 'CHEAPER' WAY TO GO!!

We don't want a repeat of the flooding caused by Hurricane Harvey!

OKAY, ONE MORE TIME, PLEASE PLEASE REVIEW AND RE-THINK YOUR STUDY TO INCLUDE THE OPENING OF THE SAN BERNARD RIVER.

Sincerely,

Gene & Lennie (Leona) Klingaman

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:47 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Brazos River Floodgates Modifications

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

**From:** Timothy Logan [mailto:tlogan@brazoriainet.com]  
**Sent:** Tuesday, April 3, 2018 6:01 PM  
**To:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Cc:** jalogan@olinbc.com  
**Subject:** [Non-DoD Source] Brazos River Floodgates Modifications

Attn: Danny Allen, Environmental Compliance Branch, Regional Planning and Environmental Center

I have been a resident of Brazoria County, Texas, since 1984, and have boated recreationally on the lower Brazos River, the lower San Bernard River and the connecting Intracoastal Waterway (ICW). I have also boated on the ICW southwest of the San Bernard River along the San Bernard Wildlife Refuge. My time and experience on these waterways has been frequent and throughout the annual seasons, in a variety of conditions.

I feel qualified to comment on the USACE proposed modifications to the Brazos river floodgates at the ICW.

In particular, I am opposed to the plan to remove the West floodgate. The USACE and DOT must be aware of increased floating tree logs and debris that will be released into the ICW during Brazos River runoff events. These tree logs and debris already cause a hazard to navigation in the ICW with the current West gate configuration. We typically have to avoid tree logs that may be as much as 3 ft in diameter and 30 plus feet long. It is wise for recreational boaters to avoid the ICW when the Brazos river is in flood stage. And this scenario is with the current configuration of closed gates, only open for barge traffic. Widening the ICW channel and removing the West gate will contribute significantly to this navigational hazard. Your plan will magnify the navigational hazard to a variety of vessels traveling the ICW, i.e.: shrimp boats, oyster boats, large recreational power boats and sailboats, and potentially tug boats.

I am also opposed to the plan to remove the West floodgate because of the requirement for increased dredging in the ICW, as is stated in the feasibility study.

I sincerely hope that you consider these issues as you finalize your proposal.

Best regards

Tim Logan

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:55 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); McLaughlin, Patrick W; Mahoney, Matthew  
**Subject:** FW: Public comment submitted by Lone Star Harbor Safety Freeport Subcommittee  
**Attachments:** image002.png; LSHSC Freeport Subcommittee Public Comment.pdf

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Poninski, Ann M [mailto:Ann.M.Poninski@p66.com]  
Sent: Wednesday, April 11, 2018 7:17 AM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Cc: JJ Plunkett <jplunkett@houston-pilots.com>  
Subject: [Non-DoD Source] Public comment submitted by Lone Star Harbor Safety Freeport Subcommittee

Good day,

Attached, please find Public Comment to the Draft Feasibility Study for Brazos River Floodgates and Colorado Locks, sent on behalf of the Lone Star Harbor Safety Freeport Subcommittee.

Thank you.

Best regards,

Ann Marie

Captain Ann Marie Poninski

Chairman, Lone Star Harbor Safety Freeport Subcommittee

O: (+1) 832.765.3171 | M: (+1) 713.438.5744





## **Lone Star Harbor Safety Committee**

### **Freeport Sub-Committee**

Colonel Lars Zetterstrom  
District Engineer,  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553

RE: Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Lock Systems  
Feasibility Study – Draft Report dated 19 February 2018

Dear Colonel Zetterstrom:

On behalf of the Freeport Subcommittee of the Lone Star Harbor Safety Committee (LSHSC), I am submitting comments on the referenced Draft Report. The Freeport Subcommittee of the LSHSC is dedicated to maximizing safety, security, and efficiency of the waterways in and around the Port of Freeport, while balancing the competing needs and uses of stakeholders. The Freeport Subcommittee focuses on improving the safety of operations and identifying areas of concern. Based on this mission, we have identified the Brazos River Flood Gates and the Colorado River Locks projects as major concerns for both ship and barge traffic in and around the Port of Freeport. After reviewing the Draft Report and tentatively selected plans, we believe that not all options have been evaluated and we would like the United States Army Corps of Engineers to consider alternative plans for both projects in order to ensure the safe and efficient movement of barges on the Gulf Intracoastal Waterway and San Bernard River while ensuring the same for ship and barge traffic in the Freeport Ship Channel.

The Brazos River Flood Gates tentatively selected plan would widen the East Gate to 125' and remove the West Gate. Although this will improve the safe and efficient transit of the barges across the Brazos River, it will impact current flow in the Freeport Ship Channel and increase siltation. The increased water flow across the Freeport Ship Channel will also create cross currents that will negatively impact the safe and efficient movement of ships transiting the channel. To improve safe transits for both ship and barge traffic, we ask that an alternative option of "sail through locks" between the East Gate and Freeport Harbor be evaluated. If a 2<sup>nd</sup> gate was installed closer to the Freeport Ship Channel, the 2 gates could be operated together as locks. One gate would open and the other would remain closed to allow a barge to transit. Then, the closed gate would open and the opened gate would close. This sequence would allow the barge to transit without delay and greatly reduce current flow through that area, while improving ship

maneuverability in the Freeport Ship Channel and reducing siltation. As an added benefit, the “lock chamber” could also be used as a safe haven for tugs and barges during a storm.

The paragraph titled “Changes at San Bernard River” in Section 5.15 “Indirect Impacts of Recommended Plan” acknowledges that the proposed open channel on the West side of the Brazos River Floodgates will reduce the water surface elevations along the river, yet it does not appear the Federal Ship Channel on the San Bernard River was evaluated in the study (Table 5.7). Although the RESTORE Act project to open the mouth of the San Bernard River is mentioned, open mouth and West Gate removal was not studied.

Port Freeport recently entered into an Interlocal agreement with Brazoria County to fund the maintenance dredging of the mouth. That agreement has a term of 25-yrs with auto-renewal; dredging the mouth is anticipated every 3-5 yrs. The reduced water level on the San Bernard River and increased siltation near the mouth may adversely impact barge movement on and across the San Bernard River. The full impacts to the San Bernard River should be evaluated before removing the West Gate.

The Colorado River Locks will have the river side gate removed, but no modification to the opening. In agreement with the Gulf Intracoastal Canal Association (GICA) which is separately providing comments to you, we request a wider opening be evaluated. The best alternative to improve safety and efficiency at the Colorado River crossing would be to remove the river gate, widen the chamber area and build new 125’ wide canal side gates set back from the river sufficiently that tows will not be impacted by river currents when transiting the gate.

The Lone Star Harbor Safety Freeport Subcommittee respectfully requests the United States Army Corps of Engineers re-evaluate the new design of the Brazos River Floodgates and Colorado River Locks. We also request an extension to the Public Comment period to present a follow up message, following our Subcommittee meeting on 12 April 2018 and Full LSHSC Committee meeting on 5 May 2018.

Best regards,



Captain Ann Marie Poninski  
Chairman, Lone Star Harbor Safety Freeport Subcommittee  
O: (+1) 832.765.3171 | M: (+1) 713.438.5744





**US Army Corps  
of Engineers** ®

**GIWW Brazos River Floodgates and  
Colorado River Locks Systems Feasibility Study**

**National Environmental Policy Act**

**Public Meeting**

**March 13, 2018**



The U.S. Army Corps of Engineers (Corps) along with the study partner, the Texas Department of Transportation (TxDOT), has prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates and Colorado River Locks Systems. The DIFR-EIS can be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>.

The purpose of this public meeting is to inform the public of the Tentatively Selected Plan (TSP) and to provide an opportunity to comment on the TSP. Your comments are very important in the National Environmental Policy Act (NEPA) process, and the Corps and TxDOT welcome your comments on the TSP and DIFR-EIS. Comments on the DIFR-EIS will be accepted through April 11, 2018.

**COMMENTS:**

Please consider what will  
happen to the mouth of  
San Bernard when it is  
opened

Name Valroy Maddux

Address \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

Comments on the DIFR-EIS may be placed in the comment box today or sent to:

Mail: District Engineer, Galveston District  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553

Email: BRFG\_CRL\_FeasibilityStudy@usace.army.mil

**Comments will be accepted through April 11, 2018.**

**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

**ROUTINE USES:** None. The "Blanket Routine Uses" set forth at the beginning of the Army's Compilations of Systems of Records Notices apply to this system.

**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments. Failure to provide one's name may also result in one losing one's right to be recognized in the official record and/or the right to make a public comment during this meeting.



US Army Corps  
of Engineers ®

GIWW Brazos River Floodgates and  
Colorado River Locks Systems Feasibility Study

National Environmental Policy Act

Public Meeting

March 13, 2018



The U.S. Army Corps of Engineers (Corps) along with the study partner, the Texas Department of Transportation (TxDOT), has prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates and Colorado River Locks Systems. The DIFR-EIS can be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>.

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COMMENTS:

By opening the West gate @ Brazos  
would this alter the flow rate  
of the San Bernard from the GIWW south  
to the historic Mouth?

\* The flow models on the San Bernard  
indicate the GIWW pushes  
the San Bernard flows north east to  
the West Gate  
\* ~~Would the delta grow~~  
~~with~~ would this new open structure  
"stave" the San Bernard mouth  
and adjacent Refuge of sediments  
for beach nourishment?  
~~stave~~ + stave Plover, Red Knot, +

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

Comments on the DIFR-EIS may be placed in the comment box today or sent to:

Mail: District Engineer, Galveston District  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553

Email: BRFG\_CRL\_FeasibilityStudy@usace.army.mil

Comments will be accepted through April 11, 2018.

**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

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**DISCLOSURE:** Voluntary. However, failure to provide the requested information will prevent a person from receiving additional information on this project and notification of future developments. Failure to provide one's name may also result in one losing one's right to be recognized in the official record and/or the right to make a public comment during this meeting.

What would the Brazos Delta do?  
with the open channel?

Would the delta ~~growth~~ <sup>sediment</sup> growth increase need for dredging.

Please review 2007 study on San Bernard Brazos  
GNW

Please review fuel costs  
for barges with differences  
performed by ERDIC

Coloda. gate sizes



**US Army Corps  
of Engineers** ®

**GIWW Brazos River Floodgates and  
Colorado River Locks Systems Feasibility Study**

**National Environmental Policy Act  
Public Meeting  
March 13, 2018**



The U.S. Army Corps of Engineers (Corps) along with the study partner, the Texas Department of Transportation (TxDOT), has prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (DIFR-EIS) for the Gulf Intracoastal Waterway (GIWW) Brazos River Floodgates and Colorado River Locks Systems. The DIFR-EIS can be viewed and downloaded from the Galveston District website: <http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Documents-for-Public-Review/>.

The purpose of this public meeting is to inform the public of the Tentatively Selected Plan (TSP) and to provide an opportunity to comment on the TSP. Your comments are very important in the National Environmental Policy Act (NEPA) process, and the Corps and TxDOT welcome your comments on the TSP and DIFR-EIS. Comments on the DIFR-EIS will be accepted through April 11, 2018.

**COMMENTS:**

*Please consider again a flood gate  
on the west side of Brazos River.*

Name Adalia Muddler

Address \_\_\_\_\_  
\_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Email Address (optional) \_\_\_\_\_

Comments on the DIFR-EIS may be placed in the comment box today or sent to:

Mail: District Engineer, Galveston District  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, TX 77553

Email: [BRFG\\_CRL\\_FeasibilityStudy@usace.army.mil](mailto:BRFG_CRL_FeasibilityStudy@usace.army.mil)

**Comments will be accepted through April 11, 2018.**

**PRIVACY ACT STATEMENT**

**AUTHORITY:** 40 CFR 124.10

**PRINCIPAL PURPOSE(S):** The requested information will be used to compile a mailing list which is used to mail individuals additional information concerning this project and other projects which may be of interest to them.

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L. Z. 16 APR 18  
L. Z. P. 10

1100 CHERRY ST. • FREEPORT, TX 77541  
(979) 233-2667 • 1 (800) 362-5743 • FAX: (979) 373-0023  
WWW.PORTFREEPORT.COM

March 8, 2018

Colonel Lars Zetterstrom, P.E.  
U.S. Army Corps of Engineers  
Galveston District  
P.O. Box 1229  
Galveston, Texas 77553

RE: GIWW Brazos River Floodgates Feasibility Study

Dear Colonel Zetterstrom,

According to Table 3.10, the recommended plan at the Brazos River Floodgates (3a.1), will increase shoaling in the Freeport Channel by 11%. This anticipated increase in shoaling appears to be a 'negative impact' to another federal project, namely Freeport Channel. There is also shown to be an increase in shoaling in the GIWW which will be an extra burden on already scarce federal maintenance dollars. While the barge interest will be pleased with the idea of a lower cost transit through the GIWW, the deep draft channel interest in Freeport Channel will experience higher costs of maintenance dredging and disposal of dredge material. Taxpayers and private berth owners alike in Freeport will, no doubt, realize an increase in maintenance dredging cost and lower productivity in the channel and at their respective facilities due to higher frequency and severity of draft restrictions if the tentatively selected plan is implemented as-is.

Please consider:

- 1) Regarding the BRFG site only, consider building 'double floodgates' on each side of the Brazos River instead of just replacing the floodgates on the east with a larger floodgate. Design enough distance between the double floodgates, so that the first gate can close by the time the second gate opens allowing a barge to transit without slowing down. This will prevent flow (current) in the GIWW, will be safer for navigation in Freeport Channel and the GIWW, will reduce sediment transportation along the GIWW, and result in less maintenance dredging costs to USACE, both in the GIWW and Freeport Channel.
- 2) Reference is made to item 1 above; the construction of the gates can be phased so that there will always be an operable closure to keep sediments from migrating along the GIWW.
- 3) If floodgates are not constructed west of the Brazos River Diversion per plan 3a.1, the San Bernard River should be federalized and maintained by USACE between the GIWW and the Gulf of Mexico.
- 4) The economic impact presented does not account for additional costs associated with the 11% increase in dredging costs for the Freeport Channel and the private berths.
- 5) The fact that there are no floodgates at the San Bernard River today is a "design deficiency" of the GIWW.

Port Freeport is supportive of improving navigation benefits for all industries, not just one at the expense of another. Installing double floodgates, as described above, will be a win-win proposition for all involved.

Sincerely,

Paul Kresta  
Port Commission Chairman

PORT COMMISSION

PAUL KRESTA, CHAIRMAN; JOHN HOSS, VICE CHAIRMAN; SHANE PIRTLE, SECRETARY; BILL TERRY, ASST. SECRETARY;  
RUDY SANTOS, COMMISSIONER; RAVIK SINGHANIA, COMMISSIONER; PHYLLIS SAATHOFF, EXECUTIVE DIRECTOR/CEO

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:45 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); McLaughlin, Patrick W  
**Subject:** FW: [Non-DoD Source] Attn: Danny Allen, Environmental Compliance Branch, regional planning and Environmental center

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Mike Pudlo [mailto:map0001@icloud.com]  
Sent: Wednesday, April 11, 2018 2:23 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Attn: Danny Allen, Environmental Compliance Branch, regional planning and Environmental center

Dear Mr. Allen and Environmental committee at the USACE

We are writing to you in regards to the proposed modifications to the Brazos river floodgates. The study for this project states that the mouth of the San Bernard river had been opened and closed several times. I do not believe this is the fact. It has closed twice and will hopefully be reopened again shortly. The people in the area of the San Bernard river are working hard to have and keep the mouth of the San Bernard river open. By ignoring this fact, the saltwater natural habitat and flow of the river would change drastically.

Please consider changes that have gone into effect since the original study was performed and especially since Harvey. We are hoping to keep both rivers and this environment healthy for saltwater fishing, boat and barge traffic.

Sincerely,  
Mike and Barbara Pudlo

Sent from my iPad



## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:45 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Opposition to USACE Proposals for Brazos Gates and Colorado Locks

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Tom Ronayne [mailto:tkronsbr@yahoo.com]  
Sent: Wednesday, April 11, 2018 4:07 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Cc: MIKE GOODSON <mikegoodson38@hotmail.com>; Linda Wright <linda@yellowstoneboat.com>; Bob Bailey <bob.bailey1941@gmail.com>; Fred Kanter <fredkan44@aol.com>; Tim Logan <tlogan@brazoriainet.com>  
Subject: [Non-DoD Source] Opposition to USACE Proposals for Brazos Gates and Colorado Locks

I strongly oppose the COE's subject proposals. The study ignored the imminent opening of the San Bernard River mouth, which the Corps itself will oversee. I was embarrassed for the young COE engineers who had to admit that in the public comment meeting last month in West Columbia. The study devotes a single paragraph to the environmental impact on the mouth of the San Bernard and ignores the case where the Brazos is flowing and the Bernard is not, which is the dominant situation given the relative sizes of their watershed. The study estimated an 18% increase in Brazos sediment transported into the ICWW with the west gate removed. That was based on a closed mouth of the San Bernard. With the Bernard mouth open, the sediment flow through the west gate would intuitively be much higher than an 18% increase.

With the Brazos fresh water flowing almost constantly toward the San Bernard except during Bernard floods, the mouth of the San Bernard River will be permanently transformed from a salt water to a fresh water estuary. The ICCW was never intended to transform the Port of Freeport, the San Bernard River, Mitchell's Cut, and Sargent Cut into supplemental outlets for the Brazos River, with all the attendant changes to their ecosystems. I understand the budget pressures on the USACE and the maintenance issues associated with the six structures at the Brazos and Colorado, as well as the cost to marine traffic caused by the difficult traverse at the Brazos. Unfortunately, the solution isn't to just remove three of the structures and literally open the floodgates for the Brazos to run wild up and down the ICCW. The Corps must propose a new plan that addresses both the marine safety issues and the true impacts to the environment, modelled with an open mouth of the San Bernard River. This same sentiment was expressed at the public comment meeting by the Port of Freeport, Brazoria County, barge operators, river residents, Friends of the River San Bernard, and others. I did not hear one comment in favor of the USACE's proposals.

As an aside comment, I was surprised by a glaring omission from the study. Traversing the Brazos is hindered occasionally by flow from a flooding Bernard, narrow gates, down river orientation of the gates, and Brazos current. No

case was studied that addressed the Brazos current. Increasing the flow area of the Diversion Channel by widening and or deepening it could dramatically reduce the current velocity the barges must cross. Selecting the appropriate starting point for the increase could possibly direct the resulting increased sedimentation to an area upstream or downstream of the ICWW crossing and prevent maintenance dredging from obstructing commercial traffic. With Brazos runoff being a prevailing condition throughout the year I was surprised there was no effort to address it directly.

Sincerely,

Thomas K. Ronayne  
7569 County Road 684D  
Sweeny, Tx 77480  
979.345.2111 home  
979.824.5459 cell

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:46 AM  
**To:** Portia Osborne; Jason Schindler; Allen, Daniel L CIV USARMY CESWF (US)  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Comments on USACE Feasibility Study  
**Attachments:** Army Corps West Gate Letter 04112018.pdf

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Charles Schwartzel [mailto:cbschwartzel@sbcglobal.net]  
Sent: Wednesday, April 11, 2018 5:41 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Comments on USACE Feasibility Study

Please see the attached letter with my comments on the proposed closing of the West Gate. Thank you.

C. Boone Schwartzel  
(713) 857-3964

**C. BOONE SCHWARTZEL**

246 CR 461A  
Brazoria, Texas 77422  
(713) 857-3964

April 11, 2018

BRFG\_CRL\_FeasibilityStudy@USACE.army.mil  
Mr. Danny Allen  
Environmental Compliance Branch  
Regional Planning and Environmental Center  
Galveston, Texas 77553

Dear Mr. Allen:

I strongly oppose the plan proposed by the Army Corps of Engineers and TXDOT to remove the West gate of the Brazos River Floodgates on the Gulf Intracoastal Waterway (GIWW). The study made by the Army Corps of Engineers is not only flawed but also inconsistent with actions taken over the past 20 years (at significant expense) by TXDOT, Brazoria County, the Port of Freeport, local residents, and the Army Corps of Engineers itself aimed at solving problems at the mouth of the San Bernard River.

I have attached three different documents illustrating the many reasons why the closing of the West gate would be counterproductive: (1) a Resolution of the Brazoria County Commissioners dated March 27, 2018, opposing the plan for a number of reasons; (2) a Letter to the Editor of The County News on April 4, 2018, by Mr. Johnnie Glick explaining the consequences of other action taken by the Corps of Engineers in the 1990s that has contributed to the problems on the San Bernard River and along the GIWW; and (3) a list posted on the Friends of the River San Bernard website summarizing many facts and studies not considered in the Army Corps of Engineers' report that attempts to justify the proposed action.

The history of the San Bernard River mouth problem (and its causes) has been well documented. The Army Corps of Engineers' diversion of the Brazos River at Freeport in 1929 changed the flow of sediment from the mouth of the Brazos River and caused much more of that sediment to be carried and deposited by Gulf currents at the mouth of the San Bernard River. As noted in Mr. Glick's Letter to the Editor, in the 1990s the Army Corps of Engineers apparently dug a bypass channel around the West gate in order to make certain repairs and to use of the channel for barge traffic while repairs were made caused considerable destruction of sandbars and lakes along the GIWW and more sediment migration from the Brazos into the GIWW and through it to the San Bernard River mouth. At the end of the day, the accumulation of the sediment at the mouth of the river by sea currents resulting from the diversion of the Brazos River in 1929 and by currents in the GIWW stemming from the use of the bypass channel in the 1990s led to (1) the closing of the mouth of the San Bernard River, (2) the destruction of wetlands, lakes, oyster beds,

and wildlife habitat along the river and the GIWW, and (3) continuing traffic problems at the West gate

Over the past 20 years, the Army Corps of Engineers, TXDOT, the Brazoria County Commissioners, the Port of Freeport, and local residents have worked together (and spent a lot of time and money) investigating solutions to these problems. The Army Corps of Engineers finally took action in 2009 and reopened the mouth of the San Bernard. Undoubtedly due to cost constraints, the amount of dredging done at that time was far less than needed and proved to be only a bandaid rather than a permanent solution to the problem. Consequently, as a result of storms and the lapse of time after the 2009 dredging was finished, the mouth silted up again 3 years later.

Since then, and despite having already studied the problem to death, residents were told that yet more environmental studies and investigations would be required before any more dredging could be done. That additional study and work was completed over the last 5 years, at great expense, and when the State of Texas was awarded a share of the BP Oil Spill settlement for use to address environmental problems, Brazoria County submitted a grant request for over \$9 million dollars to be used to conduct sufficient dredging to re-open the mouth of the San Bernard River in a more meaningful way. As importantly, included as a part of that grant request is a commitment by Brazoria County and the Port of Freeport to pay the cost of additional dredging in order to keep the mouth open for at least the next 25 years! As you are aware, the grant request has been approved and is awaiting funding.

Clearly, the proposed plan to remove the West gate (and take no other corrective action along the GIWW like that discussed in Mr. Glick's Letter to the Editor) will **increase** the amount of sediment flowing into the GIWW, increase the sediment deposited at the mouth of the San Bernard River through the GIWW, and materially undercut the progress achieved by re-opening the mouth of the river using the BP Oil Spill grant!

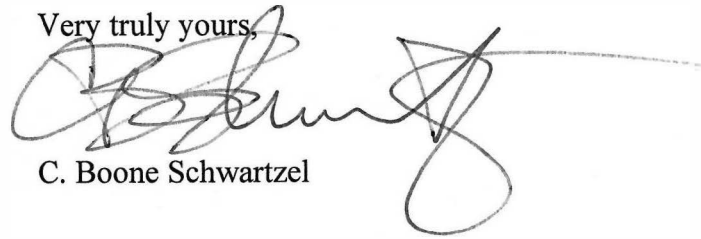
Has not the Federal government, through its actions in Freeport and at the gates, already done enough damage to the San Bernard River and the lakes and wetlands surrounding the GIWW? Must the Army Corps of Engineers compound the problems already caused by the Federal government by removing the West gate in reliance on a flawed report which failed to take into consideration many studies and other evidence gathered over the past 10 years and, incredibly, contains as one of its underlying assumptions of its projections that the San Bernard River mouth will be **closed** (when, in fact, it will be open when the grant is funded)? I suspect that if the same scrutiny given to Environmental Impact Studies and data submitted by Brazoria County or others seeking approval of a project were to be given to the Army Corps of Engineers' internal report prepared in support of its plan to remove the West gate, that internal report would be found to be as would be found to be deficient and flawed and the project rejected.

Instead of relying on a flawed report to justify removing the West gate and thereby making matters worse, why cannot the Army Corps of Engineers instead spend its time designing a way to fix **all of the problems** the Federal government has caused in the area since 1929? Why not instead make a concerted effort to correct the mistakes made by the Federal government in the past by restoring the GIWW to its condition prior to the digging of the bypass channel at the West gate or, even better, by installing jetties at the mouth of the San Bernard River (a solution considered

not long after the 1929 diversion of the Brazos River at Freeport)? **What better time to do so now that Congress has passed a budget calling for billions of dollars to be spent on infrastructure projects?**

Please do not move forward with your plan for the West gate, or at a minimum, please postpone taking any action until a thorough and accurate investigation and analysis of the situation has been made. Since 1929, the Federal government has declined to permanently fix problems at the San Bernard River mouth and along the GIWW and instead chosen to spend as little money as possible to try to patch problems as they arise, on an ad hoc basis, and kick the can down the road. That approach is no longer a good idea, especially in light of the expenditures already made, the significant commitment of over \$9 million in additional funds from the BP grant to address the continuing problems at the mouth of the San Bernard, and the commitments of yet more funds made by Brazoria County and the Port of Freeport to keep the mouth open for the next 25 years. The Federal government should not continue to “throw good money after bad” and not solve the problem. If the Army Corps of Engineers is unwilling or unable to do a job right and in a manner that helps solve the problems along the GIWW and at the mouth of the San Bernard River, **then please do nothing** rather than making matters worse! Thank you.

Very truly yours,

A handwritten signature in black ink, appearing to read 'C. Boone Schwartzel', with a long horizontal line extending to the right.

C. Boone Schwartzel

**San Bernard River**

Photos by A. Smith

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2018-03-27

March 27, 2018 Brazoria County Commissioner's Court passed the following Resolution re the COE's and TxDOT's Feasibility Study concerning the Gulf Intracoastal Waterway and the Brazos River Flood Gates. As a reminder, we are in a 45-day public comment period (until April 11, 2018) concerning that study. Thanks go out to the foresight of Brazoria County Commissioner's Court.

## RESOLUTION

WHEREAS, the Brazos River flood gates were established to aid navigation along the GIWW when the Brazos was at flood stage. The gates purposes is to eliminate unnatural currents from influencing traffic along the GIWW and reduce the amount of sediment that would need to be dredged within the GIWW. The removal of the west gate defeats these original goals and objectives of the gates and creates additional impacts on the ecosystem in the region especially along the reach of the San Bernard River from the GIWW to the Gulf of Mexico; and

WHEREAS, Dr. Nick Kraus, USACE ERDC researcher, concluded: The diversion of the Brazos River (BR) in 1929 increased sediment transport to the mouth of the San Bernard (SB) River via longshore currents. The extension of the GIWW across the Brazos River (BR) and the SB in 1941 further reduced the flow rate of the SB at its mouth, rendering it helpless in combatting the increased sediment loading from the BR. This cut off the connection between the SB and the GoM, which has had numerous implications for habitat within the watershed; (Kraus and Lin, 2002) and

WHEREAS, for the past three years, Brazoria County has been pursuing a RESTORE Act grant through the State of Texas and the U.S. Treasury to open the mouth of the San Bernard River. This is an ecosystem restoration project which will restore the historical flow of the San Bernard (SB) River to the Gulf of Mexico (GoM). The objectives of the project include the restoration of the historic connection between SB and the GoM which will also restore the tidal flow to the historic marsh habitat along the river and the Gulf Intracoastal Waterway (GIWW). The project will use the 400,000 cubic yards of dredge material beneficially to restore the beach along the USFWS San Bernard Wildlife Refuge which will enhance the buffer for ESA designated habitat; and

WHEREAS, the project is expected to cost in excess of \$9.0 million. The County's recent study shows that in the long-term the mouth will need to be dredged every 3-5 years and they are prepared to accept this responsibility in conjunction with their partner Port Freeport; and

WHEREAS, based on the information provided in the public meeting, the removal of the West gate of the Brazos River Flood Gates will result in an increase of 18% in sediment moving west through the GIWW from the BR toward the SB. This increased sediment flow will have an additional adverse effect on the SB river outlet channel from the GIWW to the GoM and increase the frequency the County will be required to perform maintenance dredging. This will have a negative economic impact on the County and Port Freeport. **The TSP places an additional financial burden on Brazoria County and the Port.** Your BCR for the TSP should account for this impact; and

WHEREAS, given the increase in sediment along the GIWW associated with the TSP and the associated financial impact of Brazoria County and Port Freeport, USACE, though this study effort, should recommend federalizing the reach of the San Bernard River from the intersection at the GIWW to the GoM and relieve the county of responsibility for these future operations and maintenance costs; and

WHEREAS, **environmental impacts not considered:** The main reason for reopening the SB to the GoM is to restore the tidal flow to the estuary. Currently, with the SB mouth closed, the estuary has become more influenced by freshwater due to the lack of tidal salt water inflows. Opening the mouth enables the estuary to normalize back to its historic conditions and reduces significantly the flow of water from the SB that would be diverted toward the west gate. This has a positive impact on wetlands and aquatic species throughout the region as well as positive operational impacts at the flood gates. Implementing the TSP will in fact send large amounts of fresh water from the Brazos toward the San Bernard negatively mitigating the environmental benefits achieved by Brazoria County through their action to open the mouth of the SB.

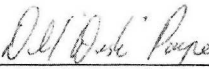
NOW THEREFORE, BE IT RESOLVED, that the Commissioners' Court of Brazoria County strongly recommends the following:

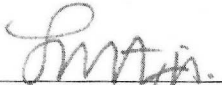
1. USACE rerun the hydrodynamic model **based on the condition that the mouth of the San Bernard River is fully open**. This is the future condition given the County's commitment to restoring the flow in the river and it should be fully considered.
2. Rerun your sediment transfer model **with the mouth of the river open** in order to refine and determine the amount of sediment deposition that will travel through the GIWW and into the San Bernard estuary. The increased sediment load will negatively impact the estuary and the actions of the county.
3. Reevaluate your environmental impacts to fully consider the impacts that the proposed TSP will have on the San Bernard estuary **with the river open** to the GoM.
4. Federalize the San Bernard from the GIWW to the GoM

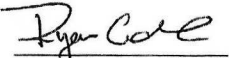
References:

Coastal Processes Study of San Bernard River Mouth, Texas: Stability and Maintenance of Mouth, Coastal and Hydraulics Laboratory, U.S. Army Engineer Research and Development Center. Report Number ERDC/CHL TR-02-10. 2002. Kraus, Nicholas C. and Lihwa Lin.


APPROVED this 27<sup>th</sup> day of March, 2018.

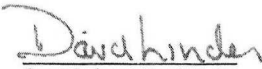
  
 Commissioner, Precinct 1  
 Donald "Dude" Payne

  
 Brazoria County Judge  
 L. M. "Matt" Sebesta, Jr.

  
 Commissioner, Precinct 2  
 Ryan Cade



  
 Commissioner, Precinct 3  
 Stacy L. Adams

  
 Commissioner, Precinct 4  
 David Linder

2018-03-22

Please note that both the mouth of the San Bernard and the cut in Cedar Lake #4 are both trying to cut a path west to Sargent to be able to stay open. Please also note the sand bar forming offshore from the Brazos River mouth.



# LETTERS To The Editor

## County, Port should rethink dredging deal

### To The Editor:

It has come to my attention that there is discussion on trying to reopen the mouth of the San Bernard River. As a property owner on the San Bernard, a business owner in the marine industry and as a taxpayer & resident of the county, I would like to bring to your attention the current plan that will increase our taxes without providing a long-term solution.

Our County Commissioners and Port Freeport have signed on to open the mouth of the San Bernard River and to take care of maintenance dredging in the future. Having the mouth of the San Bernard reopened is a great deal for the fishermen and those that live along the river upstream, but it is going to be impossible to keep it open if the Corps of Engineers goes through with their proposal.

Our Commissioners and the Port have signed on to pay for the opening of the mouth as well as the maintenance dredging, with our taxes, without knowing that the US Army Corps of Engineers is planning to remove the West Gates of the Brazos River Floodgates.

As you may or may not be aware, in the 1990's, the Corps of Engineers dug a bypass channel around the West Gates of the Brazos River Floodgates, to be able to replace the steel sheet pile walls but not stop boat traffic. Before the channel was dug, the San Bernard River had an opening of 100'+.

The channel was dug to a depth of 12' and the channel stayed open for traffic for about a year. During this time, the depth went to around 40' deep with a current that tow boats could not push. While the channel was washing out, other problems arose, which led to the closing of the mouth of the San Bernard River.

The problems that came from the channel include: washing out the sandbar & opening the Jones Lake on the Intracoastal Waterway (ICWW), shallowed the old Intracoastal Waterway on the east end of the Cedar Lakes near the mouth and opened the cut that is now at the west end of the Cedar Lakes going into the Gulf.

The only way to solve the problem of keeping the mouth of the San Bernard River open is to return the Intracoastal Waterway to how it was before the channel

was dug.

Doing this would include the following:

- Reclose most of the Intracoastal Waterway bank to Jones Lake where the sandbar has been washed out, leaving an entrance to Jones Lake on the west end as it was before the channel.
- Deepen the old Intracoastal Waterway entrance at Cedar Lakes, near the mouth of the San Bernard.
- Reclose the cut at the west end of Cedar Lakes going into the Gulf.
- Keep the West Gates at the Brazos River Floodgates, even if wider gates must be installed further to the west than the current location.

These four steps would provide the water and pressure needed to keep the mouth of the San Bernard open.

Others and myself have watched all of this unfold and see a huge problem to shipping with the removal of the West Gates when a flood comes on the Brazos. We know this typically happens about 3-4 times a year. With no gates on the west side, these floods will play havoc on fishing along the San Bernard.

The public needs to be aware of what's happening and make their opinions known to our Commissioners, Port Freeport and to our elected officials before they waste our money on something that will never last.

Below are some of the people you can contact to voice your opinions.

Brazoria County Judge – L.M. "Matt" Sebesta, Jr.

Brazoria County Commissioners:

Precinct 1 – Donald "Dude" Payne

Precinct 2 – Ryan Cade

Precinct 3 – Stacy Adams

Precinct 4 – David Linder

Congress: Rep. Randy Weber

Senators: Sen. John Cornyn and Sen. Ted Cruz

Port Freeport

General Land Office

Texas Governor – Greg Abbott

Texas Rep. Dennis Bonnen

Johnnie Glick

- **There was little or no knowledge** of the project to open the mouth of the **San Bernard**, including the submission to the **USACE** on **March 6** of the project plan that was revised to take into account the effects of **Harvey**.
  - **All modelling studies** were done assuming the mouth of the **San Bernard** would stay closed.
  - **None of the studies** on water flow and barge and gate collision rates done prior to and after the opening of the **San Bernard** in **2009** were considered in the feasibility study.
  - **The open mouth of the San Bernard** would be transformed into a freshwater estuary rather than a saltwater estuary adversely affecting natural habitat.
  - **The study stated** that the mouth of the **San Bernard** had been opened and closed “several” times, but it has only happened twice. Maybe **Cedar Lake** and the **San Bernard** got mixed up.
  - **The history of the relationship** between the **Brazos Diversion Channel** and **San Bernard River** was ignored
- 
- **The effect of the larger channel** on the west side of the **Brazos** without a gate on **Jones Creek** during high water on the Brazos was not considered.
  - **The effect of the larger channel** on the west side of the **Brazos** without a gate on barges attempting to moor during high water on the Brazos was not considered.
  - **The effect of the larger channel** on the west side of the **Brazos** without a gate on fuel usage of barges operating “against the flow” during high water on the Brazos was not considered.
  - **The effect of the larger channel** and gate on the east side of the **Brazos** on shipping entering or leaving the **Port of Freeport** during high water on the Brazos was not considered.
  - **The potential increase** in dredging requirements at the private moorings in the **Port of Freeport** and mouth of **San Bernard** was not considered.
  - **The primary hindrance to navigating** the crooked and narrow intersection of the **GIWW** and the **Brazos Diversion Channel** is high water velocity in the **Diversion Channel**, yet none of the proposals evaluated by **USACE** address that velocity. Increasing the cross sectional area of the **Diversion Channel** might proportionally decrease the velocity, e.g., doubling the area by widening and/or deepening the channel could reduce the velocity by almost half. Proper selection of the point to begin could direct silting to occur upstream or downstream of the **GIWW** intersection and minimize dredging in the **GIWW**.

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:50 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Feasibility Study for the Brazos Flood Gates and the Colorado Rocks

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Kristin Shirley [mailto:kristin.shirley61@gmail.com]  
Sent: Wednesday, March 28, 2018 3:47 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Feasibility Study for the Brazos Flood Gates and the Colorado Rocks

Attention: Danny Allen, Environmental Compliance Branch, Regional Planning and Environmental Center

I am not a Resident of Brazoria County but I am a very active Fisherman and Wildlife Watcher of the area. Over the years I have caught many Speckled Trout, Flounder, Redfish and Crab in the San Bernard River. I have tracked many of the animals that live in the marshlands in and around that area. I have spent days watching the birds that nest and use the area for their migration stops during the year. I know the area well.

The recent study was done assuming the mouth of the San Bernard River was closed. It is not closed. With it still open the environment is a Salt Water Estuary. By allowing your plan to go through and allowing the silting to occur in the Inner Coastal Canal when widening the gates at the Brazos River it will turn the Saltwater Estuary into a Freshwater Estuary and kill most or all the inhabitants of the area.

On a commercial standpoint it will also cause havock with the shipping and barge industry with the currents along with the silting.

Please refer to the models of the studies prior to this most recent study for your plan especially the 2002 Texas Parks and Wildlife study (Tracing Shoreline Changes of the San Bernard River).

Kristin Shirley

Nome, Texas

## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:46 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Attn: Danny Allen Environmental Compliance Branch, Regional Planning and Environmental Center - Brazos river West Gate Project  
**Attachments:** 3-20-18 San Bernard Mouth North view.jpg; 3-20-18 Cedar Lanes Cut SE view.jpg

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: agsdev@earthlink.net [mailto:agsdev@earthlink.net]  
Sent: Thursday, April 5, 2018 12:05 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Attn: Danny Allen Environmental Compliance Branch, Regional Planning and Environmental Center - Brazos river West Gate Project

Dear Mr. Allen,

I am a proponent of maintaining a healthy San Bernard river system that remains open to the Gulf. I am a retired Civil Engineer and a resident of Brazoria County. I am also a local pilot and fisherman, and have seen firsthand the Brazos and San Bernard issues experienced along this stretch of coastline. I own a home and property on the San Bernard river approx 5 miles upstream from the San Bernard River and the Gulf Intracoastal Water Way...(GIWW).

I was in attendance at the Public Meeting on March 13, 2018, in West Columbia, and was extremely concerned to find out that the Corps, along with TxDOT, had not taken into consideration the upcoming re-opening of the mouth of the SB river into the hydraulic model studies...including the associated sedimentation studies for that case.

In reviewing the National Environmental Policy Act (NEPA) study process dated July 12, 2016, it appears step #3, the Public Scoping Period, did not fully obtain the needed local input to your study to truly determine a viable solution to the problem at the Brazos River/ GIWW. As part of the preparation of an EIS, NEPA requires that there be an early and open process for determining the scope of the issues to be addressed by the study. This process, as I understand, is called "NEPA scoping" during which an agency secures local input.

It appears to be a glaring omission in your study since our local county government, along with various state agencies and concerned citizen groups (Friends of the River- FOR) have been steadily working towards reopening the SB mouth for several years. The link to the FOR website is: [Blockedhttp://www.sanbernardriver.com/default.php](http://www.sanbernardriver.com/default.php)  
<[Blockedhttp://www.sanbernardriver.com/default.php](http://www.sanbernardriver.com/default.php)>

You will note further within the link are numerous aerial photos I have taken over the years of the SB mouth as well as the Brazos mouth. These photos show the progression over time how the sedimentation loads affect the mouth of the BS river.

Below please find several summary concerns with the Corps study that have been identified thus far:

- \* There was little or no knowledge of the project to open the mouth of the San Bernard, including the submission to the USACE on March 6 of the project plan that was revised to take into account the effects of Harvey. (Note: The effects of a closed SB mouth I believe will have a serious impact on possible flooding along the SB River during events such as Harvey.)
- \* All modeling studies were done assuming the mouth of the San Bernard would stay closed.
- \* None of the studies on water flow and barge and gate collision rates done prior to and after the opening of the San Bernard in 2009 were considered in the feasibility study.
- \* The open mouth of the San Bernard would be transformed into a freshwater estuary rather than a saltwater estuary adversely affecting natural habitat.
- \* The study stated that the mouth of the San Bernard had been opened and closed ?several? times, but it has only happened twice. Maybe Cedar Lake and the San Bernard got mixed up.
- \* The history of the relationship between the Brazos Diversion Channel and San Bernard River was ignored.
- \* The effect of the larger channel on the west side of the Brazos without a gate on Jones Creek during high water on the Brazos was not considered.
- \* The effect of the larger channel on the west side of the Brazos without a gate on barges attempting to moor during high water on the Brazos was not considered.
- \* The effect of the larger channel on the west side of the Brazos without a gate on fuel usage of barges operating ?against the flow? during high water on the Brazos was not considered.
- \* The effect of the larger channel and gate on the east side of the Brazos on shipping entering or leaving the Port of Freeport during high water on the Brazos was not considered.
- \* The potential increase in dredging requirements at the private moorings in the Port of Freeport and mouth of San Bernard was not considered.
- \* The primary hindrance to navigating the crooked and narrow intersection of the GIWW and the Brazos Diversion Channel is high water velocity in the Diversion Channel, yet none of the proposals evaluated by USACE address that velocity. Increasing the cross sectional area of the Diversion Channel might proportionally decrease the velocity, e.g., doubling the area by widening and/or deepening the channel could reduce the velocity by almost half. Proper selection of the point to begin could direct silting to occur upstream or downstream of the GIWW intersection and minimize dredging in the GIWW.
- \* The hydraulic modeling needs to be expanded west to account for the effects at the currently opened Cedar Lakes cut towards Sargent.

Our local newspaper carried a story about the re-opening of the SB river in its' March 31, 2018 edition ...written by a local resident familiar with the hydraulic behavior of the GIWW, the locks, and the SB river over several years. Here is the link to the Guest Column which I believe has several valid options you need to consider in your study.

Blocked[http://thefacts.com/opinion/letters\\_to\\_editor/article\\_3c4c0b79-d2e7-58e0-b28f-ef2d834064a7.html](http://thefacts.com/opinion/letters_to_editor/article_3c4c0b79-d2e7-58e0-b28f-ef2d834064a7.html)  
<Blocked[http://thefacts.com/opinion/letters\\_to\\_editor/article\\_3c4c0b79-d2e7-58e0-b28f-ef2d834064a7.html](http://thefacts.com/opinion/letters_to_editor/article_3c4c0b79-d2e7-58e0-b28f-ef2d834064a7.html)>

Mr. Glick summarized those options in his letter as follows:

Quote:

1. Re close off most of the Intercoastal Waterway bank to Jones Lake where the sandbar has been washed out, leaving an entrance to Jones Lake on the west end as it was before the channel.
2. Deepen the old Intercoastal Waterway entrance at Cedar Lakes, near the mouth of the San Bernard.
3. Reclose the cut at the west end of Cedar Lakes going into the Gulf.
4. Keep the West Gates at the Brazos River Floodgates, even if wider gates must be installed further to the west than the current location.

These four steps would provide the water and pressure needed to keep the mouth of the San Bernard open." End Quote.

I am attaching a couple aerial photos I took on March 20th this year. One photo shows the mouth of the San Bernard almost closed after hurricane Harvey opened it up last September. Another photo shows the opened Cedar Lakes #4 cut still open since Harvey opened it up to relieve all the floodwaters entering the GIWW.

I trust the USACE will consider all of these points when re-evaluating your recommended options.

If you have any questions or if I can be of assistance please do not hesitate to contact me below.

Thank you!

Sincerely,

A.G. "Bert" Smith

5071 CR 631

Brazoria, TX 77422

Cell: 979-299-3802







## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:55 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew; McLaughlin, Patrick W  
**Subject:** FW: [Non-DoD Source] Brazos feasibly study

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Shelly Stubbs [mailto:nclsugarlandjewelsvpticktocker@gmail.com]  
Sent: Tuesday, April 10, 2018 8:00 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos feasibly study

Dear Mr Allen,

I am writing to urge you and the Corp of Engineers to reopen your study and re-examine proposed solutions for the Brazos Flood Gates and to further consider it's long term effects to the area, particularly the opening/closing of the San Bernard River.

The San Bernard River and the interest of the entire area (economically, recreationally and environmentally) should be considered. There are many who disagree with the current proposals and believe they will drastically negatively impact the San Bernard River and the mass efforts by citizens to maintain the river in it's natural state with an open mouth.

The Corp owes it to the local citizens and other users of the river to right previous wrongs that have led to the current problems.

Regards,

Shelly Stubbs  
Sugar Land, Texas

LWZ 10 APR 18  
↳ PPAID



Texas Waterways Operators Association  
P.O. Box 1745  
Houston, TX 77007  
[www.twoa.org](http://www.twoa.org)  
(713) 435-1359

Colonel Lars Zetterstrom  
District Engineer, USACE  
P.O. Box 1229  
Galveston, TX 77553

**RE: Gulf Intracoastal Waterway: Brazos River Floodgates and Colorado River Lock System  
Comments to Feasibility Study Draft Report**

Dear Colonel Zetterstrom:

Texas Waterways Operators Association (TWOA) appreciates the opportunity to submit comments on the draft feasibility study. TWOA represents 21 towboat and barge operators, harbor and assist craft operators, and inland fleeting operators whose businesses rely on the Gulf Intracoastal Waterway (GIWW). Safe and efficient navigation along this waterway is a critical priority to TWOA's members. The tentatively selected plan (TSP) proposed in the draft report serves to ensure the Brazos River Flood Gates and Colorado River Locks will not continue to deteriorate to the extent that safety and efficient navigation are compromised. As such, TWOA offers the following comments.

Brazos River Flood Gates Removing the west floodgate, significantly increasing the size of the east forebay by moving the east gate further east in the GIWW, and widening the east gate to 125' are certain to result in safer, more efficient towboat and barge operations. With these modifications we can expect fewer costly accidents and fewer delays than we experience with the present configuration. Additionally, our towboat operators would like to see an easing of the severe turning angle to make transits across the River even safer; I understand the Study Team plans to include this work as it works to refine the TSP.

Colorado River Locks The TSP will not result in significant delay reductions and improvements to navigation efficiency and may in fact reduce safety compared to the current condition. While TSP may decrease the risk of allisions, leaving the canal side gates at their present 75' width would make transiting the canal gates more challenging than it is today, in that mariners would have to contend with a current through the canal gates during that portion of the transit. TWOA believes that widening the canal side gate in combination with removing the river side gate and widening the chamber achieves several objectives. First, the wider gate will reduce the current velocity through the gate compared to a 75' gate, enhancing safety. Second, the wider opening will allow greater margin of error as mariners transit the gate. Third, the wider gate will facilitate transits by "doubled up tows" where empty barges are being pushed abreast.

The best alternative to improve safety and efficiency at the Colorado crossing would be to remove the river gate, widen the chamber area and build new 125' wide canal side gates set back from the river sufficiently that tows will not be impacted by river currents when transiting the gate. This will facilitate safer crossings with less frequent need to "trip" barges or reconfigure tows for the crossing. If this cannot be done, maintaining the existing configuration offers the benefit of allowing tows to transit through the locks without having to overcome currents or head differentials as they transit the gates.

Thank you for your efforts to improve the GIWW, and thank you again for the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Johnson', with a long horizontal flourish extending to the right.

Morgan Johnson  
President  
Texas Waterways Operators Association

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:48 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] BRFG

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3187 Office Phone  
409-682-7506 Govt Cell Phone

-----Original Message-----

From: Anna Turner [mailto:v7photos@aol.com]  
Sent: Tuesday, April 3, 2018 10:22 AM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] BRFG

I strongly disagree with removing the west gate at the BRFG. Y'all need to look at how it has been in the past and what helped not making changes and wasting money.

It has come to my attention that there is discussion on trying to reopen the mouth of the San Bernard River. As a property owner on the San Bernard, a business owner in the marine industry and as a taxpayer & resident of the county, I have major problems with your proposal.

Our County Commissioners and Port Freeport have signed on to open the mouth of the San Bernard River and to take care of maintenance dredging in the future. Having the mouth of the San Bernard reopened is a great deal for the fishermen and those that live along the river upstream, but it is going to be impossible to keep it open if the Corps of Engineers goes through with their proposal. Our Commissioners and the Port have signed on to pay for the opening of the mouth as well as the maintenance dredging, with our taxes, without knowing that the US Army Corps of Engineers is planning to remove the West Gates of the Brazos River Floodgates.

As you may or may not be aware, in the 1990's, the Corps of Engineers dug a bypass channel around the West Gates of the Brazos River Floodgates, to be able to replace the steel sheet pile walls but not stop boat traffic. Before the channel was dug, the San Bernard River had an opening of 100'+. The channel was dug to a depth of 12' and the channel stayed open for traffic for about a year. During this time, the depth went to around 40' deep with a current that tow boats could not push. While the channel was washing out, other problems arose, which led to the closing of the mouth of the San Bernard River.

The problems that came from the channel include: washing out the sandbar & opening the Jones Lake on the Intercoastal Waterway (ICWW), shallowed the old Intercoastal Waterway on the east end of the Cedar Lakes near the mouth and opened the cut that is now at the west end of the Cedar Lakes going into the Gulf.

The only way to solve the problem of keeping the mouth of the San Bernard River open is to return the Intercoastal Waterway to how it was before the channel was dug. Doing this would include the following:

1. Reclose off most of the Intercoastal Waterway bank to Jones Lake where the sandbar has been washed out, leaving an entrance to Jones Lake on the west end as it was before the channel.
2. Deepen the old Intercoastal Waterway entrance at Cedar Lakes, near the mouth of the San Bernard.
3. Reclose the cut at the west end of Cedar Lakes going into the Gulf.
4. Keep the West Gates at the Brazos River Floodgates, even if wider gates must be installed further to the west than the current location.

These four steps would provide the water and pressure needed to keep the mouth of the San Bernard open.

Others and myself have watched all of this unfold and see a huge problem to shipping with the removal of the West Gates when a flood comes on the Brazos. We know this typically happens about 3-4 times a year. With no gates on the west side, these floods will play havoc on fishing along the San Bernard.

Thanks,  
Anna Turner

## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Thursday, April 12, 2018 5:49 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Jason Schindler; Portia Osborne  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Brazos River Floodgates Modifications, Attn: Danny Allen

Franchelle E. Craft  
Project Manager  
Galveston District Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77550  
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409-682-7506 Govt Cell Phone

-----Original Message-----

From: Patty & Larry Williams [mailto:lwwilliams1@gmail.com]  
Sent: Wednesday, March 28, 2018 8:15 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos River Floodgates Modifications, Attn: Danny Allen

Attn: Danny Allen, Environmental Compliance Branch, Regional Planning and Environmental Center

I oppose the proposed modifications to the existing Brazos River Floodgates on the Intracoastal Waterway & believe they will negatively affect the San Bernard River and surrounding areas due to the following reasons:

- \* There was little or no knowledge of the project to open the mouth of the San Bernard, including the submission to the USACE on March 6 of the project plan that was revised to take into account the effects of Harvey.
- \* All modelling studies were done assuming the mouth of the San Bernard would stay closed.
- \* None of the studies on water flow and barge and gate collision rates done prior to and after the opening of the San Bernard in 2009 were considered in the feasibility study.
- \* The open mouth of the San Bernard would be transformed into a freshwater estuary rather than a saltwater estuary adversely affecting natural habitat.
- \* The study stated that the mouth of the San Bernard had been opened and closed "several" times, but it has only happened twice. Maybe Cedar Lake and the San Bernard got mixed up.
- \* The history of the relationship between the Brazos Diversion Channel and San Bernard River was ignored
- \* The effect of the larger channel on the west side of the Brazos without a gate on Jones Creek during high water on the Brazos was not considered.
- \* The effect of the larger channel on the west side of the Brazos without a gate on barges attempting to moor during high water on the Brazos was not considered.
- \* The effect of the larger channel on the west side of the Brazos without a gate on fuel usage of barges operating "against the flow" during high water on the Brazos was not considered.
- \* The effect of the larger channel and gate on the east side of the Brazos on shipping entering or leaving the Port of Freeport during high water on the Brazos was not considered.

\* The potential increase in dredging requirements at the private moorings in the Port of Freeport and mouth of San Bernard was not considered.

\* The primary hindrance to navigating the crooked and narrow intersection of the GIWW and the Brazos Diversion Channel is high water velocity in the Diversion Channel, yet none of the proposals evaluated by USACE address that velocity. Increasing the cross sectional area of the Diversion Channel might proportionally decrease the velocity, e.g., doubling the area by widening and/or deepening the channel could reduce the velocity by almost half. Proper selection of the point to begin could direct silting to occur upstream or downstream of the GIWW intersection and minimize dredging in the GIWW.

Please consider these factors in the proposed modifications!!

Larry & Patty Williams

4707 County Road 747A

Brazoria, TX 77422



## Portia Osborne

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**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 4:34 PM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** Richardson, Jerica M CIV USARMY CESWF (US); Mahoney, Matthew; McLaughlin, Patrick W  
**Subject:** FW: [Non-DoD Source] Feasibility Study of the Brazos Floodgates and the Colorado lock  
**Attachments:** 30571974\_2153228081356710\_8782267509597274112\_o.jpg; 30582105\_2153228338023351\_2683510195199410176\_o.jpg

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-----Original Message-----

From: CrewAdmin - Ken [mailto:CrewAdmin@CenturionCrew.Com]  
Sent: Wednesday, April 11, 2018 11:45 AM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Feasibility Study of the Brazos Floodgates and the Colorado lock

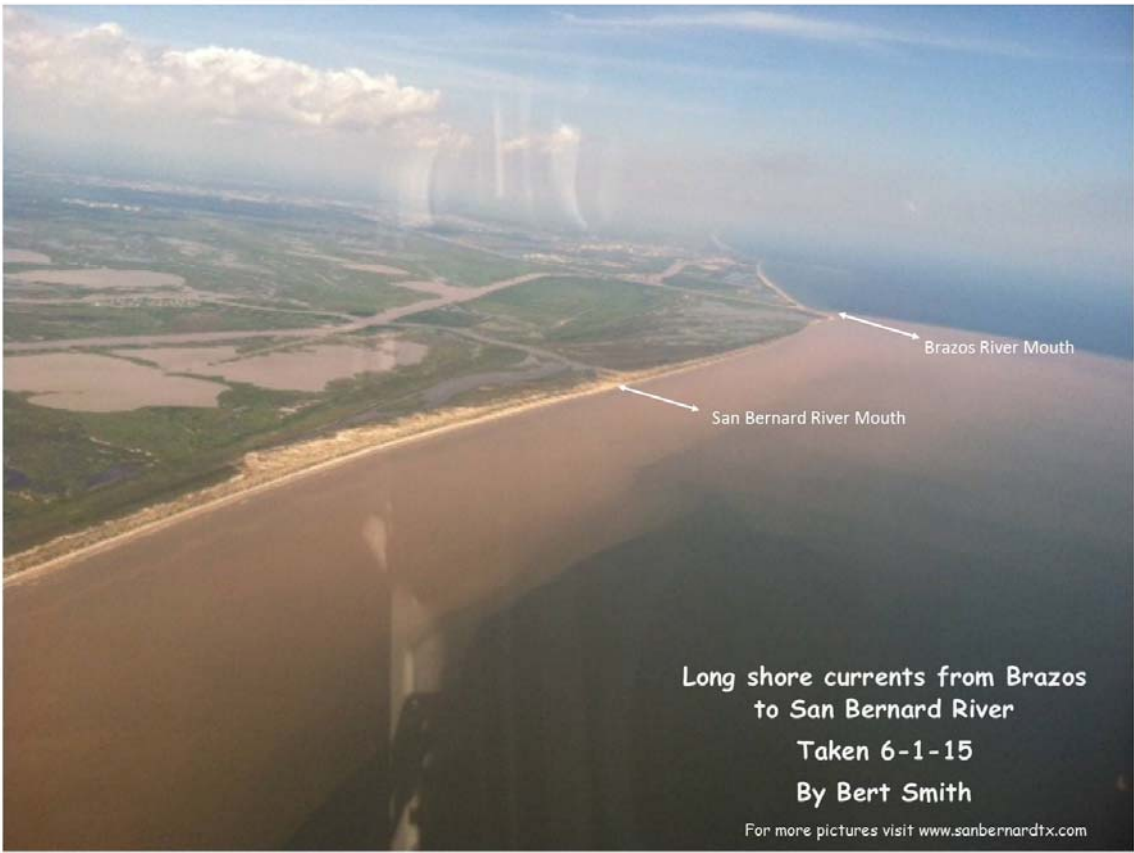
To whom it may concern,

Hoping the following from a concerned citizen will be as concerning to you as it was to me.

please reference your Public Notice SWG-2015-00603 ( Blocked<http://www.swg.usace.army.mil/.../PN.../PN.201500603.pdf...> ). This proves that the Corps of Engineers was aware that Brazoria County was in the process of opening the mouth of the San Bernard River mouth and had already done background work to get to the point of the Public Notice issued March 6, 2018 re the adjustments made to the project as a result of Hurricane Harvey. The applicant had previously proposed dredging to open the mouth of the San Bernard River and a Public Notice describing this work was issued on August 15, 2017. The COE, therefore SHOULD have known this project was imminent and SHOULD have modeled their plans on the Brazos floodgates with and without an open mouth of the San Bernard. Instead your own documentation was ignored, and your current plans are unacceptable. Attached, please note pictures taken during the 2015 flood which shows what happens between the San Bernard and the Brazos during a flood when the mouth of the San Bernard is closed and the 74' of the West gate of the Brazos was open (the gate was pulled for repairs). This is not theory – THIS HAPPENED. Your current plans would increase the width of the opening on the west side of the Brazos to from 74' to 125'. Please note the siltation in the GIWW as it actually occurred with a missing west gate. An increase of “only” (your words) 18 – 22% in siltation in the GIWW is totally unacceptable. More research into existing studies and additional modeling should be done before the current Brazos feasibility study move forward. Your current plan would do more harm than good. And, at a minimum, your work should be like a medical doctor’s oath, “First, do no harm”.

We became a property owner on the San Bernard River to be able to pass it on to our children and their children and so on. So future generations will be able to have a place to create special memories that the San Bernard River will afford them. In 2017 hurricane Harvey did an still untold amount of damage. The river flowed through our neighborhood Bernard Acres, this caused flooding and damage to the entire neighborhood. More so the canals and basin we live on had over three feet of silt added to them. Several areas are now impassible. This is a direct effect of the mouth of the San Bernard River being closed, dumping the silt of the river in the waterways of our neighborhood. If the west gate of the Brazos is left open it will surely speed up the process of the closing of the mouth which will lead to future high level flooding. If the correct actions are not taken now the cost will only be greater in the future. Please consider everyone that will be effected by this not just the commerce that benefits from the inter-coastal waterway.

Best Regards,  
Ken Willingham  
713.858.3787

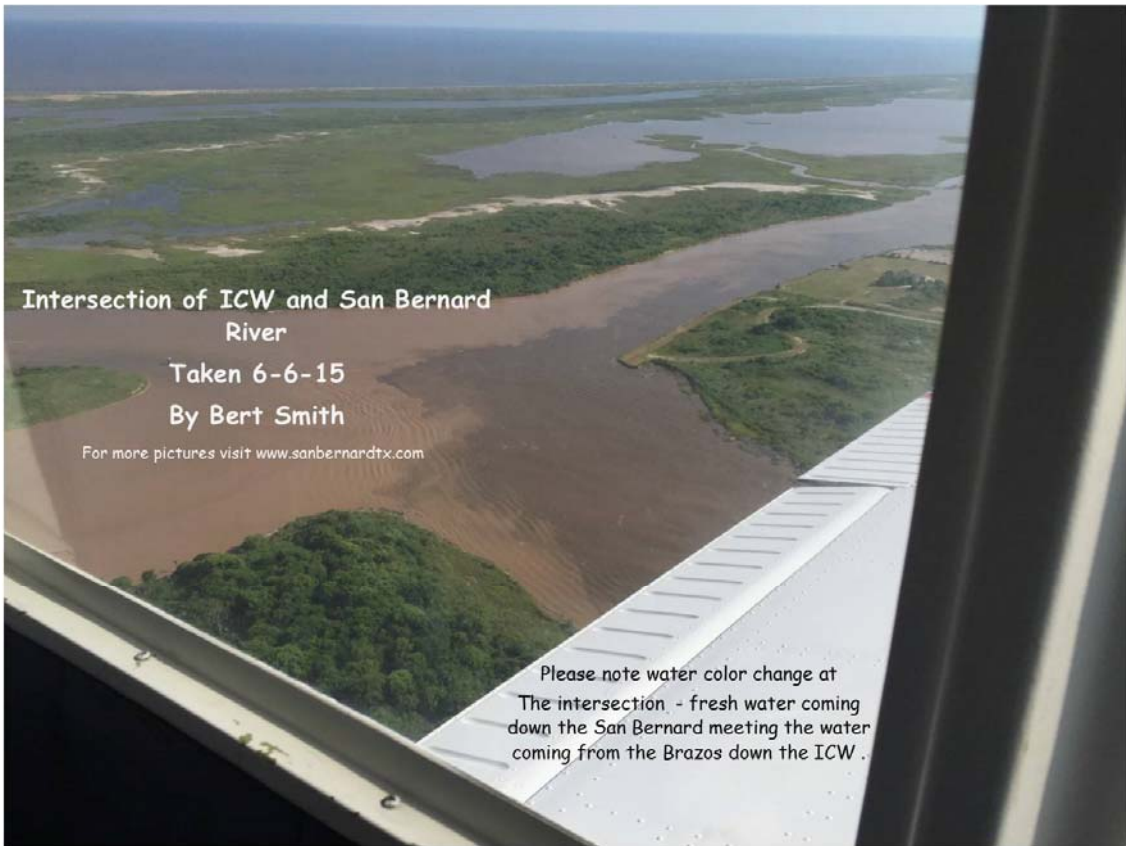


Long shore currents from Brazos  
to San Bernard River

Taken 6-1-15

By Bert Smith

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)



Intersection of ICW and San Bernard  
River

Taken 6-6-15

By Bert Smith

For more pictures visit [www.sanbernardtx.com](http://www.sanbernardtx.com)

Please note water color change at  
The intersection - fresh water coming  
down the San Bernard meeting the water  
coming from the Brazos down the ICW .

## Portia Osborne

---

**From:** CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
**Sent:** Wednesday, April 11, 2018 10:53 AM  
**To:** Allen, Daniel L CIV USARMY CESWF (US); Portia Osborne; Jason Schindler  
**Cc:** McLaughlin, Patrick W; Mahoney, Matthew; Richardson, Jerica M CIV USARMY CESWF (US)  
**Subject:** FW: [Non-DoD Source] Brazos River Floodgates Modifications

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-----Original Message-----

From: Linda Wright [mailto:linda@yellowstoneboat.com]  
Sent: Monday, March 19, 2018 4:08 PM  
To: CESWG-BRFG-CRL-Feas-Study <BRFG\_CRL\_FeasibilityStudy@usace.army.mil>  
Subject: [Non-DoD Source] Brazos River Floodgates Modifications

Attn: Danny Allen  
Environmental Compliance Branch  
Regional Planning and Environmental Center

As a concerned citizen, I attended the USACE meeting regarding proposed modifications to the existing Brazos River Floodgates and Colorado River Locks. on March 13. Most of the public discussion was voiced opposition to the Corps plan to remove the existing west flood gate on the Intracoastal Waterway and replace it with an open 125 ft. wide channel. I live on the San Bernard that is situated four miles west of the existing BRFG. Here are reasons why the proposed modifications will cause harm instead of benefitting use of the GIWW and harm to the San Bernard River.

There was little or no knowledge of the project to open the mouth of the San Bernard, (for a timeline of reopening the mouth of the San Bernard go to [Blockedhttp://www.sanbernardriver.com/mouth.php](http://www.sanbernardriver.com/mouth.php)) including the submission to the USACE on March 6 of the project plan that was revised to take into account the effects of Harvey.

All modelling studies were done assuming the mouth of the San Bernard would stay closed.

None of the studies on water flow and barge and gate collision rates done prior to and after the opening of the San Bernard in 2009 were considered in the feasibility study.

The open mouth of the San Bernard would be transformed into a freshwater estuary rather than a saltwater estuary adversely affecting natural habitat.

The study stated that the mouth of the San Bernard had been opened and closed "several" times, but it has only happened twice. Maybe Cedar Lake and the San Bernard got mixed up.

The history of the relationship between the Brazos Diversion Channel and San Bernard River was ignored.

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The effect of the larger channel on the west side of the Brazos without a gate on fuel usage of barges operating "against the flow" during high water on the Brazos was not considered.

The effect of the larger channel and gate on the east side of the Brazos on shipping entering or leaving the Port of Freeport during high water on the Brazos was not considered.

The potential increase in dredging requirements at the private moorings in the Port of Freeport and mouth of San Bernard was not considered.

The primary hindrance to navigating the crooked and narrow intersection of the GIWW and the Brazos Diversion Channel is high water velocity in the Diversion Channel, yet none of the proposals evaluated by USACE address that velocity. Increasing the cross sectional area of the Diversion Channel might proportionally decrease the velocity, e.g., doubling the area by widening and/or deepening the channel could reduce the velocity by almost half. Proper selection of the point to begin could direct silting to occur upstream or downstream of the GIWW intersection and minimize dredging in the GIWW.

I sincerely hope this issues are addressed before proceeding further with the project.

Regards

Linda Wright  
138 Vivian Street  
Brazoria, Texas 77422