

# ***What Lies Beneath: The Ongoing Pipeline Safety Challenge Facing Dredging and Marine Construction Projects***

Presenters:

**Ed Landgraf**

Chairman and Founder, Coastal and Marine Operators (CAMO)

**Tim Osborn**

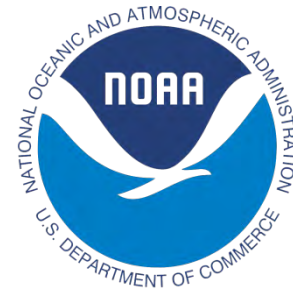
Manager, National Oceanic & Atmospheric Administration (NOAA)

**Jason Campbell**

Vice President of EHS, Great Lakes Dredge & Dock Corporation

**Micah Morris**

Operations Manager, Callan Marine, Ltd.



Moderator:

**Margaret Davis**

VP, Hile Group Inc.



## WEDA Webinar Guidelines

### **Chat**

Use the chat to introduce yourself to the other attendees.

### **Questions**

Use the Q&A feature to ask the presenter questions. We will address all Questions after all presentations.

### **Technical Issues**

If you experience any technical issues, the easiest solution is to log out of Zoom and then log back in. If that doesn't work, contact me directly using the chat or email [Info@WesternDredging.org](mailto:Info@WesternDredging.org).

### **Presentations**

The presentations and recording from today's webinar will be available on the WEDA website later today or tomorrow.

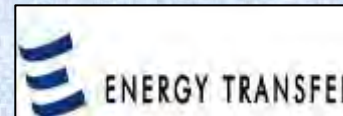
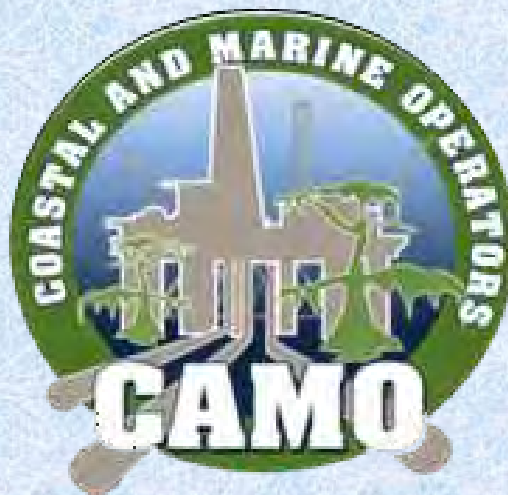
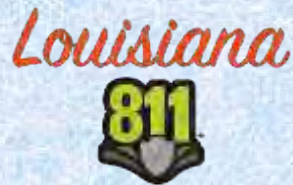
### **Professional Development Hours (1 PDH)**

After this webinar, you will receive a thank-you email. Please reply to that email to request a certificate.

### **WEDA Membership**

If you are not currently a member of WEDA, please consider joining. If you are uncertain as to the status of your membership, contact us at [Info@WesternDredging.org](mailto:Info@WesternDredging.org).

CAMO Members and Partners:



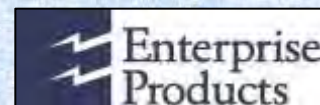
**KINDER MORGAN**

**Ed Landgraf  
Chairman**

[ed@camogroup.org](mailto:ed@camogroup.org)

[www.camogroup.org](http://www.camogroup.org)

Ph. (985) 209 4753



# Marine Pipeline Fatalities and Incidents DO Happen! Here are the Statistics...



## Interactions between Marine Vessels and Pipelines (over 20 yrs.)

Source: NTSB, Coast Guard and PHMSA

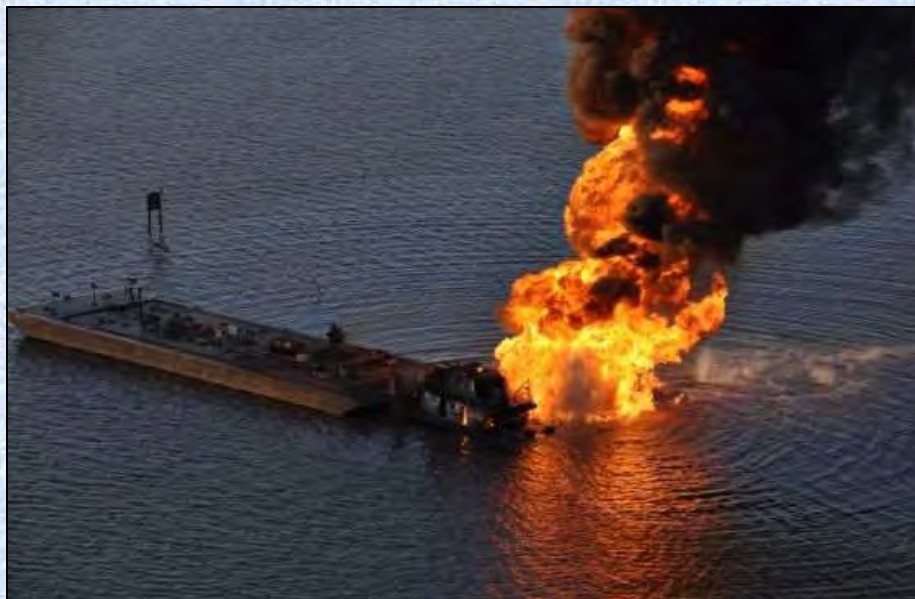
Pipeline Strikes Reported 118

Fatalities 25

Personnel Injuries 17

Environmental Impact - Pipeline Spills  
100,000 bbls

**Spills in Costal/ Marine  
Environments can  
average over \$10,000  
a bbl. just to clean up**



# **Dec 2020 – update now 5 killed from the Corpus Dredge – Pipeline Accident**

**By Associated Press Texas Aug. 21, 2020**

**CORPUS CHRISTI, Texas — A dredging vessel at a Texas port hit a natural gas pipeline, sparking an explosion that sent six people to the hospital and left four others missing, authorities said.**

**Investigation into Corpus Christi pipeline explosion may take more than a year**



**April 17, 2018  
Dredge/ Pipeline  
Explosion  
(Matagorda, Tx)**



The dredger Jonathon King Boyd on fire near Port O'Connor, Texas, April 17, 2018. Photo courtesy [Maritime Throwdown](#)

**August 21, 2020  
Dredge/ Pipeline  
Explosion  
(Corpus, Tx)**



Coast Guard crews respond to a dredge on fire in the Port of Corpus Christi Ship Channel, Aug. 21, 2020. A Sector/Air Station Corpus

**What's the  
difference?**

**5 – Killed  
and ~50 miles**

# CAMO Study shows some type of Dredge/ Pipeline damage, near miss or strike - averages 1 per year

## [Dredger strikes subsea gas pipeline in Gulf of Mexico, El Paso ...](#)

[gcaptain.com/dredger-strikes-subsea-pipeline/](http://gcaptain.com/dredger-strikes-subsea-pipeline/) ▼

Apr 1, 2011 - Incident Summary: At 2030 on 30 Mar, while conducting dredging operations

## [Dredging ship cracks natural gas pipe in Delaware River](#)

[www.dailylocal.com/article/DL/20140807/NEWS/140809829](http://www.dailylocal.com/article/DL/20140807/NEWS/140809829) ▼

Aug 7, 2014 - The breach occurred at about 9:15 p.m. when a dredging vessel contracted by the U.S. Army Corps of Engineers struck an 8-inch pipeline near ...

## [Coast Guard responds after dredge strikes pipeline in Louisiana ...](#)

[coastguardnews.com](http://coastguardnews.com) › Marine Environmental Protection ▼

Sep 5, 2016 - NEW ORLEANS – The Coast Guard and other agencies are responding to an oil discharge near Bay Long, Louisiana, Monday. Watchstanders ...

## [\[PDF\] Natural Gas Pipeline Rupture and Fire During Dredging of Tiger Pas...](#)

[pstrust.org/docs/ntsb\\_doc19.pdf](http://pstrust.org/docs/ntsb_doc19.pdf) ▼

Oct 23, 1996 - The spud struck and ruptured a 12-inch-diameter submerged ... gas released from the pipeline enveloped the stern of the dredge and an ...

## [Pipeline Fire - CNN iReport](#)

[ireport.cnn.com/docs/DOC-413532](http://ireport.cnn.com/docs/DOC-413532)

**Dredge hit a natural gas pipeline off  
apflood | Posted February 26, 2010 |**

## [Dredger Hits Natural Gas Pipeline and Catches Fire](#)

<https://www.maritime-executive.com/article/dredger-hits-natural...>

By MarEx 2018-04-18 15:34:00 [Brief] On Tuesday evening, the cutter suction dredger Jonathan King Boyd hit a gas pipeline during dredging operations in Matagorda Bay, Texas, sparking a fire.

# Dredger Reported Activity to CAMO - for Help



CHANNEL C/L COORDINATES

X-COORDINATE	Y-COORDINATE
2,855,918.79	617,000.10
2,855,196.19	616,497.03
2,853,597.22	613,668.40
2,853,422.81	611,184.99
2,852,033.04	608,933.31
2,849,891.39	607,856.08
2,848,986.87	605,833.05

NOTES - SEE DRAWING C-02

Did you account for material placement and Dredge discharge pipe in your plans?

CURVE DATA

200'±15.0'
170'
179'±1'
160'±1'
160'±1.7'

C/L CURVE DATA

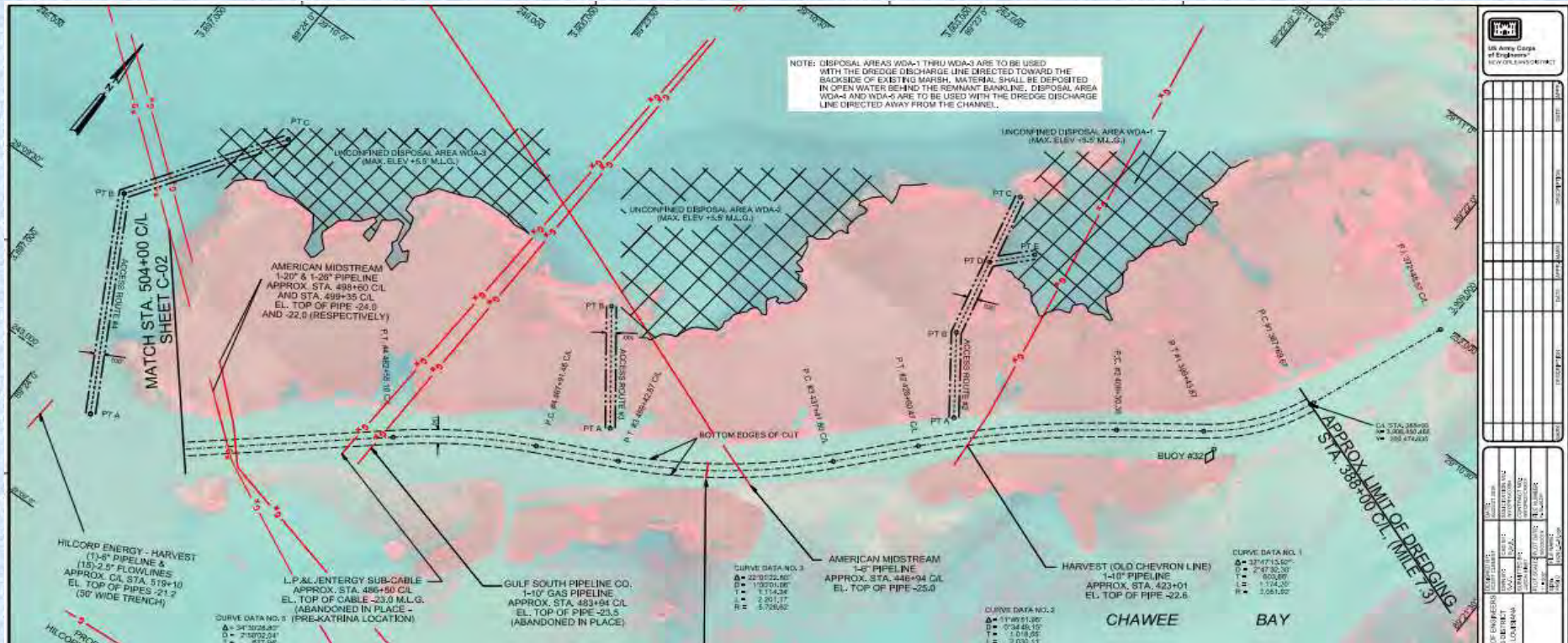
200'±15.0'
170'
179'±1'
160'±1'
160'±1.7'

CURVE DATA

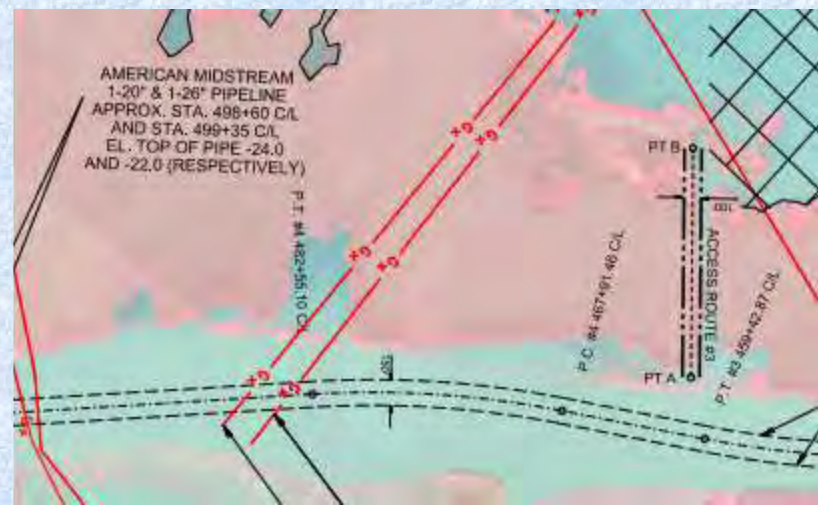
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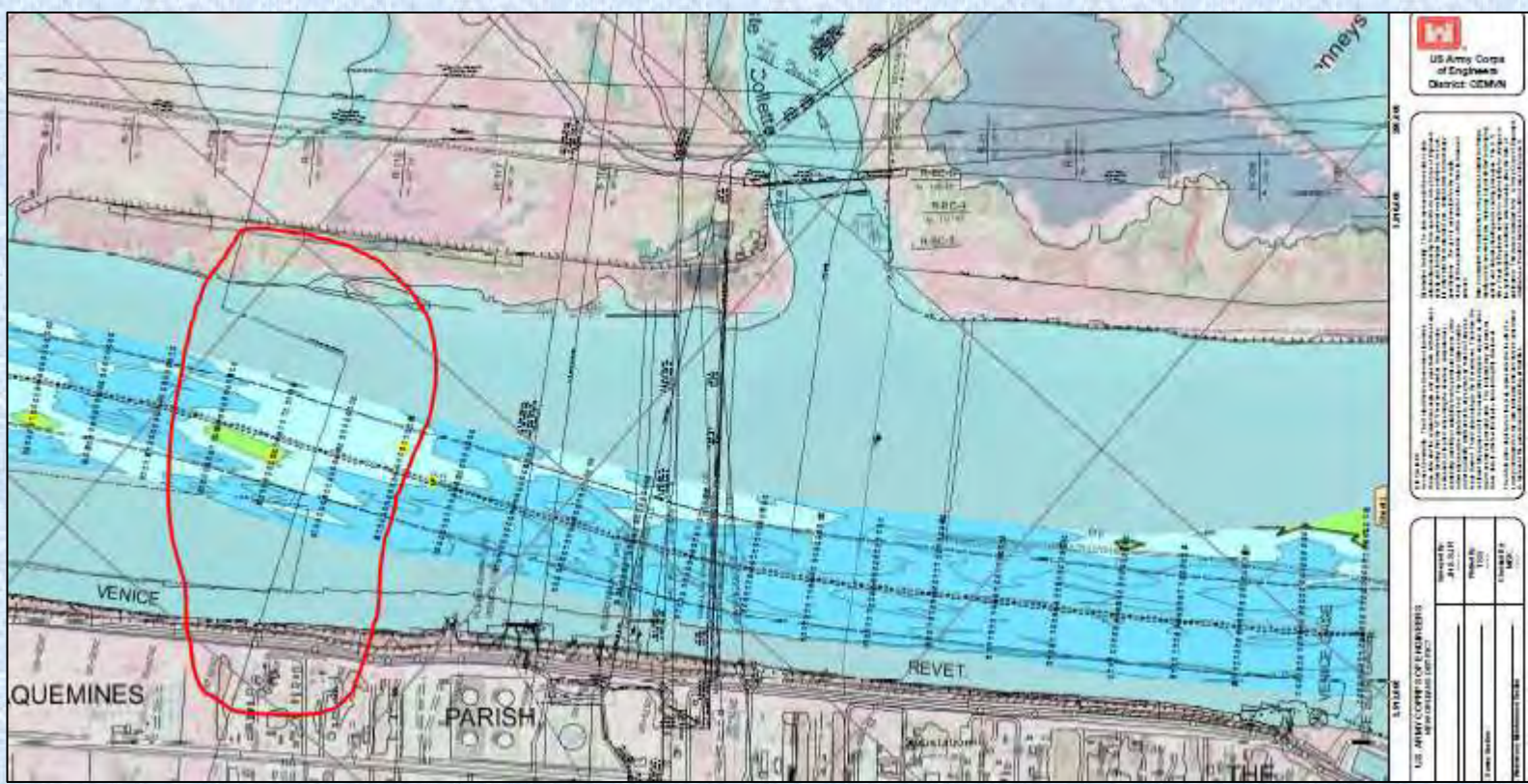


# Pipeline Data Needs to be Checked – Pre Project



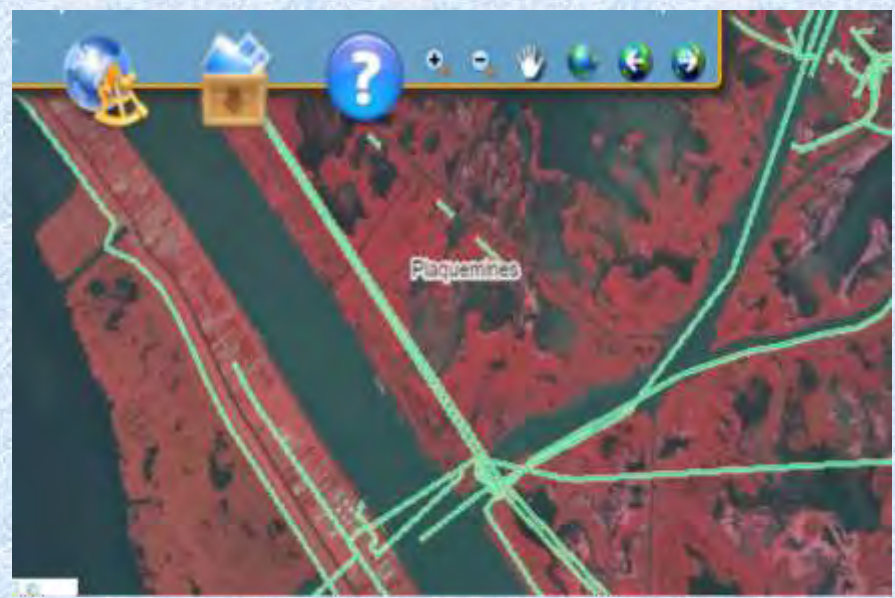
 US Army Corps of Engineers NEW ORLEANS DISTRICT	
PROJECT NO.	
DATE	
DESIGNED BY	
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LOCATION	
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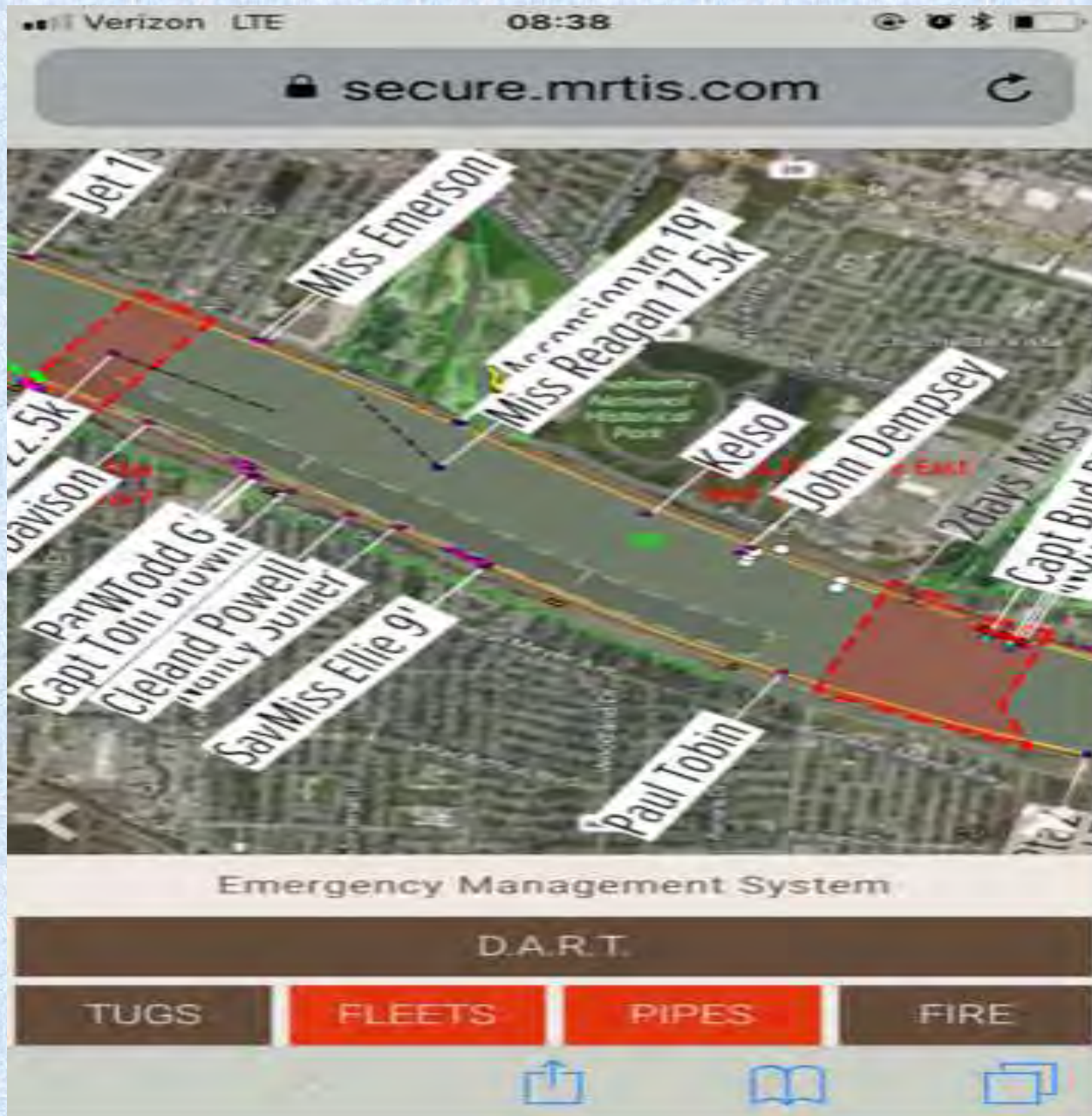


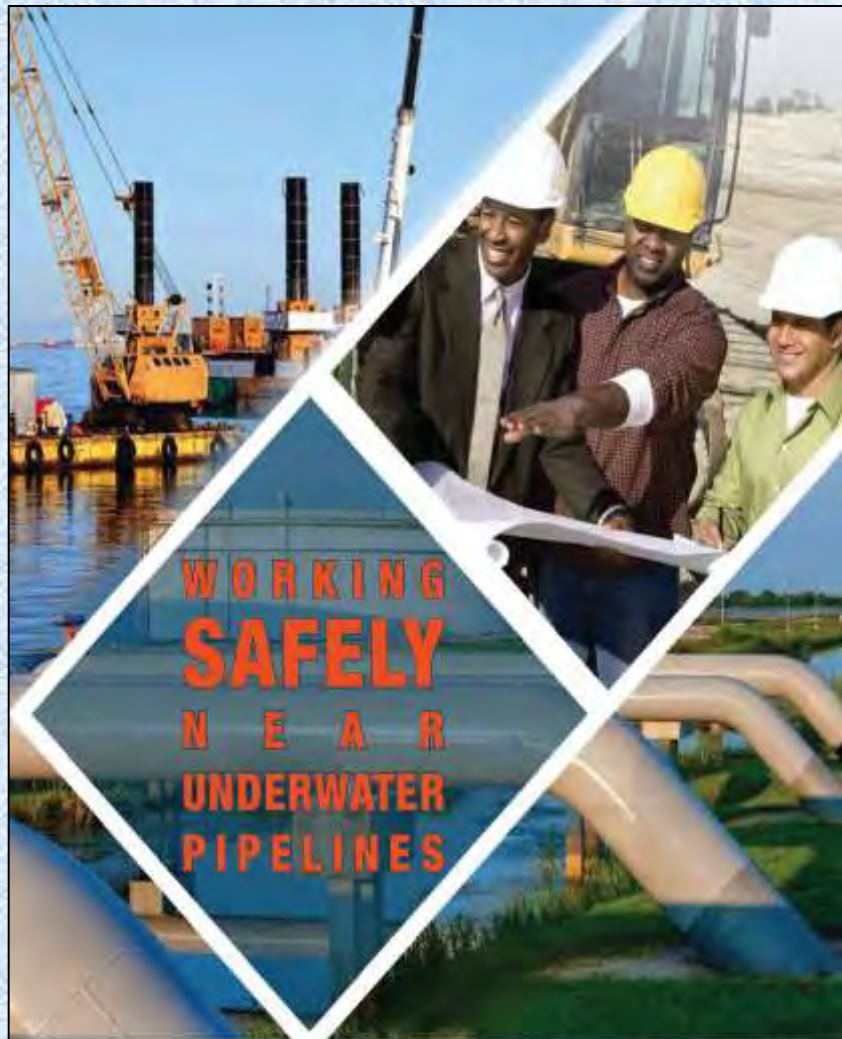
# Dredge Pipeline Issue

4/15/21



# Issue: Pipeline corridors in Safe Anchorages?????





**WORKING  
SAFELY  
NEAR  
UNDERWATER  
PIPELINES**

Recommended Best Practices Guide  
& Checklist for Damage Prevention



**A CAMO and LPBF Partnership**

**~ PHOTOGRAPH THIS  
PAGE ~**

**Register for FREE  
one-hour training:**

**[https://camo.dpa.train  
ing/index](https://camo.dpa.training/index)**

**Watch inbox for password  
from DPA**

~ ~ ~ ~

**EMAIL 10 PEOPLE ABOUT IT**

**Or go to [www.camogroup.org](http://www.camogroup.org)**

**Questions – [ed@camogroup.org](mailto:ed@camogroup.org)**

# [Get Free Safety Resources at www.camogroup.org](http://www.camogroup.org)

camogroup.org

New Online Training: Working Safely Near Underwater Pipelines

[Click here to Register](#)

## CAMO

Coastal and Marine Operators Pipeline Industry Initiative

[Purpose, Actions, and Goals](#)

[Members and Board](#)

[Downloads](#) 



### Emergency

Call immediately if a pipeline is damaged or leaking.

Call 800-368-5888 or 1-800-368-5888.

Report the location, direction of flow, and amount of spill.

Report the name of the pipeline operator.

Report the name of the vessel or facility.

Report the name of the person in charge.

Report the name of the company.

Report the name of the vessel or facility.

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Recommended Best Practices Guide & Checklist for Working Near Pipelines

### Safety

Working Safely Near Underwater Pipelines

Working Safely Near Underwater Pipelines

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# Best Practices and Tip Cards

## Click here to Download PDF



# WORKING SAFELY NEAR UNDERWATER PIPELINES

**Beware**  
Underwater Pipeline

▶ 0:18 / 0:19



1 of 10



**The training is for: personnel in construction, dredging, coastal restoration, pipeline companies, ports, mariners, agencies and emergency responders.**

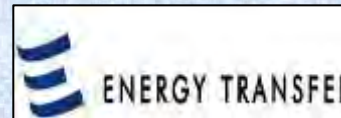
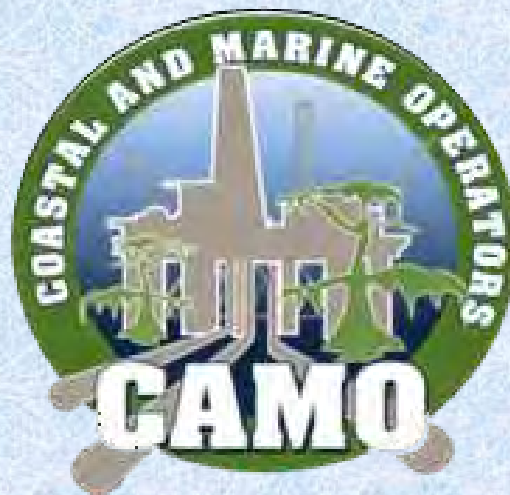
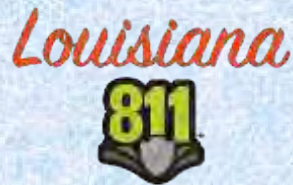
**It's one hour of condensed learning, divided into seven (7) sections.**

# **2021 Dredge and Pipeline CAMO Sub Committee**

## **Current Objectives:**

- 1. Obtain a Corps, Agency, Regulator, CPRA, State/ Federal Sponsor etc. to assign a focal point at the right decision making level to participate on this committee.**
- 2. Pipeline data and information provided to dredgers (from Agency, Client or Sponsor) is often outdated and/ or inaccurate – resulting in unfair responsibilities to dredgers.**
- 3. Training and Guidelines - “All” dredgers and pipeline companies implement training on dredge and pipeline safety (for effected personnel).**
- 4. Project “look back” exercises need to be conducted and learning’s implemented in future projects and shared.**
- 5. Identify any new technologies or better ways to ID underwater pipelines, abandon and flow lines.**
- 6. Dredge operations field tour for pipeline companies and stakeholders**

CAMO Members and Partners:



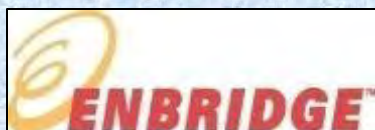
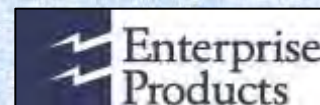
**KINDER MORGAN**

**Ed Landgraf  
Chairman**

[ed@camogroup.org](mailto:ed@camogroup.org)

[www.camogroup.org](http://www.camogroup.org)

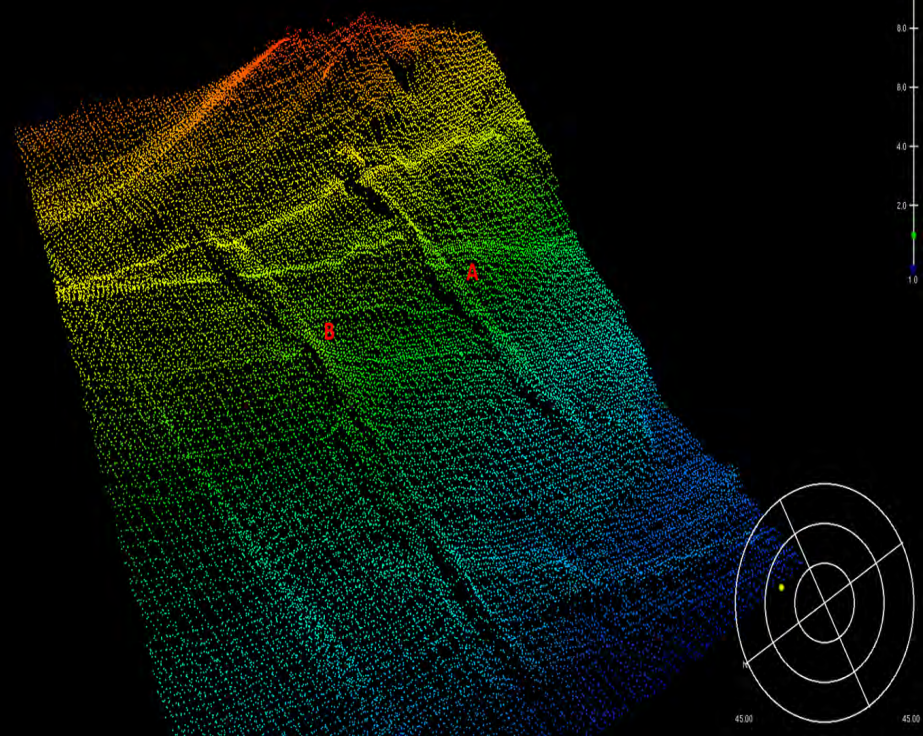
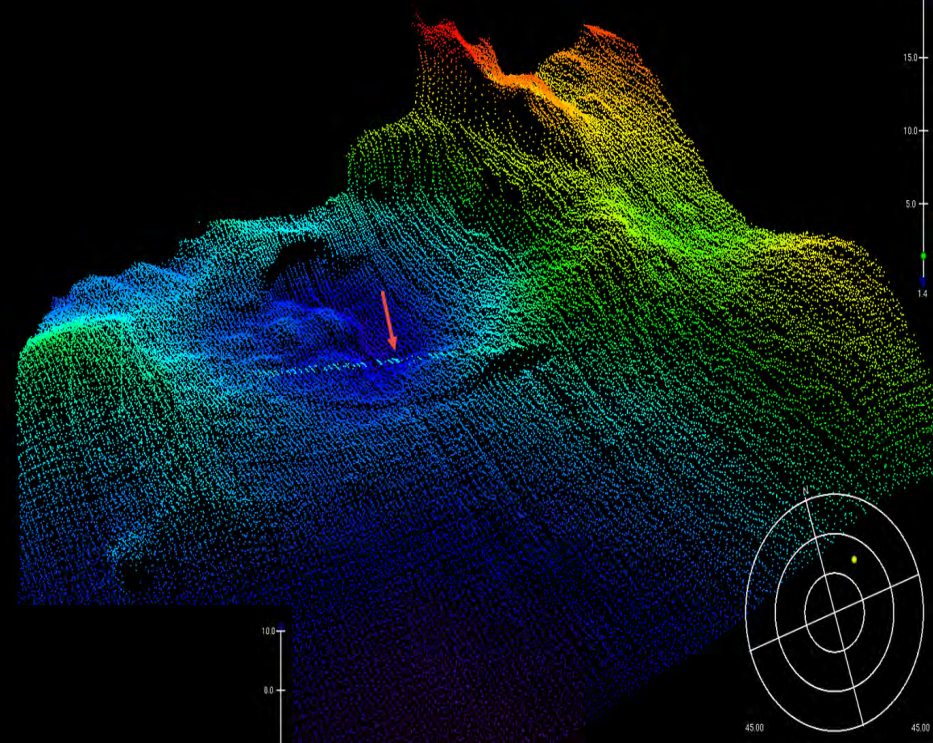
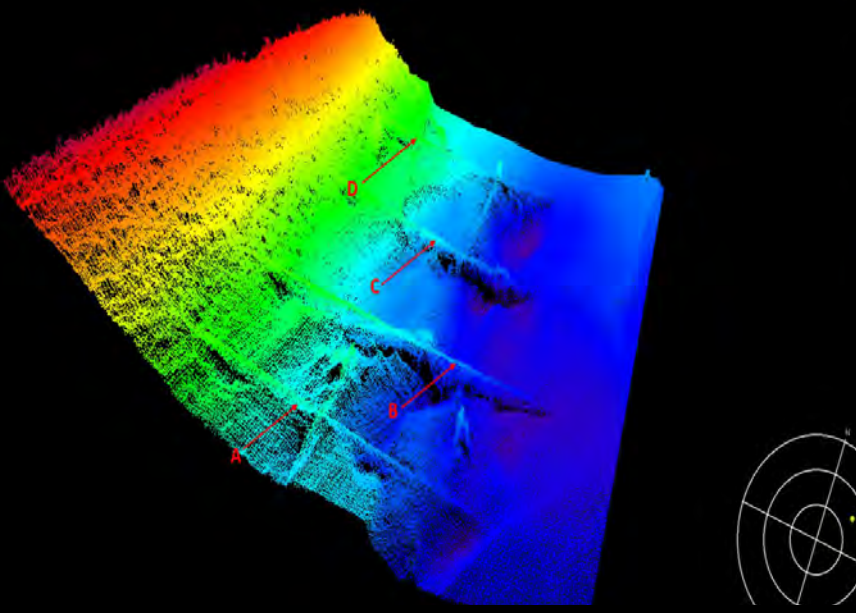
Ph. (985) 209 4753






# Pipelines and Coordination in Safety in Projects and Navigation

Tim Osborn, NOAA Coast Survey  
[tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov)  
337-254-5933



# NOAA Coast Survey Submerged Pipeline Reporting



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Coast Survey, Marine Chart Division  
Silver Spring, Maryland 20910-0202

### Submerged Pipeline Status Report Form

U.S. Army Corps of Engineers District:  Waterway and State:

USACE Permit Public Notice Number:  Latitude/Longitude:

(For example: 29 12 20.42, 49 47 26.32, -79 12 1.01, 49 47 49.44, -79 09 05.44, 29 09 05.44, 49 17 17.12)

Please complete the following checklists to the best of your ability (refer to "What to Submit" and "Supporting Notes" on page 2):

**Requested Action (with reference to applicable questions at right):**

<input type="checkbox"/> Add uncharted pipeline (1, 2, 3)	[1] Date of installation/renoval/abandonment:	<input type="text"/>
<input type="checkbox"/> Update currently charted pipeline (1, 2, 3, 4, 5)	[2] What product or material does it carry?	<input type="text"/>
<input type="checkbox"/> Remove charted pipeline (1)	[3] Permanent opening status:	<input type="text"/>
<input type="checkbox"/> <input type="text"/> (1, 2, 3, 4, 5)	[4] If abandoned, does it contain volatile material?	<input type="text"/>
	[5] What is being updated?	<input type="text"/>

**Project Status:**

Complete - Was the project completed as permitted?

Incomplete

Not Started

Cancelled, No Activity

**Primary point of contact:**


Name & Title:

Company Name:

Email Address:  Phone Number:

Owner Name:

Please include any additional comments here (e.g., other pipeline status, other updates):



Revised 4-1-2011

#### What To Submit:

Please use the "Attach" button at bottom to include all relevant supplementary information, including:

<b>To add an uncharted pipeline:</b> <input type="checkbox"/> As-Built * <input type="checkbox"/> USACE Permit †	<b>To update a charted pipeline:</b> <input type="checkbox"/> ENC Graphic or Latitude/Longitude ‡ <input type="checkbox"/> USACE Permit †	<b>To remove a charted pipeline:</b> <input type="checkbox"/> ENC Graphic or Latitude/Longitude ‡ <input type="checkbox"/> USACE Permit(s) † <input type="checkbox"/> Removal statement ¶
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#### \* As-Built:

Digital as-built surveys (e.g., shapefiles, geodatabase files, dgn files, dwg files, GeoPDFs, Excel files, csv files, xyz data) are preferred.

Un-georeferenced PDF files and hand copy surveys are acceptable if they are overlaid with a coordinate grid or tick marks.

For all as-builts, ensure that the coordinate system (projection, horizontal datum, and units) is stated in the as-built and/or is indicated in the "As-Built Geographic Coordinate System" field below.

As-Built Geographic Coordinate System:

† **USACE Permit:** Provide a copy of the United States Army Corps of Engineers permit that authorized the pipeline activity.

#### ‡ ENC Graphic:

(a) graphic of the largest scale NOAA ENC® with the feature circled. We suggest using the NOAA Online ENC Viewer found at: <https://nauticalcharts.noaa.gov/encviewer/encviewer.html> (zoom in to see the most detailed data available)

(b) Latitude/Longitude marking the location of the charted pipeline; see the field located near the top of the form

#### ¶ Removal Statement:

If you are submitting this form requesting that a pipeline be considered for removal from applicable charts, please note that NOAA will require an official statement on company letterhead stating that pipeline removal has been completed as permitted. This statement should be included as an attachment prior to submission of this form using the "Attach" button below.

Upon completion, please use the "Submit" button below to email this form directly to NOAA's National Ocean Service, Marine Chart Division. If email is not an option, hard copy printed forms and any supplemental information may be mailed to:

Department of Commerce, NOAA  
Nautical Data Branch, N/C526  
1315 East-West Highway  
Silver Spring, MD 20910-1282

#### Supporting Notes:

When a pipeline that falls within a charted pipeline area (or pipeline and cable area) is removed, the National Ocean Service (NOS) cannot delete the charted area without being certain that NO additional pipelines or cables are located in that area. To remove a charted area, NOS cartographers will need to do extensive research to ensure that NOS did not receive information about other utilities that fell within those limits. To that end, any information regarding the status of additional utilities in such an area would be useful.

All pipeline data that NOS receives is subject to charting policy. There is no guarantee that NOS will add, revise or delete an individual symbol or area for one or more navigational products. NOS shall remain the final authority for charting any submarine pipeline that it considers to be potentially hazardous to marine navigation regardless of other recommendations.

Thank you for your assistance. If you have any questions regarding this inquiry, please contact the Nautical Data Branch via email at [ncx.nsb@noaa.gov](mailto:ncx.nsb@noaa.gov). Please be sure to include the USACE permit number in the subject field.



Callan Marine, LTD. is a Texas-based, family-owned dredging business founded in 2009. Callan Marine performs dredging projects for both private and public clients by providing services to restore berthing depths for ship docks, navigation channels, or otherwise facilitate transportation in our nation's waterways.

Micah Morris is a graduate of Texas A&M University at Galveston with a Bachelor of Science in Maritime Administration. He joined the Callan Marine team in 2016 and has served in various project management roles. Micah is now responsible for the Brown Water Division at Callan Marine.



Micah Morris, Operations Manager  
Brown Water Division