



C.A.M.O. - Coastal, And Marine Operators

Pipeline Industry Initiative

- **Purpose - To explore and address issues and challenges, in preventing spills, releases and damage to coastal and marine pipelines, which negatively impacts the environment and safety.**
- **Action - Design and Support “Drivers” that will enhance the protection of oil and gas pipeline infrastructure through industry, government and agency collaboration, while demonstrating continuous improvement.**
- **Goals – Implement effective solutions and objectives that sustain and enhance pipeline asset integrity, environmental protection, industry perception, and our right to operate.**
- **CAMO - Newly formed in 2009 with over 20 pipeline companies participating, we have two general membership meetings a year**

C.A.M.O. - Coastal, And Marine Operators

Participating Companies

Air Products

BP

Chevron

Conoco Phillips

Enbridge

Elpas

Enterprise

ExxonMobil

Kinder Morgan

Plains

LOOP

Shell

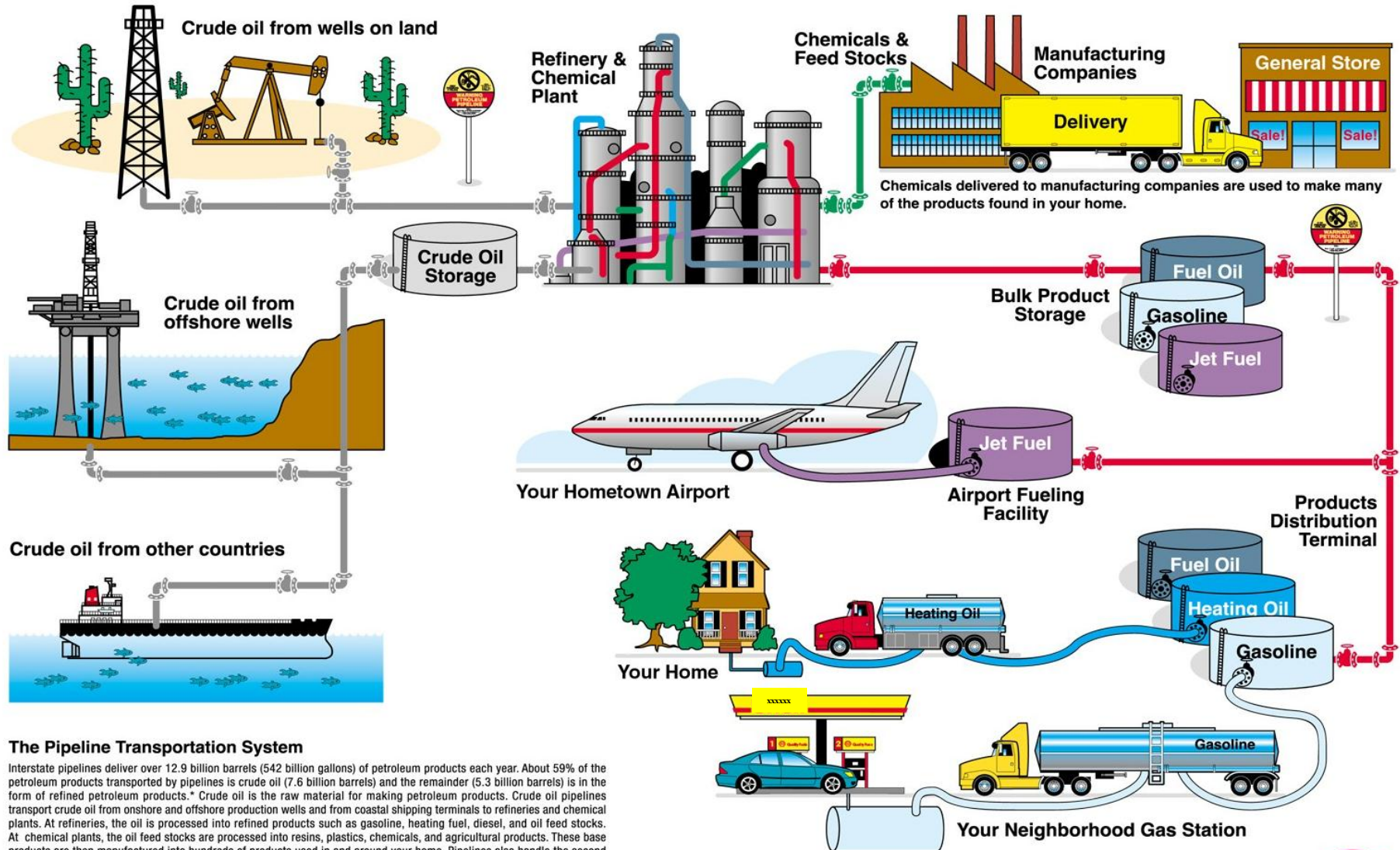
Spectra

Texas Gas

Trans Canada

Trunkline

Pipeline Transportation – Supporting The American Way Of Life



*** Pipelines are among the Highest Tax Revenue Generators in many regions**



**Pipelines run through many environments via right of ways.
They are the Safest mode of Oil and Gas transportation.**

Gulf Coast Energy Statistics:

(Most of which is transported via pipeline)

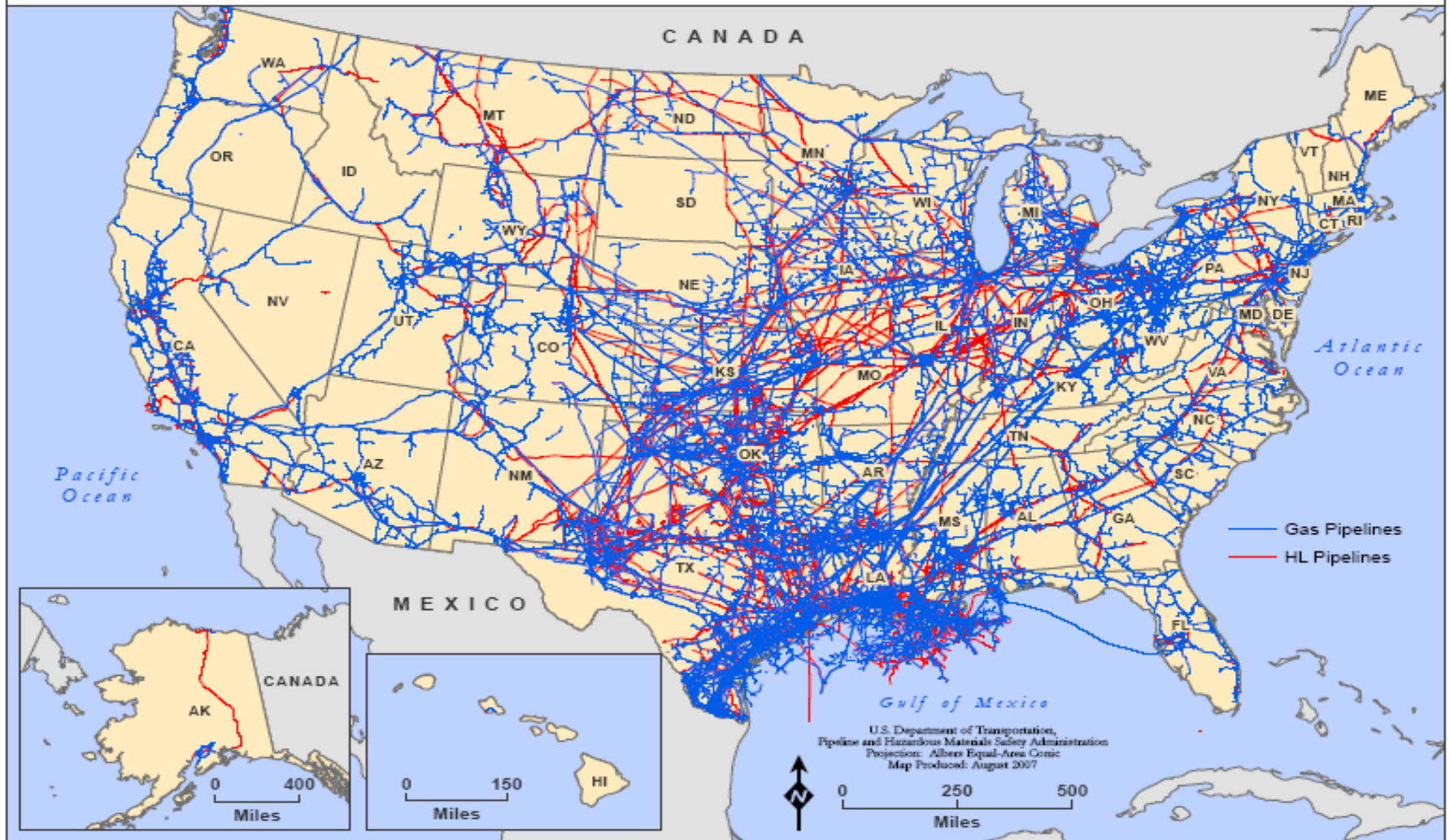
- Provides over 40% of all energy consumed in the US**
- La. and Tx. are home to four US Strategic Petroleum Reserve underground storage facilities**
- Ms. La. and Tx. Combined refining capacity is over 7.5 million barrels a day, which is 43% of the total US market share**
- Home to Louisiana Offshore Oil Port (LOOP) with a capacity of transporting over 1 million barrels of imported crude oil a day**
- Henry Hub, located near Erath, La. has a nexus of 13 natural gas pipeline systems that carry approximately 49 percent of US wellhead production to US markets**
- Over 2.6 million barrels of crude oil traverses the Gulf Coast each day through pipelines**
- Over \$6 billion of federal revenue is generated each year from the Gulf Coast OCS oil and gas production, this is Second only to the IRS in total US Gov't Revenue**

Pipeline Distribution Infrastructure

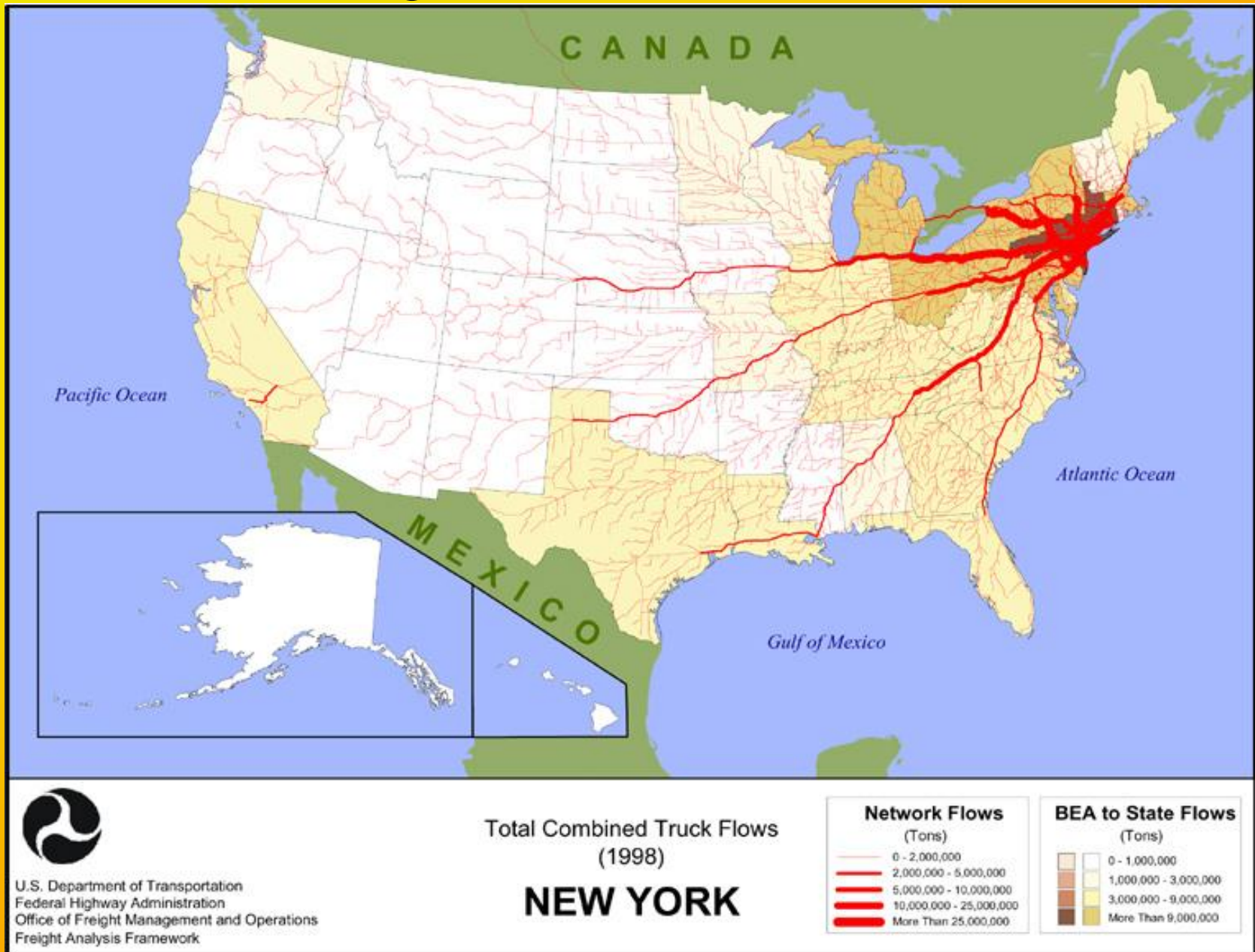


Pipeline and Hazardous
Materials Safety Administration

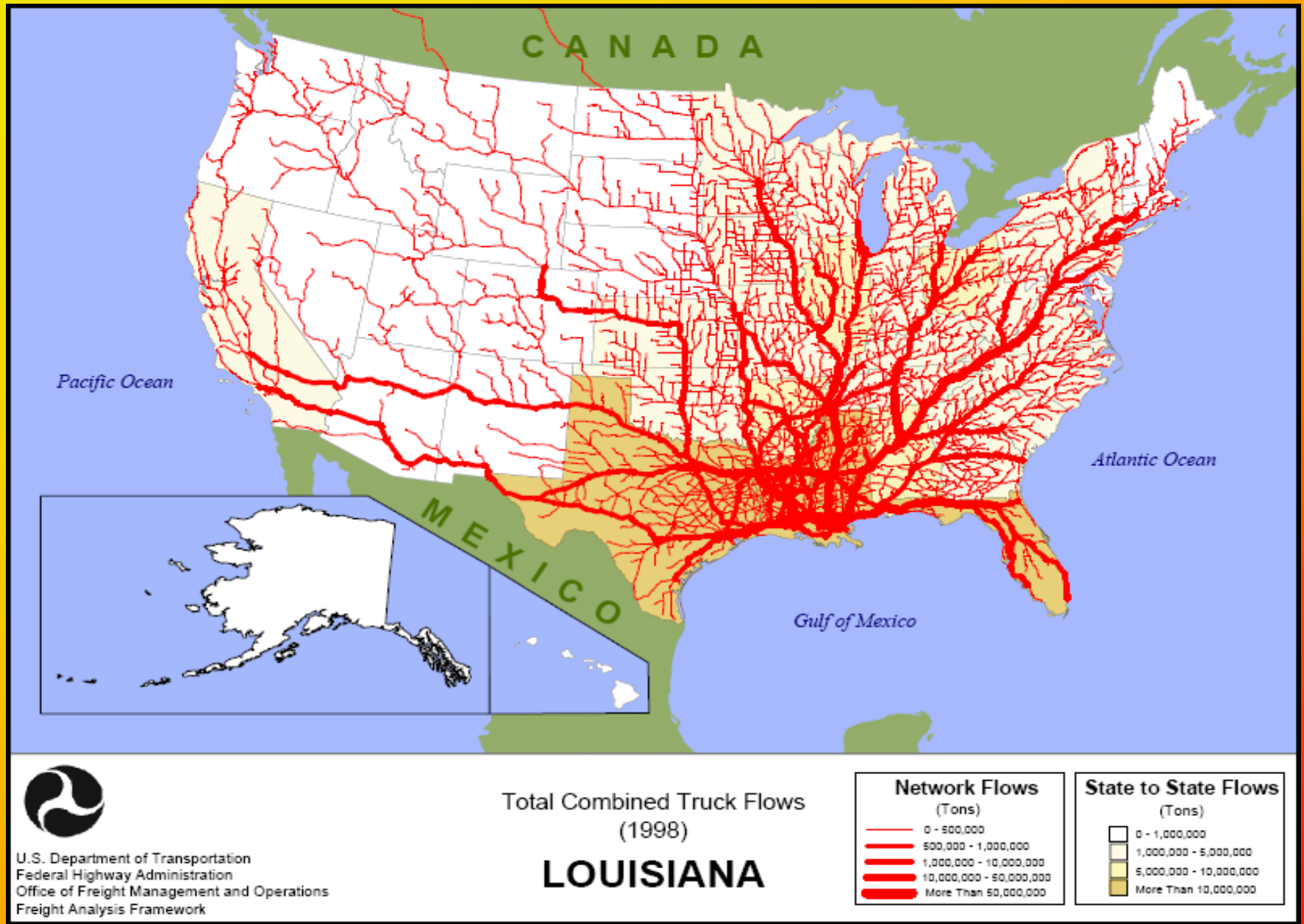
Gas and Hazardous Liquid Transmission Pipelines Pipelines as of 08/08/07



East Coast Freight and Distribution Infrastructure

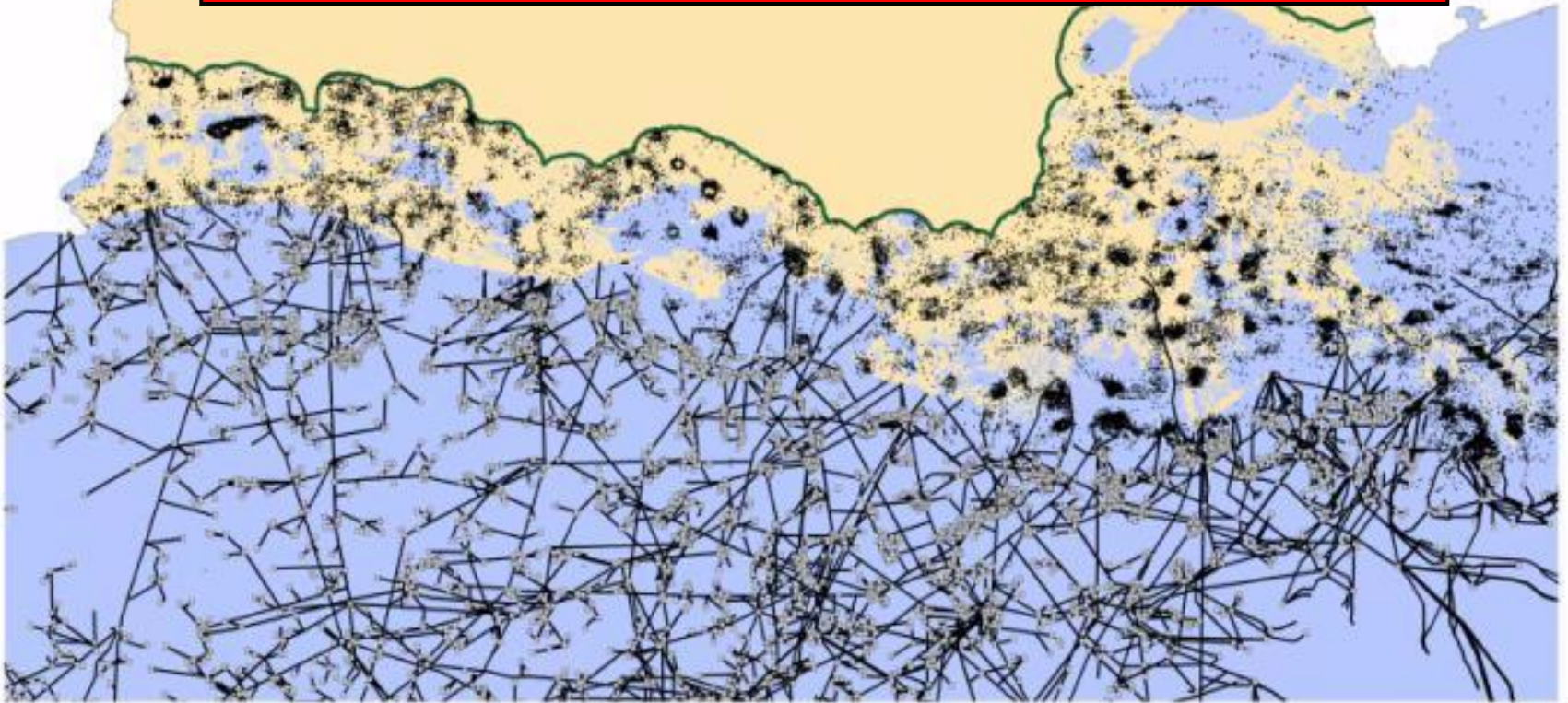


From the Gulf Coast...

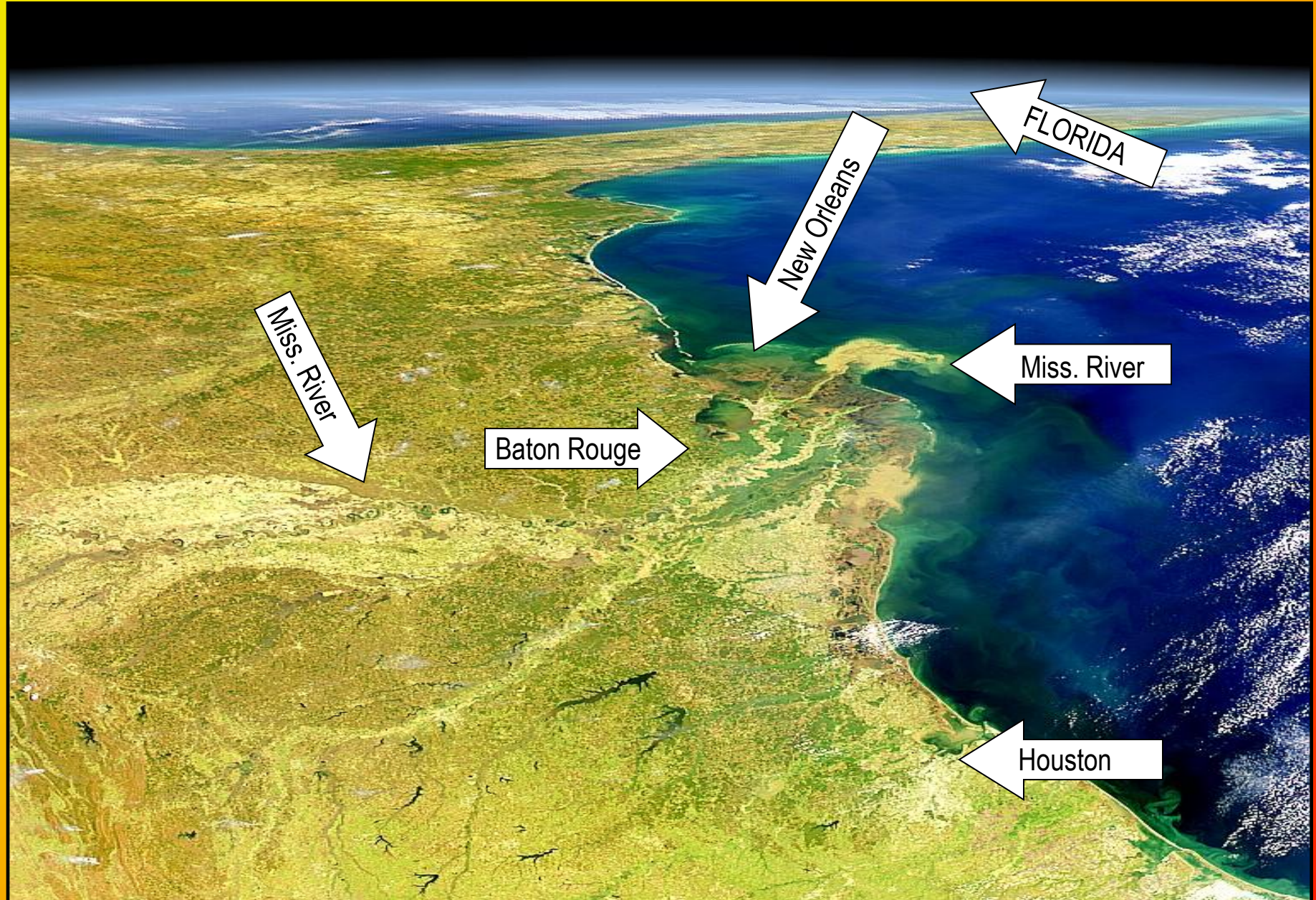


**25-30 Percent of the United States Energy Supply
Traverses the Gulf - Through Underwater Pipelines.
They must be protected from Damage.**

- Over 4,000 platforms, Over 33,000 active wells,
- Over 35,000 miles of pipeline



Gulf Coast Region



Pipeline Industry - Unknown and 3rd party damage is one source of our industries largest spills.

Marine

or

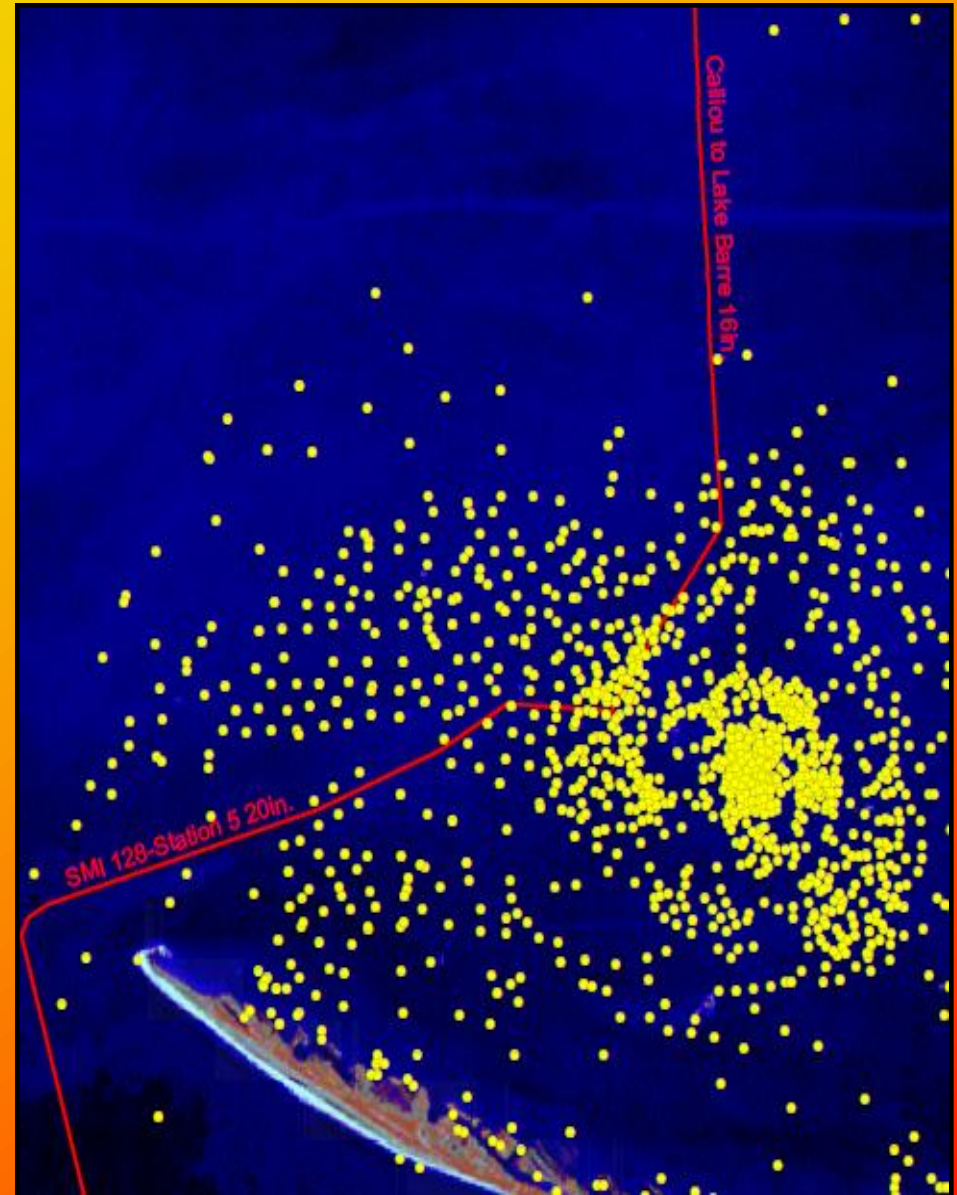
On Land

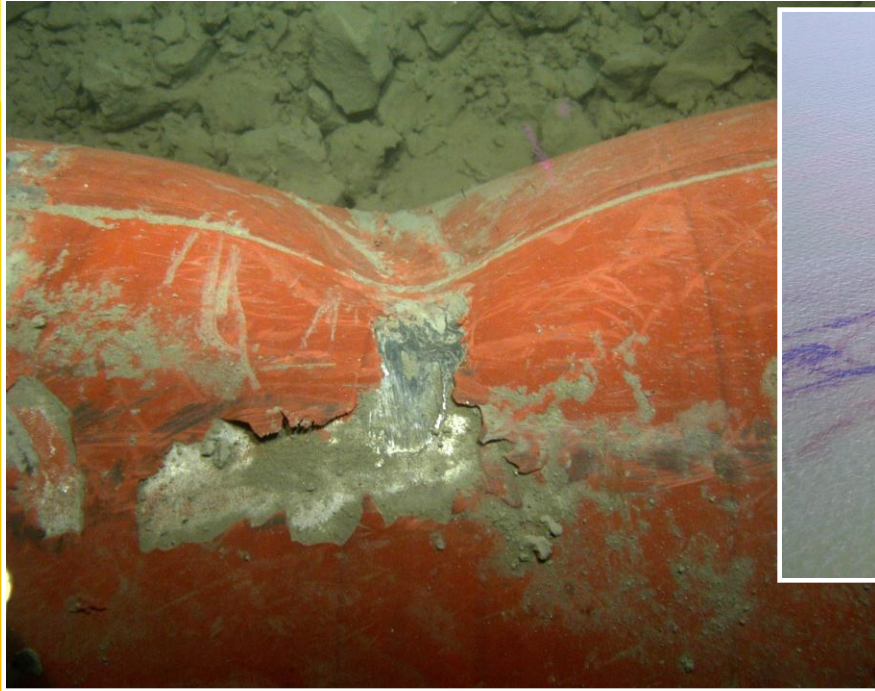


CAMO Initiative - Preventing Third Party Damage and Unauthorized Encroachments to Coastal and Marine Pipelines

Things to consider -

- On land One Call Laws are very specific – but in coastal and marine areas the law needs enhancements to protect pipelines and the environment from releases
- Excavator Operators vs. Marine Vessel Operators
- (Left) Large amount of wells near PL's – all need many types of marine vessel work
- Pipeline operators need to be in the loop for Any Activity that contacts the water bottom near pipelines

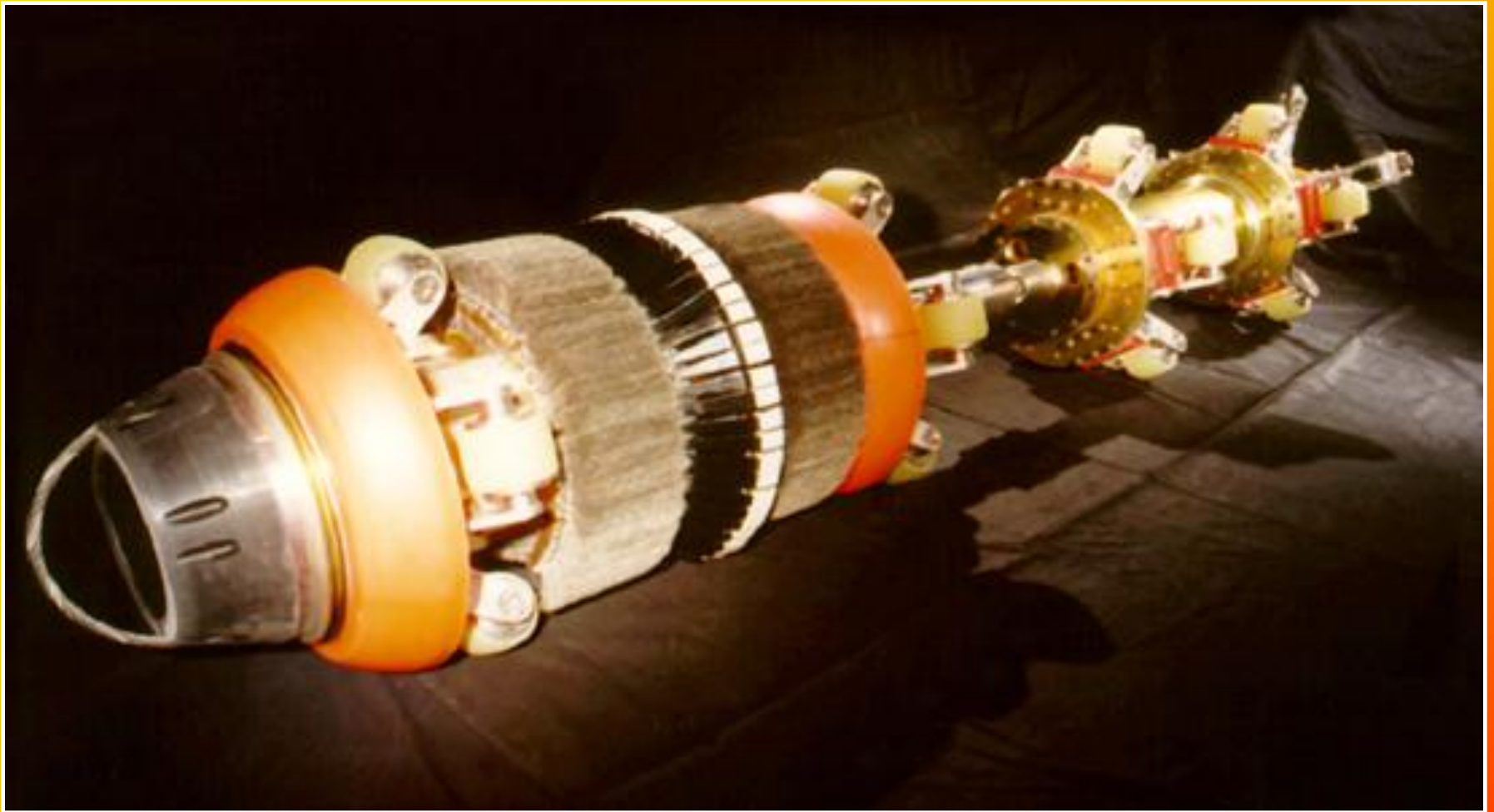




**Coastal and Marine Areas should require a One Call
no different than on land.**

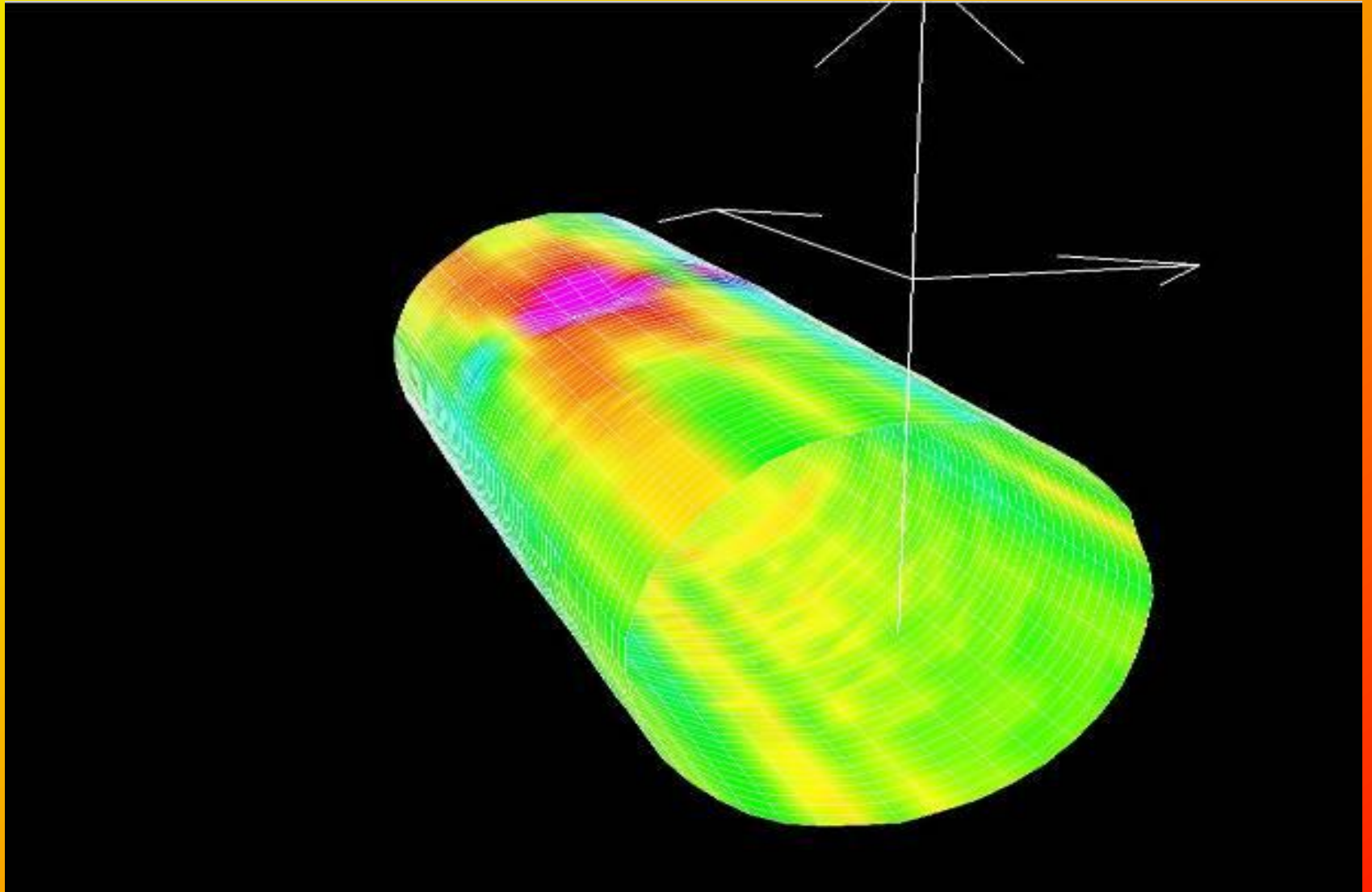
Typical Third Party Marine Pipeline Damage where no “One Call” was made (can lead to fatigue failure)





- **“Smart” Pigs are used to internally scan a pipelines integrity**
- **Smart pigs can detect dents, corrosion, etc.**
- **“Standard” Pigs are run more frequently to help keep the Pipeline clean**

Sample of Smart Pig Data



Marine Pipeline - 3rd Party Damage from a Vessel Anchor Drag



Pipeline System Near Miss, a Spud Barge over the pipeline

(No notification was made)



**20" Oil
Pipeline of
400,000 bbls a day**

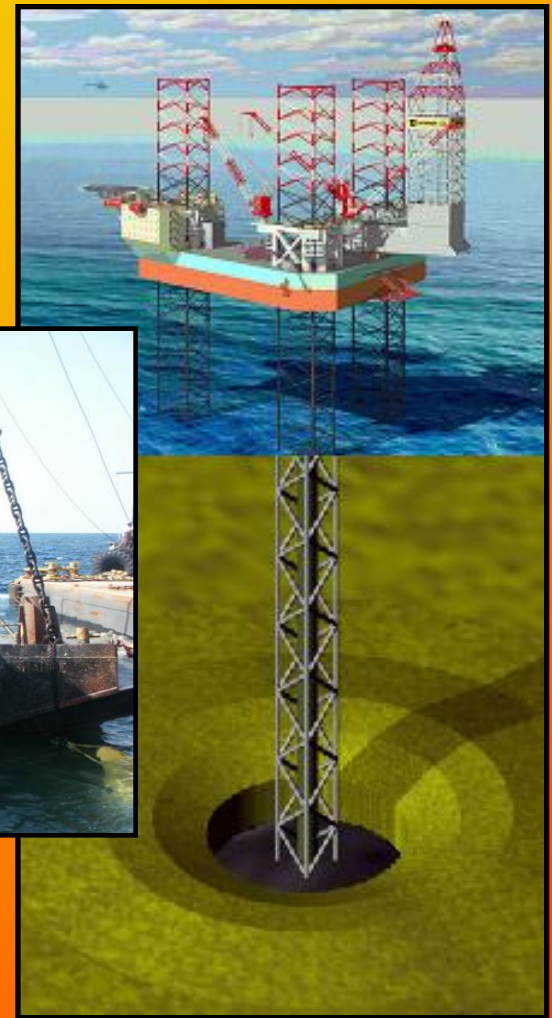
Recent Vessel Damage to a 16" Natural Gas Pipeline



**Worker Safety and
Releases in marine
environments
can be very serious**

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





**Activities than should
require a “One Call”
notification**

Wheel Washing from Large Boats is a huge damage threat.

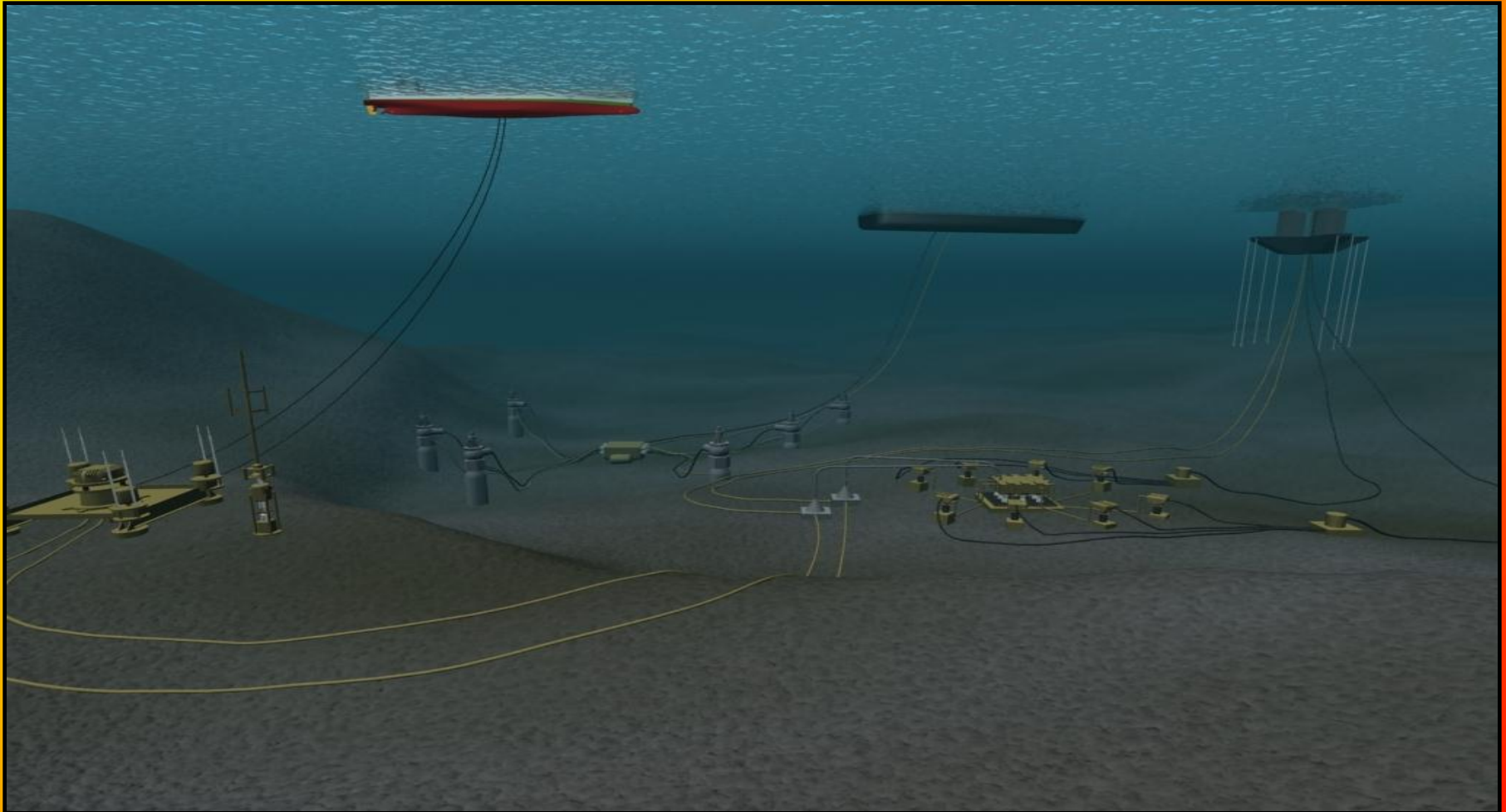


Construction that requires a One Call?



Offshore – GulfSafe: Provides a notification system for offshore operations, which mimics each State’s “Call Before You Dig” system

Onshore - Louisiana One Call also has a **Marine Ticket**



In State Waters Call 811



**Know what's below.
Call before you dig.**

48 hrs before you work, Your ticket is good for 10 days!

It's a free service and It's the Law!

State Police can enforce “One Call Law” Violations



LOUISIANA STATE POLICE UNDERGROUND UTILITIES COMPLAINT FORM

The purpose of this complaint form is for State Police to review for possible violations only to the UNDERGROUND UTILITY/FACILITY DAMAGE PREVENTION LAW. Underground utility complaints should be reported to the Louisiana State Police complaint line # 225-925-4893 and **COMPLAINT FORM MUST BE COMPLETELY FILLED OUT AND FAXED BACK TO L.A. STATE POLICE AT #225-922-1588** Hours 08:00 - 4:30

Provide the following information as completely as possible.

PART A – WHO IS SUBMITTING THIS INFORMATION

Who is providing this information? <input type="checkbox"/> Excavator <input type="checkbox"/> Locator <input checked="" type="checkbox"/> Facility owner <input type="checkbox"/> Property Owner <input type="checkbox"/> Other	Name of person providing information: <u>Kevin Arceneaux (Shell Pipeline)</u> Daytime phone number: <u>985-873-3429</u> <u>(cell) 985-790-2868</u>
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PART B – DATE AND LOCATION OF THE EVENT

Location of the excavation and/or damage (include city and parish): <u>N 29 12.807 W 90 28.039 (Terrebonne Parish)</u> <u>In Terrebonne Bay — near Cocodrie, La.</u>	Date the damage or downtime occurred: <u>5-11-09</u> No damage or downtime
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PART C – AFFECTED UTILITY/FACILITY INFORMATION

What type of utility/facility operation was affected? <input type="checkbox"/> Telephone <input type="checkbox"/> Water <input checked="" type="checkbox"/> Petroleum Pipeline <input type="checkbox"/> Gas <input type="checkbox"/> Sewer <input type="checkbox"/> Cable TV <input type="checkbox"/> Electric <input type="checkbox"/> Other _____
Is the utility owner a member of one-call? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no

PART D – EXCAVATION INFORMATION

Type of Excavator: <input type="checkbox"/> Contractor <input type="checkbox"/> Municipality <input type="checkbox"/> Railroad <input type="checkbox"/> Developer <input type="checkbox"/> Parish <input type="checkbox"/> Occupant <input type="checkbox"/> Utility <input type="checkbox"/> State <input type="checkbox"/> Farmer <input checked="" type="checkbox"/> Unknown / Other <u>Marine - jackup boat</u>

PART E – NOTIFICATION

Did the excavator notify the one-call notification center? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	IF YES, PROVIDE THE ONE-CALL NOTIFICATION TICKET NUMBER: <u>None made</u>
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PART F – LOCATING AND MARKING

Were utility/facility marks visible in the area of excavation? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Were the utility/facilities marked correctly? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
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PART G – DESCRIPTION OF DAMAGE

Was there damage to a utility/facility? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If yes, duration of the outage: <u>0</u> Approximately how many customers were affected? <u>0</u> Number of people injured: <u>0</u> Number of fatalities: <u>0</u>
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PART H – DESCRIPTION OF THE ROOT CAUSE

What was the root cause of the damage, downtime, or near-miss? This information is meant to be a guide and does not cover the law in its entirety. Examples of violations are not all inclusive.	
<input type="checkbox"/> Facility was not located or marked	<input type="checkbox"/> Notification to the one-call center made but not sufficient
<input type="checkbox"/> Digging later than the 10 day expiration	<input type="checkbox"/> Digging outside of the physical area of the requested locate
<input type="checkbox"/> Digging prior to the mark by time	<input type="checkbox"/> Not reporting damage of the underground utilities/facilities
<input checked="" type="checkbox"/> No notification made to the one-call center-Not calling before digging <input type="checkbox"/> Other	

PART I – EXCAVATOR INFORMATION

Name of:	<u>XX</u>		
Address:	<u>XX</u>		
Phone: <u>985-846-8577</u>	Fax:	E-Mail:	
Was Citation Issued? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Citation number: _____		

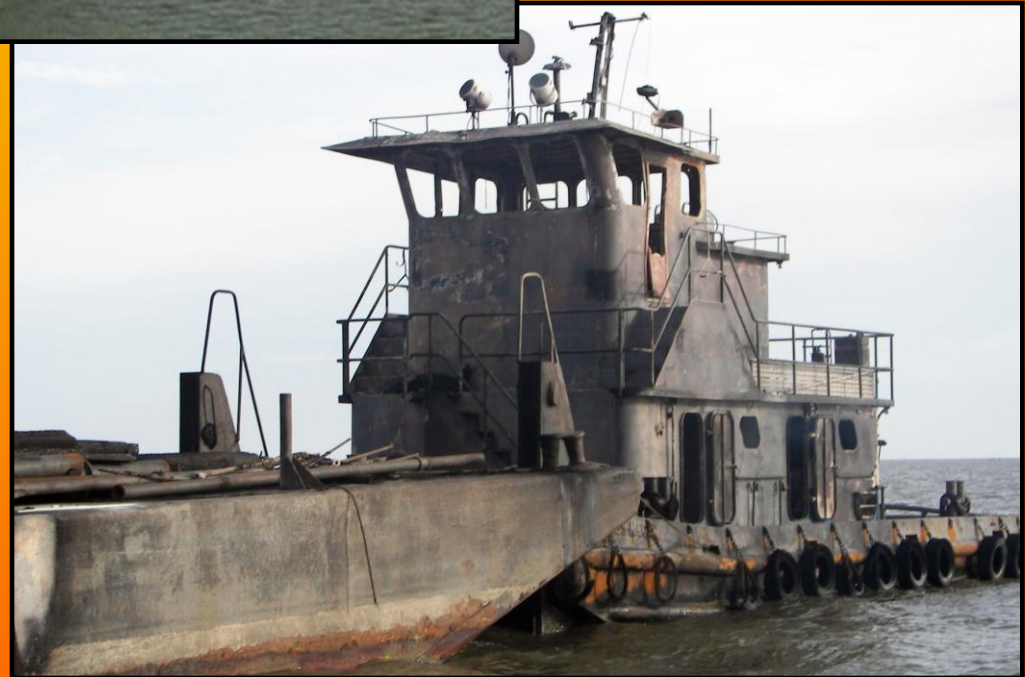
Coastal and Marine Third Party

Damage Incident Examples

- **Terrebonne Bay, May 1997, 5000 bbls. crude oil released, cause Spud Barge**
- **Catfish Lake, Sept 2001, Boat Prop**
- **Little Lake, Vessel Damage**
- **Bayou Perot, Jan 2007, 10,000 bbls barge hit**
- **Poseidon Pipeline, over 3000 bbls crude oil, anchor drag**
- **Safety - West Cote Blanche Bay Oct 2006 kills six, spud barge**
- **2010 - Morgan City Area Dredge Gas PL Hit and Delta Release Spud Barge Hit crude line**



West Cote Blanche
Bay:
Spud Barge Kills 6
October 6, 2006



Coastal and Marine Third Party

Damage Incident DATA

The data below was compiled from PHMSA, Minerals Management Service, United States Coast Guard and the National Transportation Safety Board.

Interactions between Vessels / Anchors / Pipelines (1987 - 2007)

Pipeline Strikes Reported	118
<u>Fatalities</u>	25
Injuries	17
Environmental Impact from Pipelines Spills	100,000 bbls
Property Damage to Regulated	\$100,000,000

Unknown and 3rd party damage and is the source of our industries largest spills.

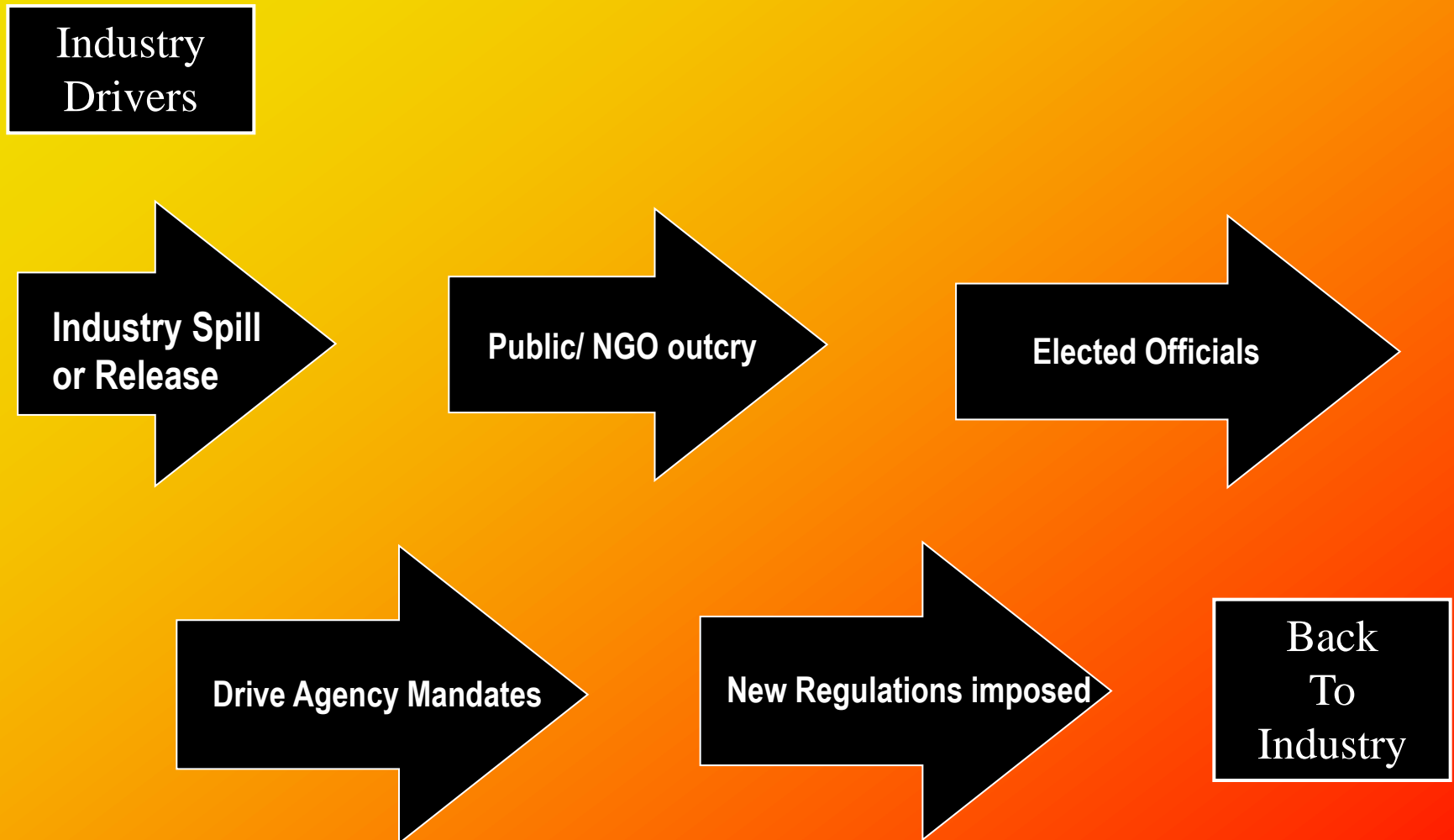


What To Do If A Leak Occurs

- Leave the area immediately (upwind) warn others.
- Do not touch, breath or make contact with leaking liquid.
- Do not attempt to stop the leak by operating pipeline equipment.
- Do not light a match, or make a spark
- From a safe distance, call 911 or local emergency response number.

I. P. E. A. R. stop gap system overview

Industry, **P**ublic/ NGO, **E**lected Official, **A**gency, **R**egulations



So what's at Stake?

- **Expanded Energy Access in the Gulf and US...**
- Industry Perception – we have too many spills or releases
- Doesn't demonstrate continuous improvement
- State and National economy and energy security
- **Worker Safety, Preserve our License to Operate**
- **Your legal liability both Personally and Corporately**
- **Reasons to support CAMO initiatives**
 - Environmental Responsibility
 - Reduce both Oil and Gas releases
 - Reduce system downtime which protects state revenue
 - Public safety
 - Sustain effective operations
- **New Regulations? All 50 States have a “One Call Law” why not the GOM?**



Why?



- Help protect the community and the environment.
- Help eliminate injuries caused by pipeline accidents.
- Help reduce damages.
- Protect the US economy



CAMO Upcoming Initiatives

- **Fall Bi - annual meeting Nov. 11**
- **International Work Boat Show, CAMO exhibit – December**
- **Execute the CAMO Grant initiatives, DVD, Web site design/ population, Ads, education and awareness materials etc.**

Address: CAMOgroup.org

- **Get more One Call Language in Coastal Permits, and work with USCG and State Regulators on Marine Enforcement**
- **Formalize structure for CAMO and Near/ Long term Goals**
- **Secure funding from membership dues and Grants for our awareness, education and outreach initiatives**
- **Work with CGA and PHMSA to assist with CAMO initiatives**
- **Main objective is to close the gap between On Land and Marine Damage Prevention initiatives**

Coastal and Marine Pipeline Threats and Challenges

- Wheel Washing
- Soil Erosion and Land Loss
- Drilling Rigs & Ships
- Jack-ups & Work Boats
- Lay/Derrick Barges & Large Anchors
- Spud Barges & Supply Boats
- Tropical Storms & Hurricanes
- Mudflows & Shifting Land
- Saltwater Corrosive Atmosphere
- Sensitive Environment



