

# DWH Oil Spill Impacts on Marine Fisheries

*Joe Jewell – MDMR Office of Marine Fisheries Deputy Director*



Shrimp and Crab



Finfish



Shellfish



Seafood Technology

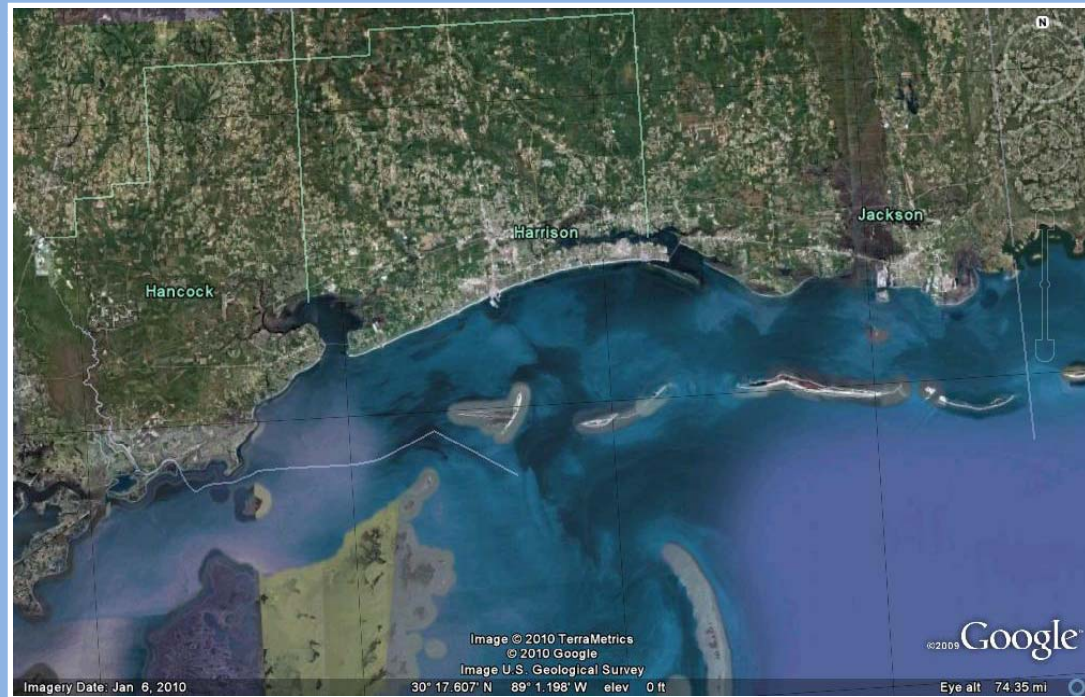


Artificial Reef



Managing Your Marine Resources Today for a Sound Tomorrow

Illustrations courtesy of Joe Jewell ©



Shrimp and Crab



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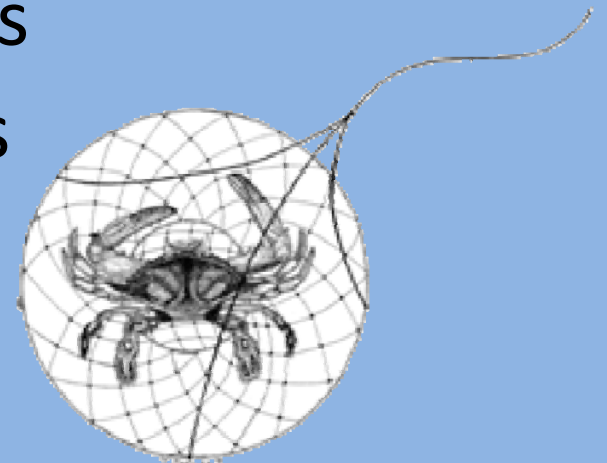


Managing Your Marine Resources Today for a Sound Tomorrow

Illustrations courtesy of Joe Jewell ©

# *Impacts to Marine Fisheries*

- Area Closures/Opening
  - Recreational Impacts
  - Commercial Impacts
- Seafood Safety Issues
  - Perception
  - Chemical Analysis
  - Public Outreach/Education
- Potential Long term Impacts



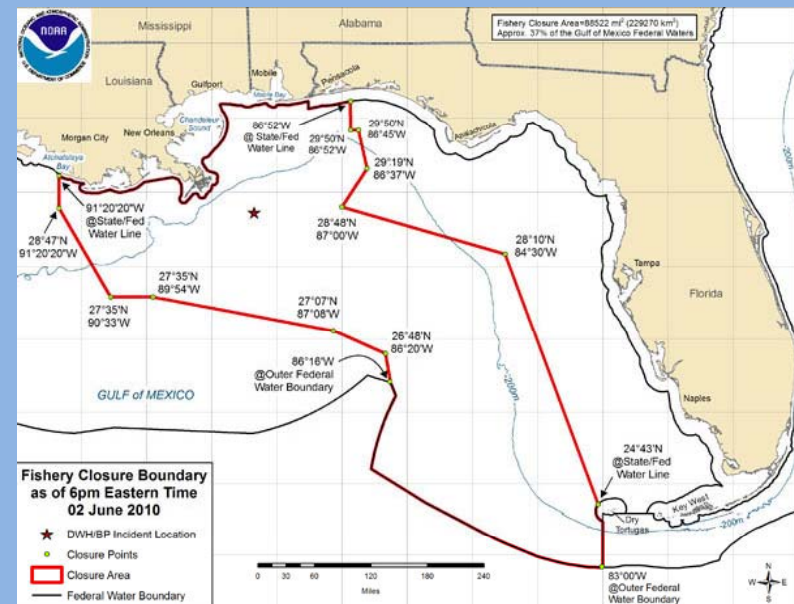


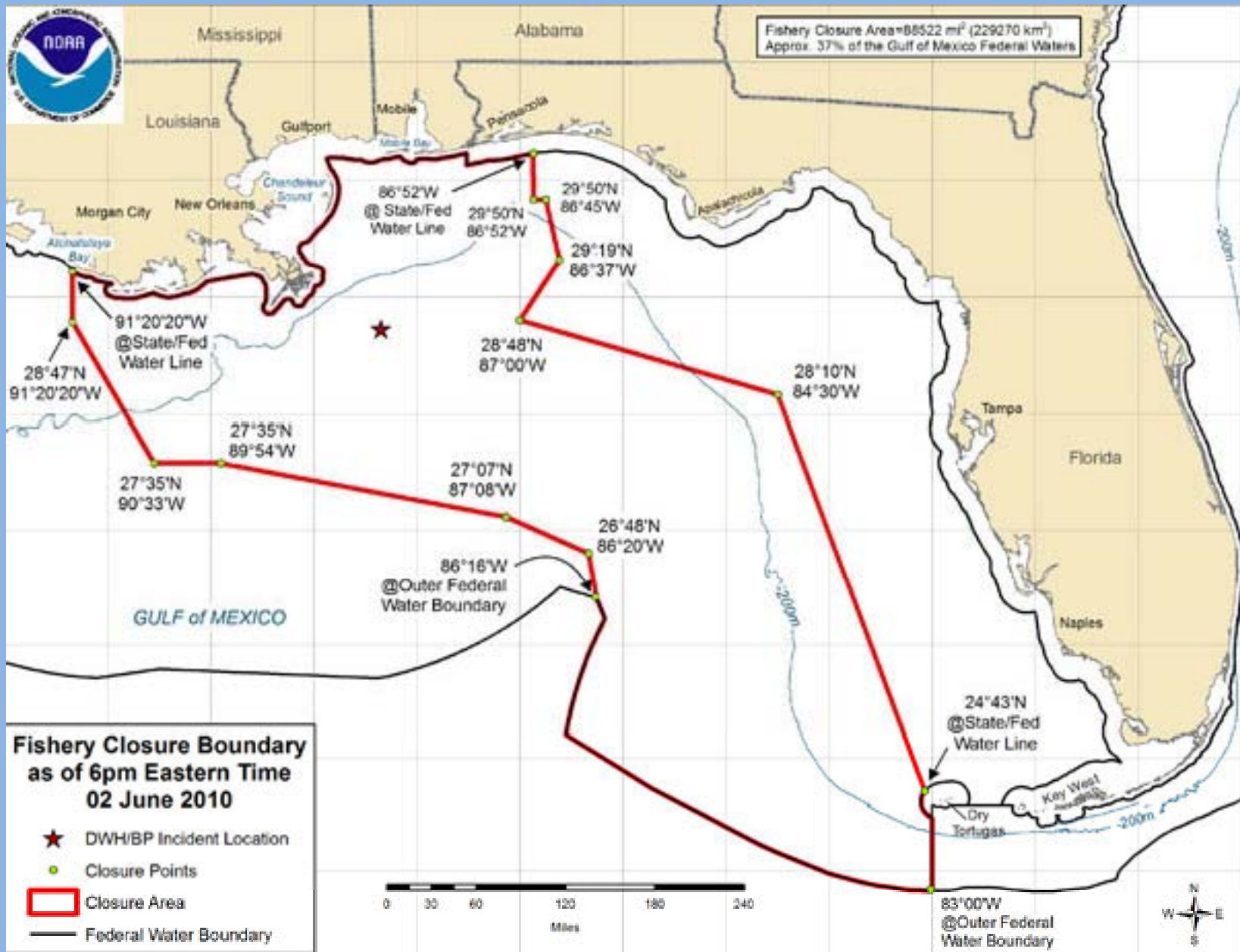
## *Time Line of Major Events*

- April 20, 2010 BP DWH Well failure – 11 Deaths and 17 Injuries
- **June 1, 2010 First MS Waters Close**
- **July 1, 2010 All MS Waters Close** (except 3 bay areas)
- **July 16, 2010** BP announces halt to flow
- **July 30, 2010 MS Waters N of Barrier Islands Open**
- August 5, 2010 BP granted permission to begins pumping cement into DWH Well (Top Kill).
- **August 6, 2010 All MS Waters Again Open**
- September 19, 2010 BP Permanently “kills” the DWH Well (Bottom Kill)

# Area Closures – Federal Waters

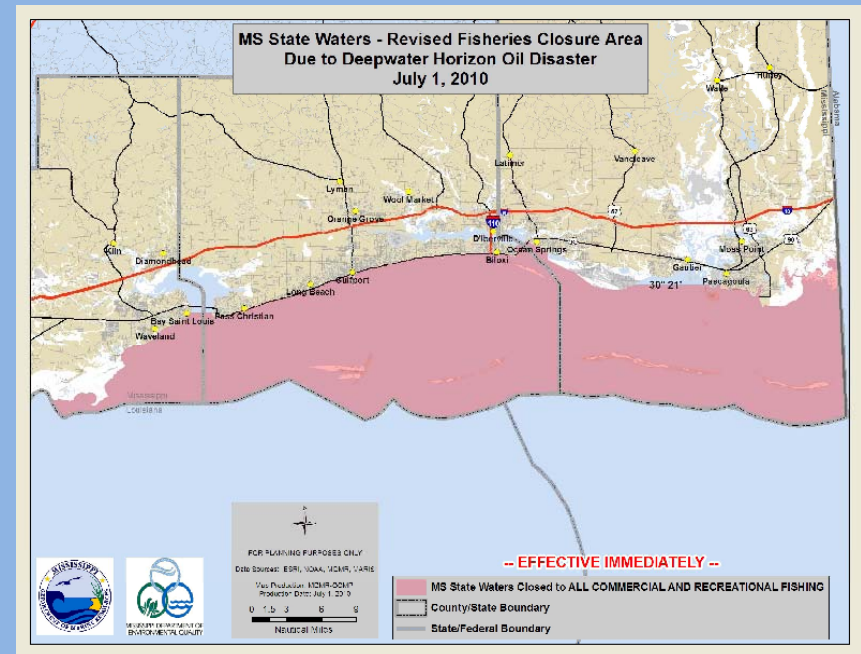
- Federal – Large sections of Gulf of Mexico closed starting immediately after the oil spill, up to 36%. Commercial/recreational fishermen unable to fish.
- Public Perception Issue





# Area Closures – MS State waters

- State – Entire MS Sound Closed to both Commercial and Recreational Activities. All three major bays remained opened (Bay St. Louis, Biloxi Bay and Pascagoula).
- Public Perception Issue



# MS State Waters - Revised Fisheries Closure Area Due to Deepwater Horizon Oil Disaster July 1, 2010



**-- EFFECTIVE IMMEDIATELY --**



FOR PLANNING PURPOSES ONLY

Data Sources: ESRI, NOAA, MDMR, VARIS

Map Production: MDMR-DCMP  
Production Date: July 1, 2010

0 1.5 3 6 9  
Nautical Miles

- MS State Waters Closed to ALL COMMERCIAL AND RECREATIONAL FISHING
- County/State Boundary
- State/Federal Boundary

## *MS Area Closures*

- MS waters start closing on June 1 and complete closing on July 1, 2010 – for a total closure of 59 days. Affects Shrimp Season
- Three main bay areas remained opened during this time – Bay Saint Louis, Biloxi Bay and Pascagoula Bay.
- Closures were precautionary in response to weathered/degraded oil entering the MS Sound
- Perception that seafood unsafe



# *Area Openings*

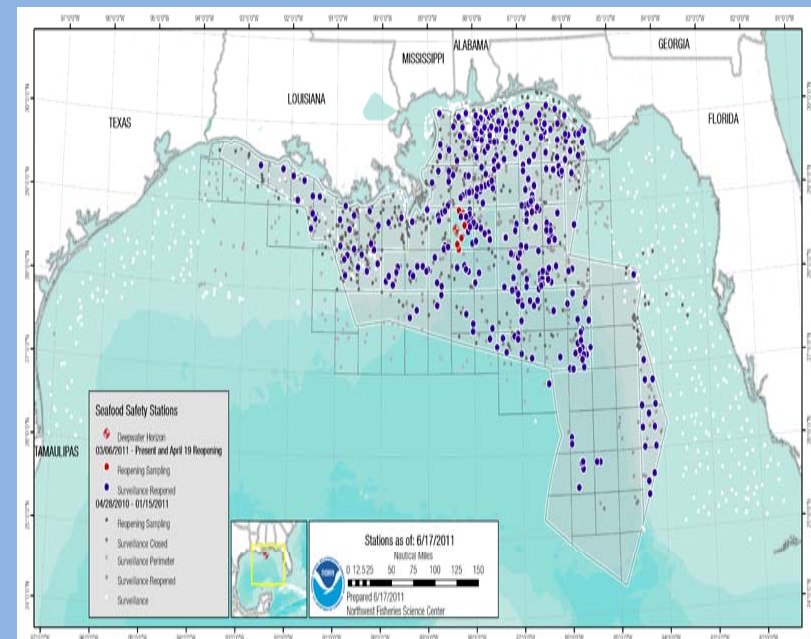
## *Laboratories Used to Analyze Tissue Samples:*

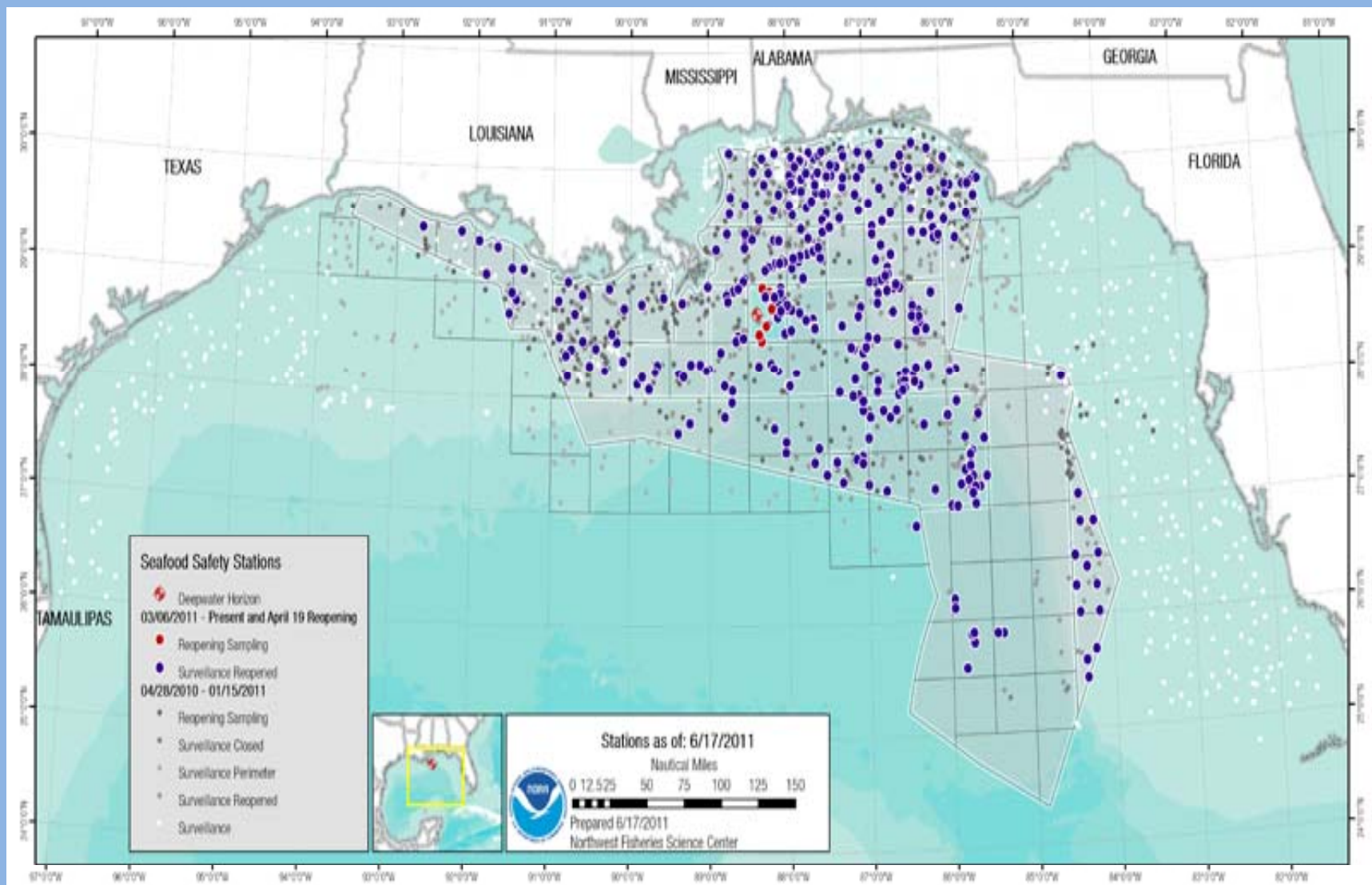


- **NOAA Pascagoula Laboratory (reopening samples)**
- **Mississippi Chemical Laboratory (seafood safety samples)**

# Area Openings – Federal

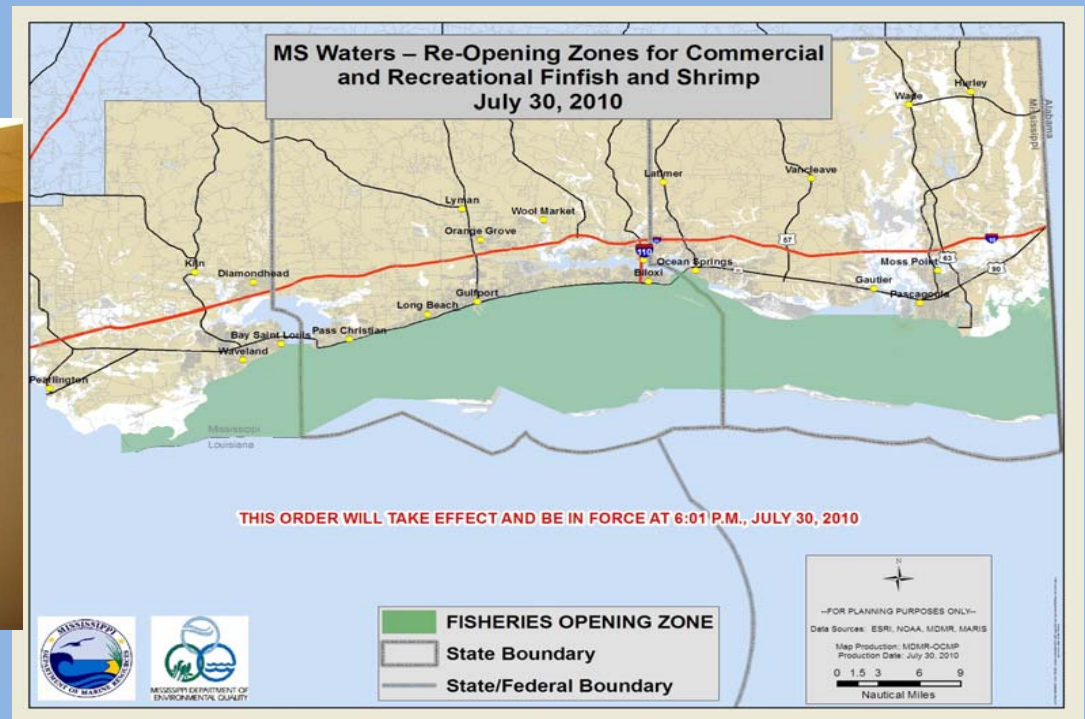
- Entire Gulf Opened back on ~April 19, 2011.
- Approximately 12,000 Samples were analyzed in support of this effort.
- None of these sample exceeded the FDA established limits





# Area Openings – MS State Waters

- All State Waters Opened back on August 6, 2010.
- Approximately 70 Samples were analyzed in support of this effort.
- None of these sample exceeded the FDA established limits.



**MS Waters – Re-Opening Zones for Commercial and Recreational Finfish and Shrimp  
July 30, 2010**



**THIS ORDER WILL TAKE EFFECT AND BE IN FORCE AT 6:01 P.M., JULY 30, 2010**



- FISHERIES
- State Bound
- State/Fede

**MS State Waters - Re-opening Zone  
Opening for Shrimp and Finfish Only  
August 6, 2010**

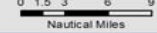


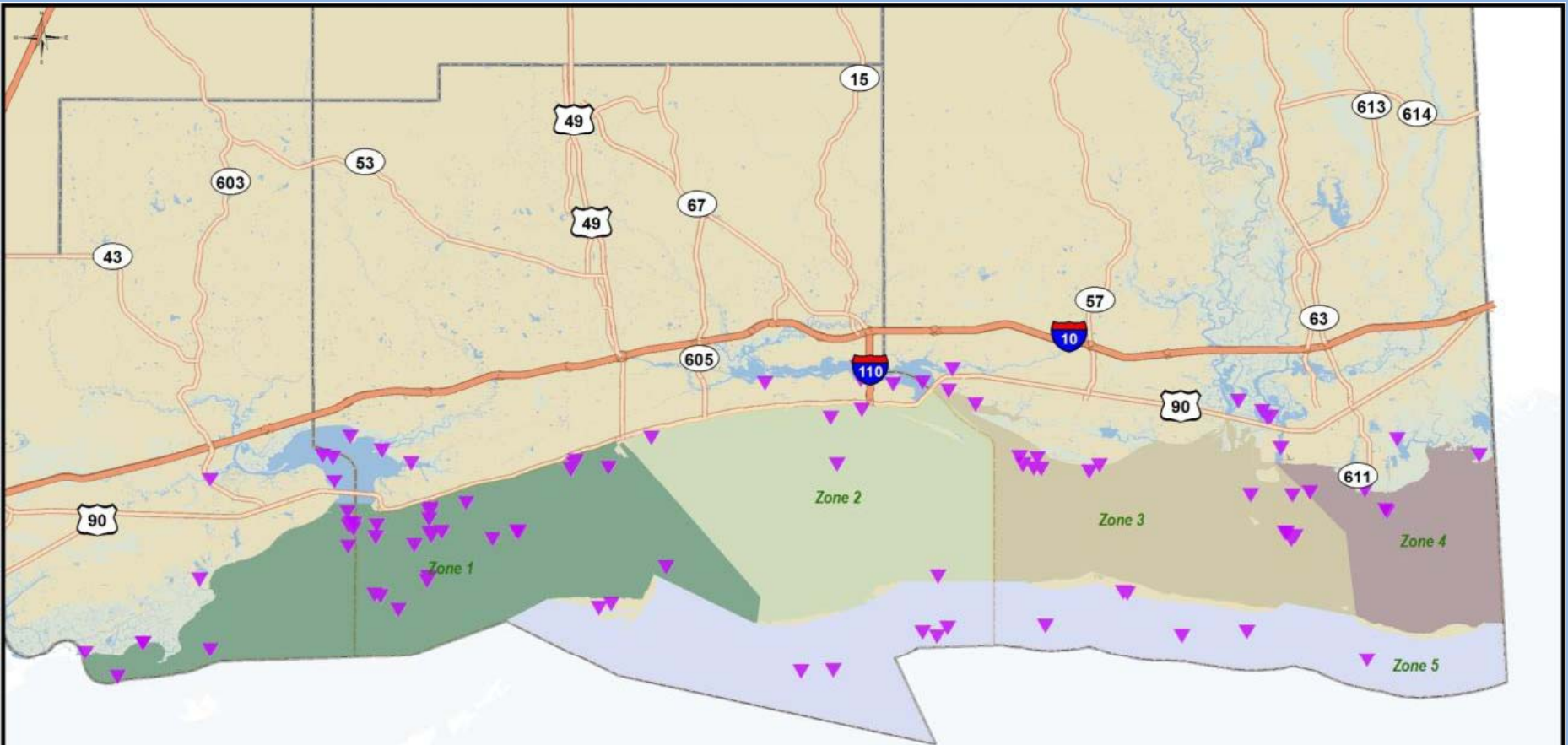
**Fisheries Opening Zone  
Shrimp and Finfish Only**

- Islands South to State-Fed Boundary
- State/Federal Boundary

—FOR PLANNING PURPOSES ONLY—  
Data Sources: ESRI, NOAA, MDMR, MARIS

Map Production: MDMR-DCMP  
Production Date: August 5, 2010





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 Map Projection: WGS1984  
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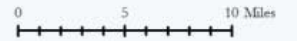


**MDEQ**

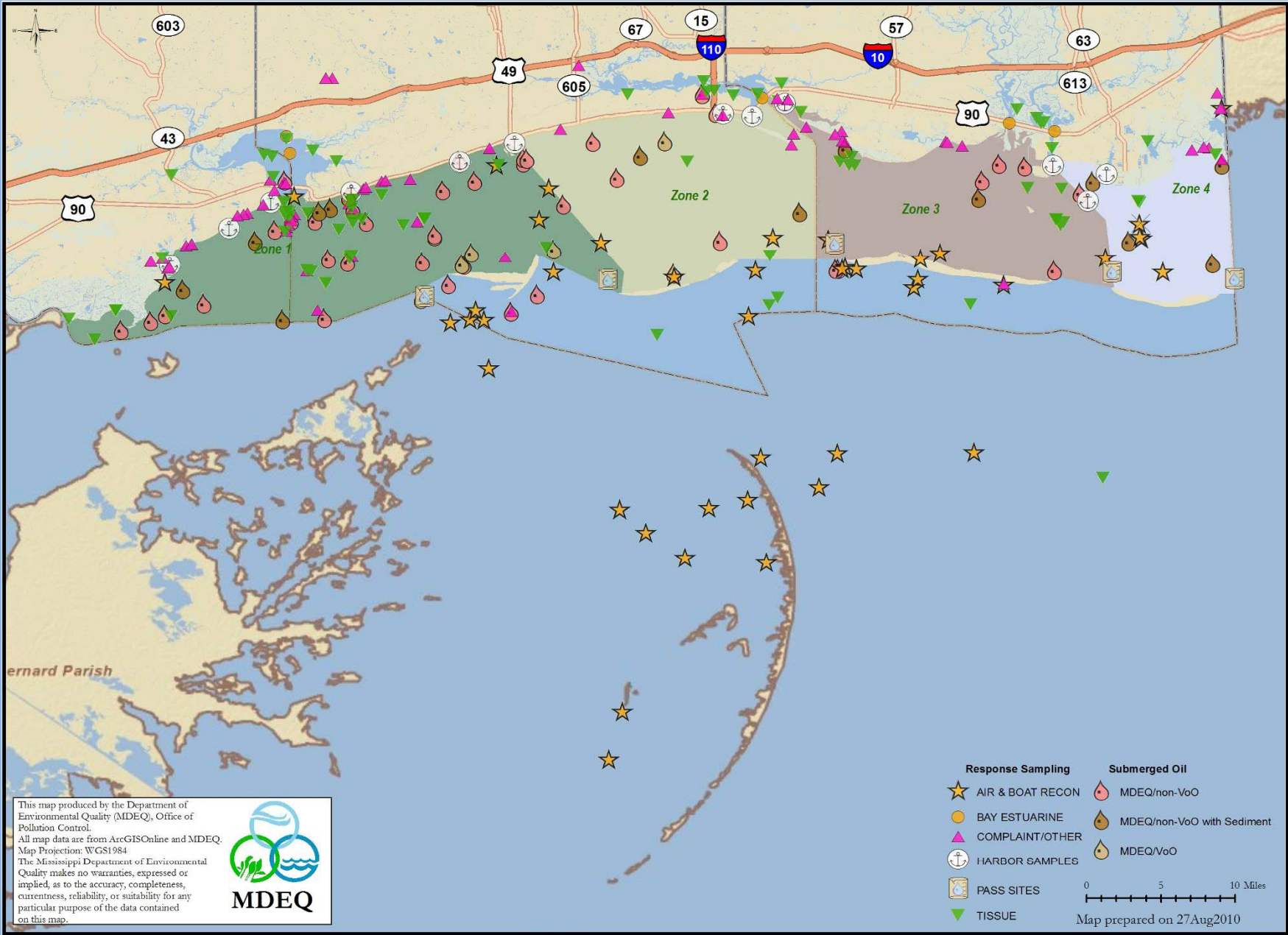


**MISSISSIPPI  
 DEPARTMENT OF MARINE RESOURCES  
 MDMR**

▼ Tissue Sampling Sites



Map prepared on 27Aug2010



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## *MS Seafood Safety Samples*

*Started early May 2010...Ongoing effort*

- Total of 441 Samples Collected
- 13 Samples Results are Pending
- 428 are all below established FDA levels of concerns (results at: [www.dmr.ms.gov](http://www.dmr.ms.gov))

*Samples Collected – includes public input, black gill crabs, black mullet, oysters, red drum...*

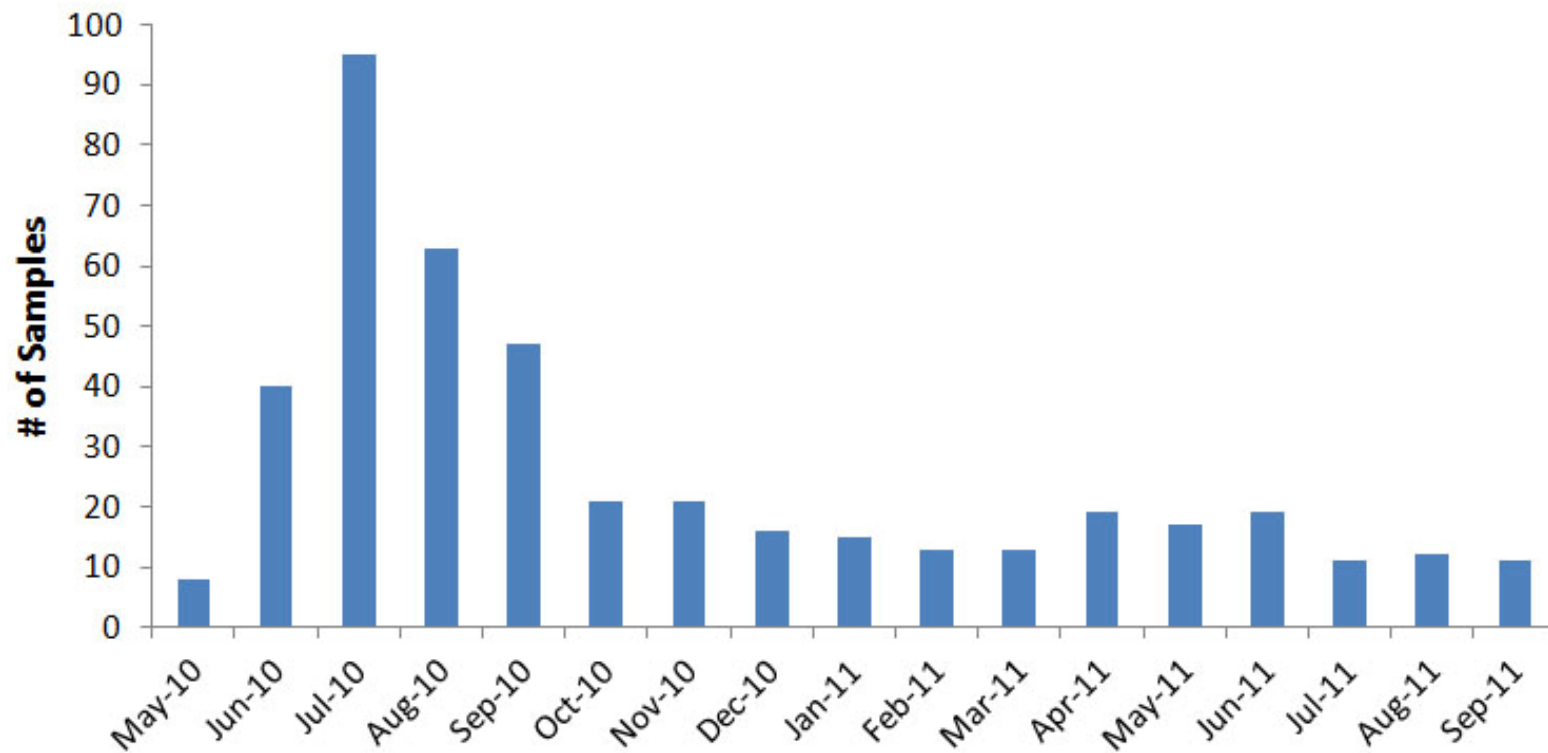
- Oysters = 87
- Crabs = 79
- Fish = 172
- Shrimp = 103
- TOTAL = 441



*Minimum of 100 grams per sample*

- ***Oysters*** – one species, collected from all eight shellfish area classification zones.
- ***Blue Crabs*** – one species, collected from all marine waters (bays, estuaries, MS Sound, inshore, near shore and offshore Barrier Islands).
- ***Shrimp*** – three main species (Brown, White and Pink). Two Royal Red shrimp included.
- ***Fish*** – 20 different species collected, collected from all marine waters (bays, estuaries, MS Sound, inshore, near shore and offshore Barrier Islands), top – middle – and bottom dwellers.

### MDMR Seafood Samples Collected Through Sept 2011



## *Red Snapper Monitoring Program*

### **Assess Red Snapper Health – Related Fish**

- 954 Caught and examined – 5 With Lesions
  - 3 Red Snapper, 1 Sheepshead, 1 Harvest Fish, had wound related lesions; determined not linked to DWH BP oil spill
- 4,462 additional fish had external examinations under this program
  - 10/1000 croakers fin tail lesions, 1/120 gag grouper lesion; determined not linked to DWH BP oil spill



## *Seafood Safety Efforts*

1. Flight Inspections
2. Water Sampling
3. Precautionary Fishery Closures
4. Fisheries Reopening Protocols
5. Seafood Testing
6. Dealers/Processors/Retailers Inspections.
7. Public Meetings
8. Press Releases and Interviews
9. Seafood Safety (Newsletter and Brochure)



## *Potential Long term Impacts*

- What might these be?
- Natural Resource Damage Assessment (NRDA)
  - 1. Preliminary Assessment
  - 2. Injury Assessment/Restoration Planning
  - 3. Restoration Implementation

