

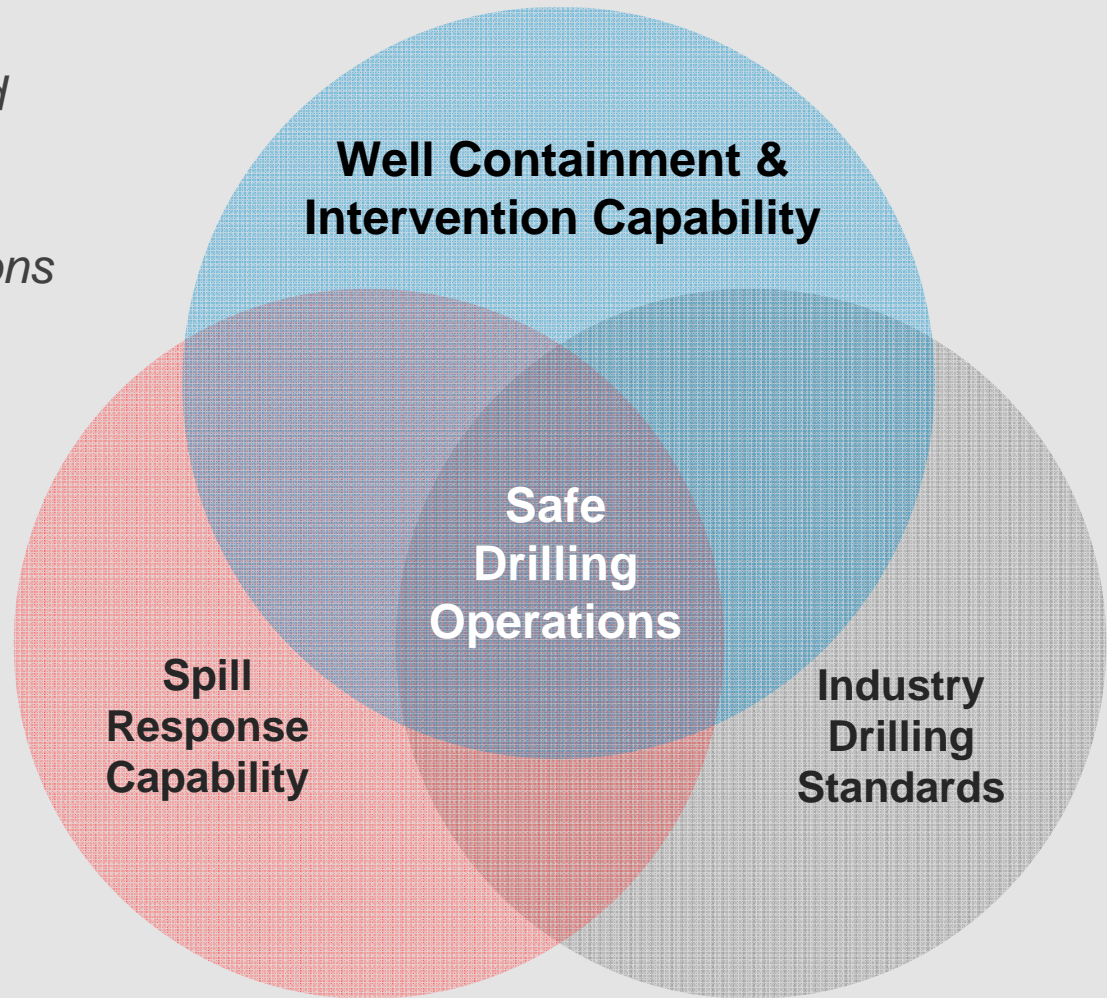
# The Marine Well Containment System

NOIA  
2010 Fall Meeting  
October 30, 2010



# Restoring Confidence in Deepwater Drilling Operations

*Our initiatives are aligned with Administration / Congressional expectations of how to resume safe drilling operations in the Gulf of Mexico*



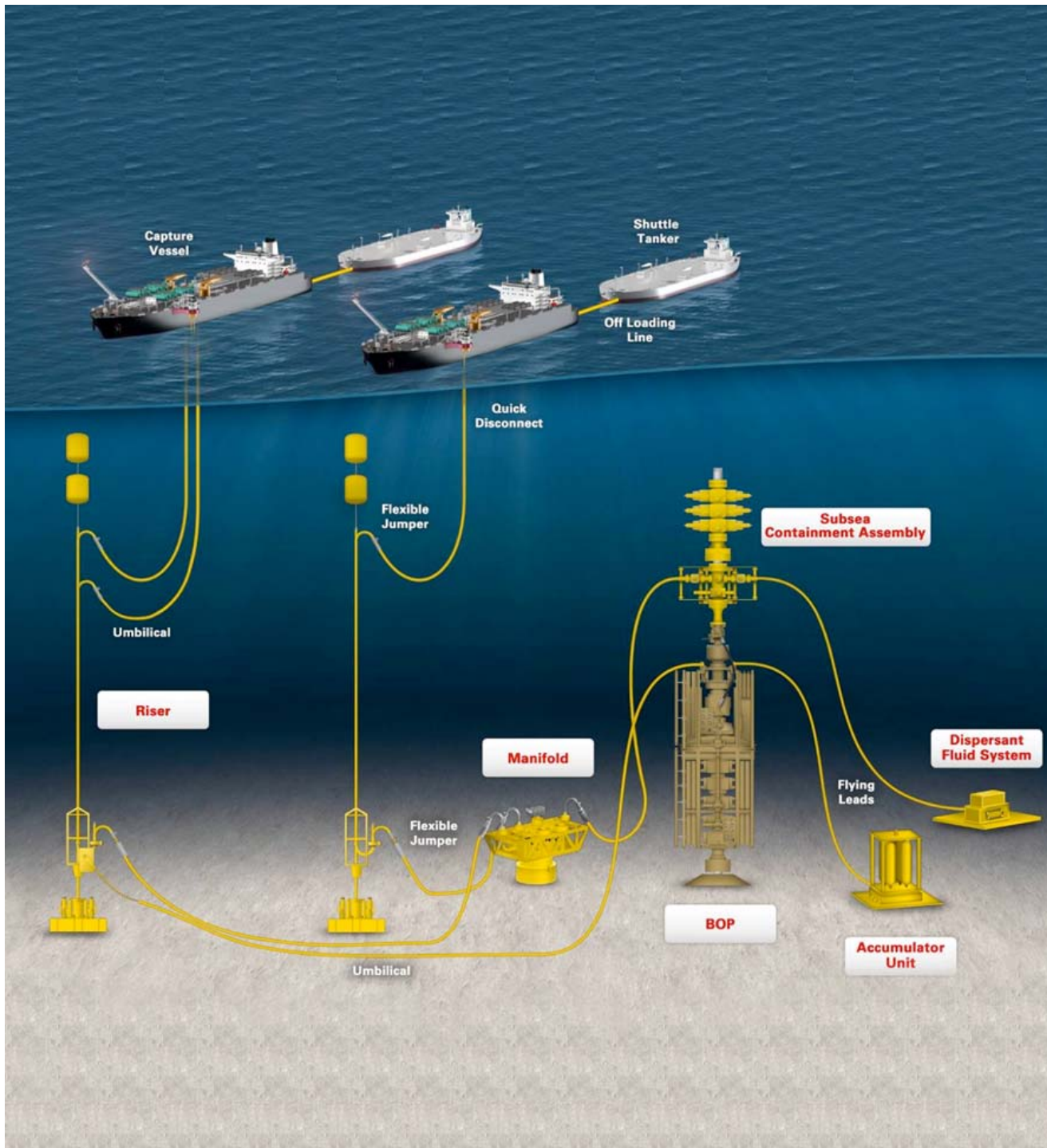
# Industry Committed to Improving Response Capabilities

## **Chevron, ConocoPhillips, ExxonMobil and Shell have initiated development of a new, rapid containment response system**

- Fully contain oil flow in the event of a potential future underwater blowout
- Designed to address a variety of scenarios in the Gulf of Mexico
- New specially designed equipment constructed, tested and available for rapid response
- Can operate in deepwater depths up to 10,000 feet
- Adds containment capability of 100,000 barrels per day (4.2 million gallons per day), exceeding size and scope of the Gulf spill

## **Initial investment \$1 billion in specially designed equipment**

- System can be expanded and adapted for new technologies
- Additional costs for operation, maintenance and contracts for existing equipment / vessels



## Fully Integrated System Constructed and Tested in Advance

This flexible and adaptable system includes subsea containment equipment connected by risers to vessels that will safely capture, store and offload the oil

# Containing Flow through Connection to Wellbore

## Selected Examples:

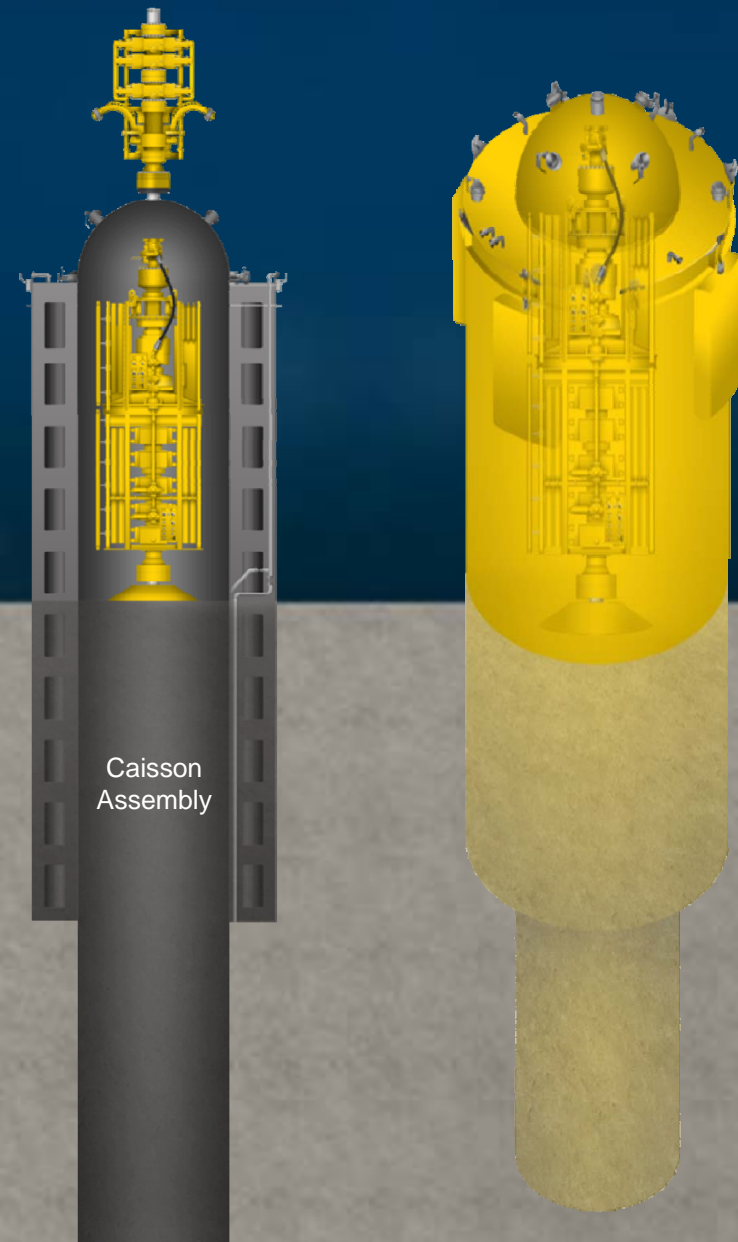
*Assembly attached to undamaged mandrel profile at wellhead or BOP*



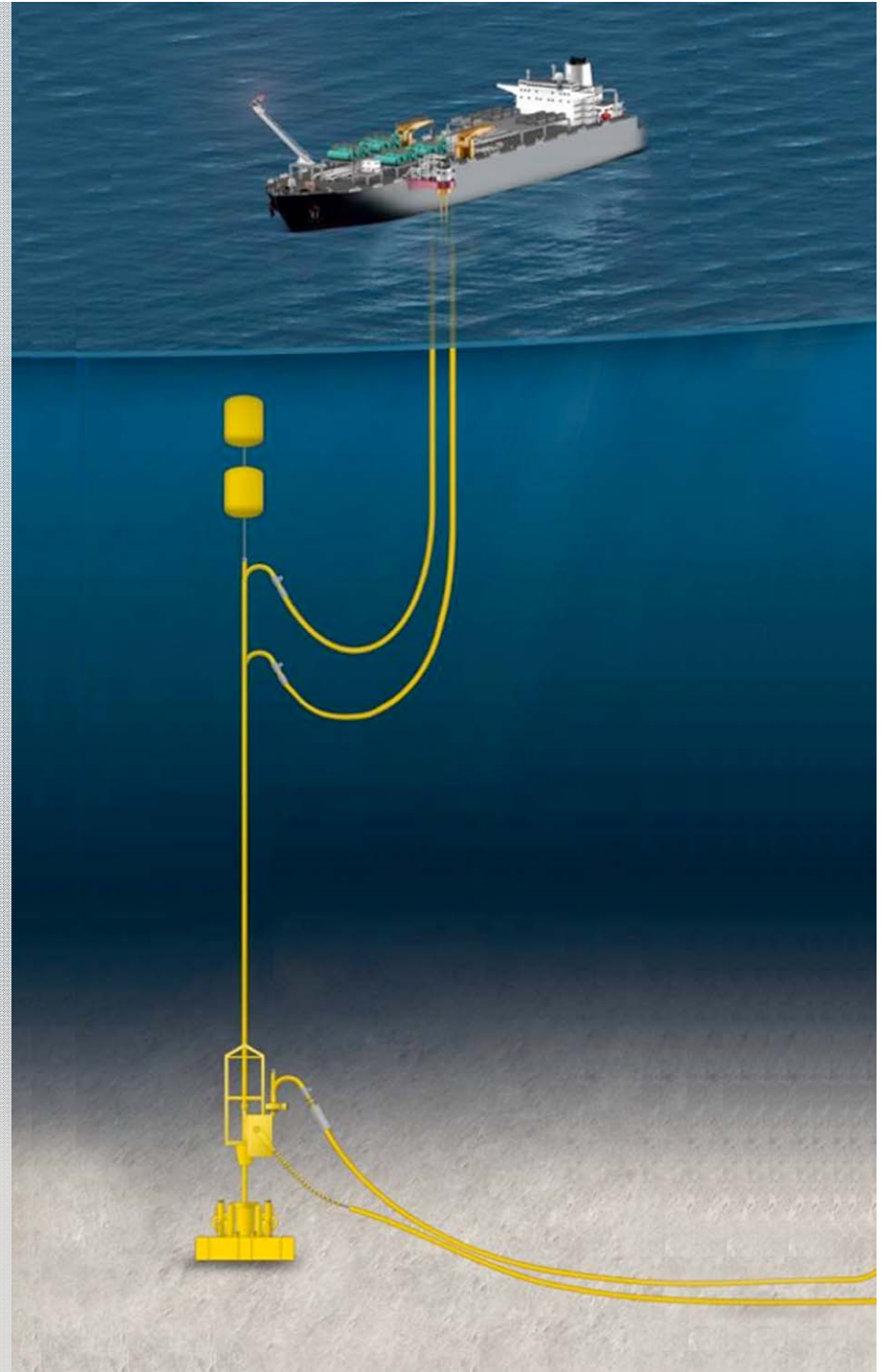
*Assembly attached to damaged riser*



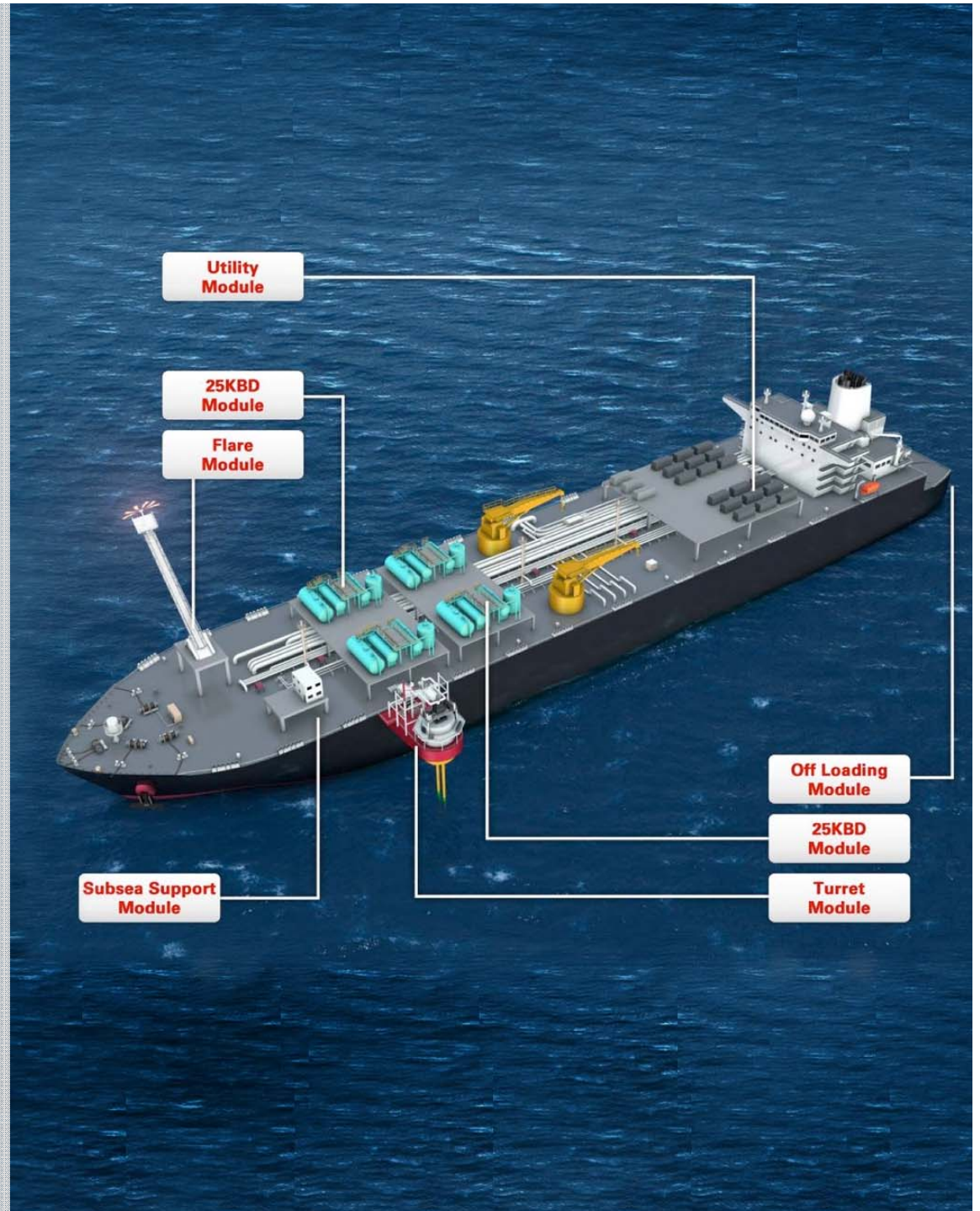
# Containing Flow through Connection to Sea Floor



Riser System  
Provides  
Maximum  
Flexibility



# Modular Equipment Allows Rapid Capacity Expansion





# System Significantly Enhances Current Gulf Response Capabilities

## **Improves safety and environmental protection**

- Potential to shut-in well or fully contain oil flow and operate until the well is under control
- Enhances safe operations by reducing congestion (e.g. fewer vessels, risers / flowlines)

## **Pre-designed, constructed and maintained in the Gulf**

- Utilizes existing technology and proven components specifically configured for well containment
- Capable of a rapid response; begin mobilization to the field within 24 hours and fully operational within days to weeks
- System components will be fully tested and maintained in a state of continuous readiness

## **Designed to be flexible and adaptable for multiple potential future scenarios**

- New equipment will connect to well or sea floor and is responsive to a multitude of scenarios in the Gulf of Mexico
- Will operate in a wide range of depths, weather conditions and oil flow rates
- Scalable to allow for expansion

# System Capabilities in Place as Early as Six Months

**Industry will continue its focus on prevention, while developing new response capabilities**

## **Over the first six months:**

- Project organization, led by ExxonMobil, to secure existing capture equipment and vessels and to begin construction of new system
- Establish a non-profit organization, the Marine Well Containment Company (MWCC), to operate and maintain the system

## **Over the first 18 months:**

- Utilize existing vessel fleet and capture equipment until new components added
- Complete construction of new system components
- Test new equipment as it becomes available

## **Long term:**

- Update system capabilities as deepwater technology evolves

# Project Progress

## **Established project organization**

- Key project leadership positions staffed
- Project team of 100 and staffed from each of the four Sponsor companies

## **Engineering and design work on new system is underway**

- Completed conceptual engineering
- Identified prospective contractors for subsea, topsides and marine work scopes
- Commenced discussions with ship owners for permanent conversion of tankers to modular capture vessels
- Initiated award of engineering contracts

## **Designed to be flexible and adaptable for multiple potential future scenarios**

- Executed agreement with BP for assessing applicable pieces of existing equipment
- Procuring other available vessels and equipment to increase capture capability
- Building on lessons learned

## **Engaging with government agencies to review system and provide updates**

# MWCC Membership Open to Companies Operating in U.S. GOM

## **Marine Well Containment Company (MWCC), a non-profit organization, will:**

- Provide fully trained crews to operate equipment
- Ensure the equipment is operational and ready for rapid response
- Update system capabilities as deepwater technology evolves

## **MWCC structure**

- Participation open to all companies that operate in U.S. GOM blocks
- Members responsible for pro rata share of development and operating costs
- Full time professional management under direction of member board

## **MWCC equipment/services accessible to Members and Non-Members**

- Standard service contracts
- Member fees will reflect user contribution to system development
- Separate fee structure for Non-Members based on GOM drilling activity

## **Details on MWCC Agreements will be available in a month**

- Information sessions with operators in U.S. GOM – Sep. 14 and Oct. 14

# Marine Well Containment System for Industry Use

**We are committed to develop, build and test this rapid response system that will be able to capture and contain oil from a potential underwater blowout in the Gulf**

**This new system will significantly exceed current Gulf response capabilities**

**The Marine Well Containment Company will operate the system and make it available to oil and gas operators in the U.S. GOM**

**Industry's goal is that this system is never used**