

 **U.S. ARMY**

US Army Corps of Engineers 

Deepwater Horizon Impacts to Gulf Coast Dredging Operations

Jeff Corbino
USACE – New Orleans District

*Background image NASA Aeronet – May 24, 2010

Building Strong

1

 **U.S. ARMY**

US Army Corps of Engineers 

TOPICS

- Deepwater Horizon Oil Budget & Fate
- USACE Interest & Oil Monitoring Considerations
- Monitoring Overview & Preliminary Results
- Recommendations for FY11 Dredging Operations

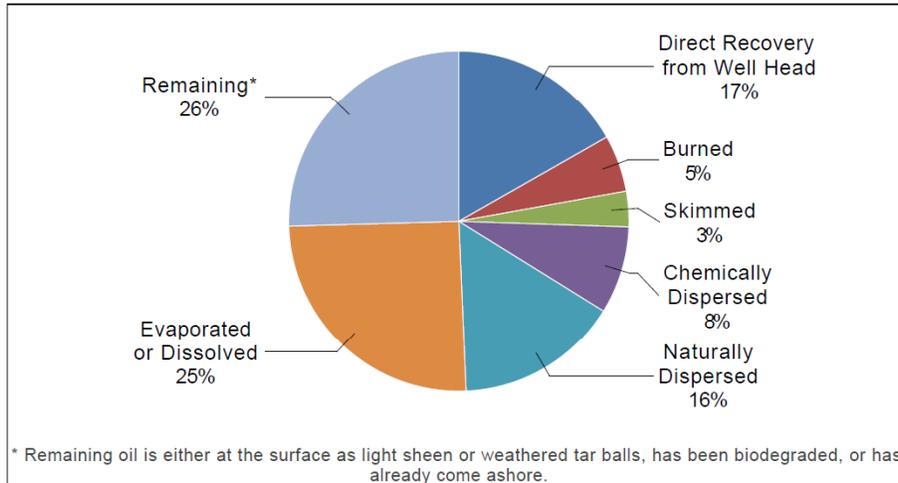
*Background photo Al Allen – May 10, 2010

Building Strong

2



USCG Oil Budget - October 12, 2010



Based on estimated release of 4.9 Million Barrels between April 20 and July 15, 2010



...as per that Remaining Oil Dredged Material Island just west of South Pass



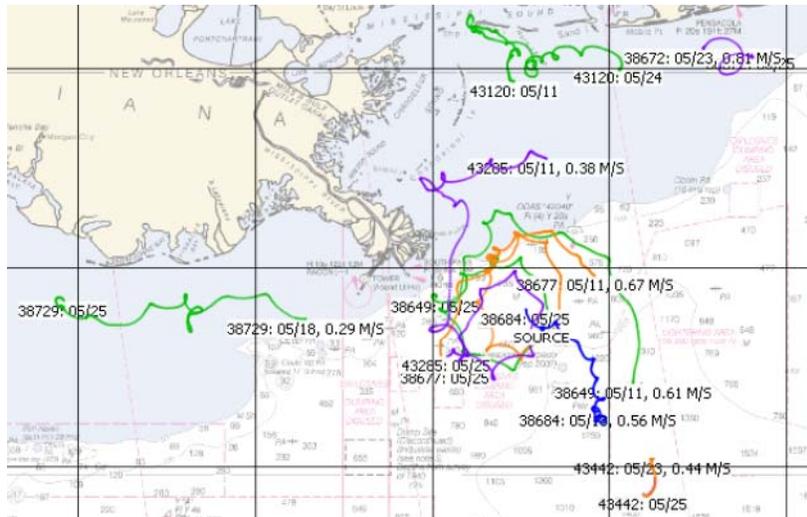
Asphalt - Like Tar Balls

Degraded Oil Buried & Mixed with Sand

*CEMVN - October 26, 2010



How do you Track Oil Movement?

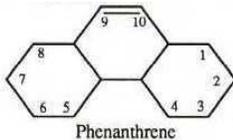
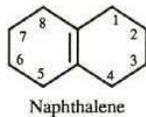
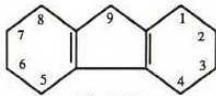


*USCG Drifters - May 25, 2010

Building Strong

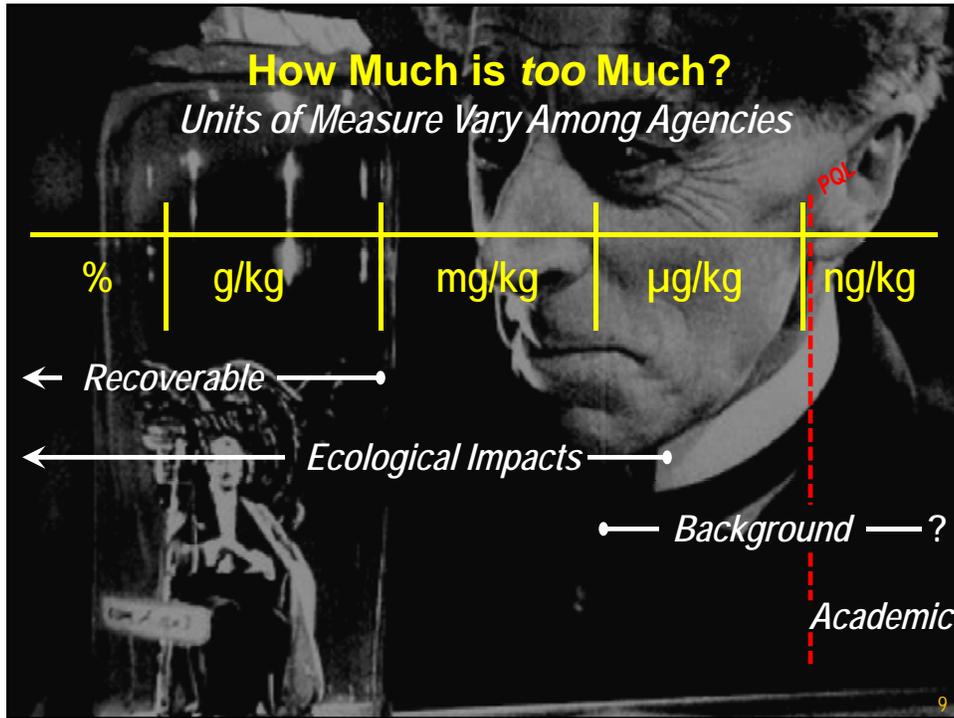


What Contaminants are Indicators of Oil Pollution? Polycyclic Aromatic Hydrocarbons (PAH)



*Photo By 18 Wheel Beauties

Building Strong

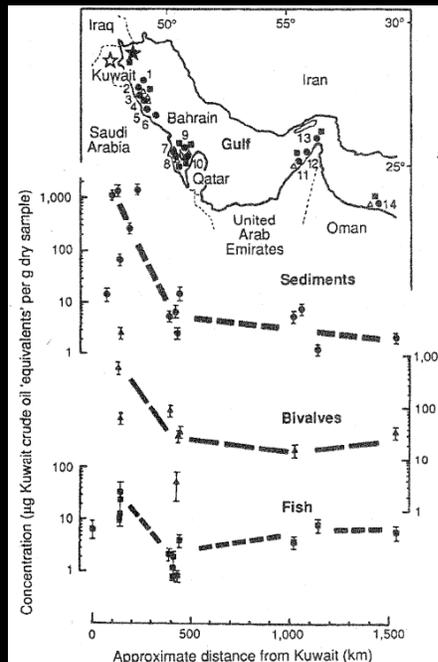


Any Past Spills Similar to DWH?

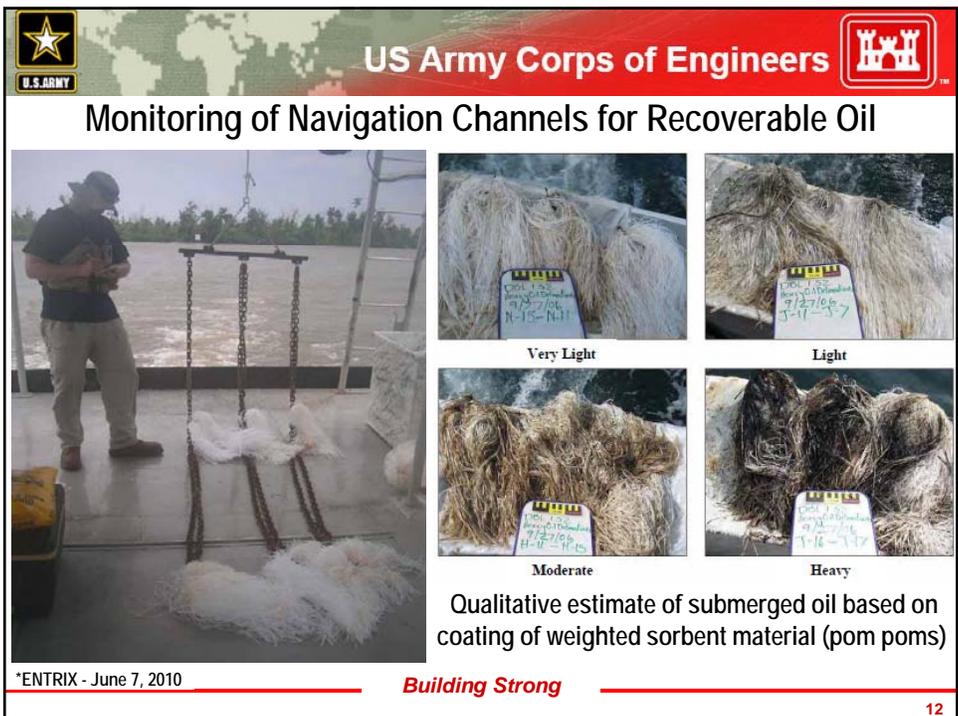
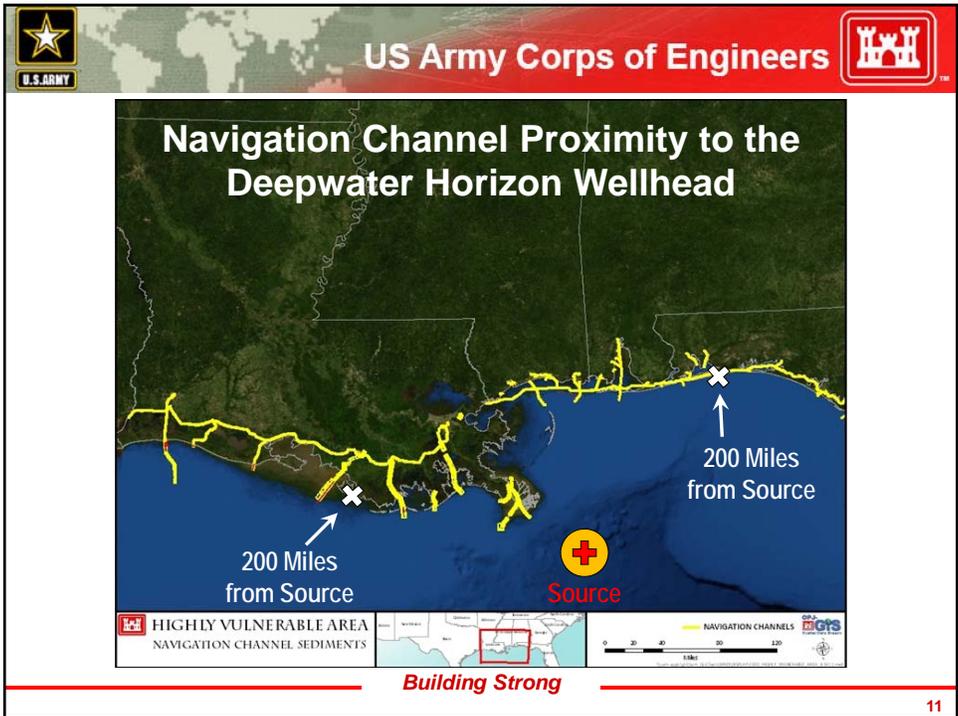
- o ~ 4 Million Barrels Released into Arabian Gulf;
- o ~ 500 Million Barrels Ignited by Retreating Iraqi Army



*Associated Press – March 2, 1991



*Readman et al. – Nature Publishing Group 1992





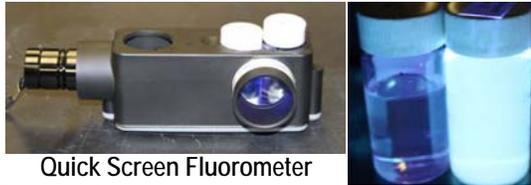
Monitoring for Ecologically Significant Quantities of Oil



Quantitative estimate of petroleum products in dredged material



Portable GC-MS

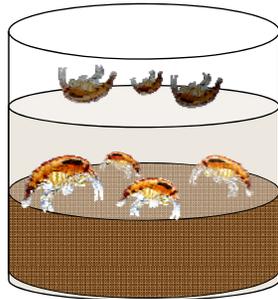


Quick Screen Fluorometer

Building Strong



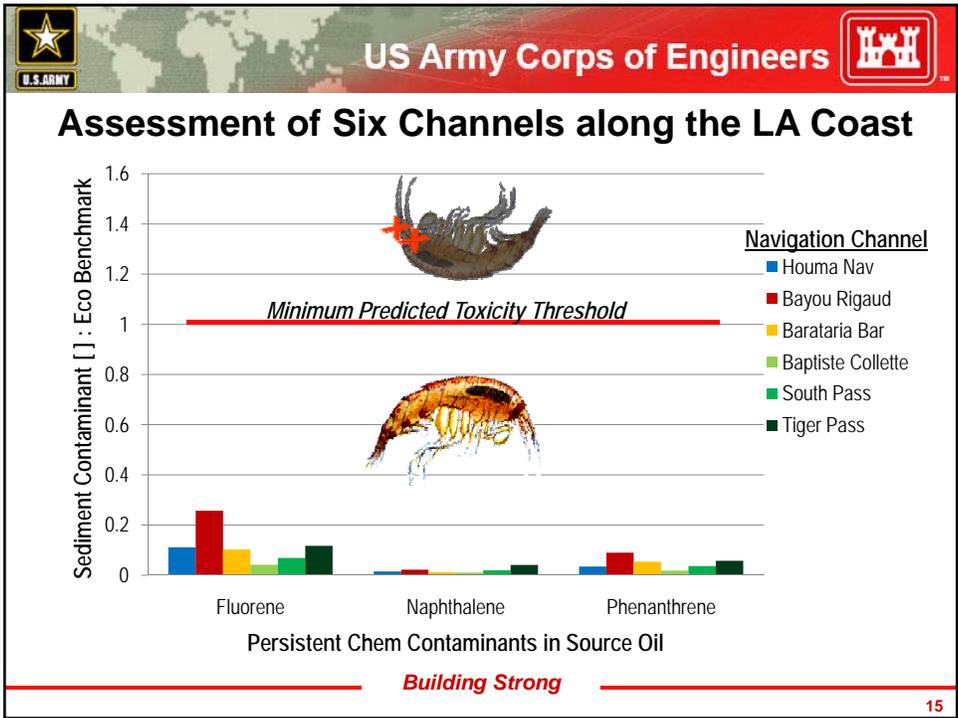
Dredged Material Assessments Prior to FY11 Channel Maintenance



- q 23 Gulf Projects Identified for Re-Evaluation
- q Determine if Oil-Related Contaminants are Present
- q Conduct Biological Tests if Contaminants Elevated



Building Strong



- U.S. ARMY US Army Corps of Engineers
- ### What are our Chances to Strike Oil?
- No Direct Impacts to Dredging Ops During Spill
 - Indirect Impacts to Permitting being Addressed
 - No Evidence of Oil in Shoal Material
 - Dredged Material Screening Kits Available
 - Residual Oil Moving within Sub-Tidal Zone
 - May Require Flexibility in Disposal Plans
- Building Strong*
- 16



US Army Corps of Engineers



Questions?



*Background image NASA Aeronet - May 24, 2010 *Building Strong*