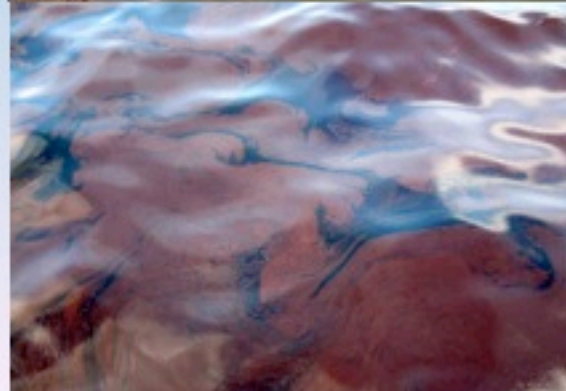


Deepwater Horizon (DWH) Oil Blowout

Overview: Woods Hole Oceanographic Response

<http://www.whoi.edu/dwhresponse/>





- No two oil events are the same
- DWH challenges: deep water; continuous flow; environmental risk undetermined
- Ocean covers 70% of planet; we have observed less than 5%
- Lack integrated coastal and off-shore ocean observing system: no integrated baseline data
- Difficult to work in deep ocean
- Impacts can last for decades
- Environmental risk vs. technical risk

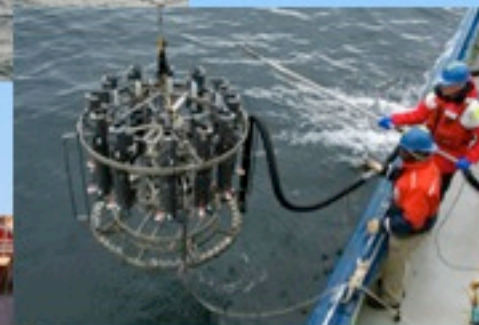


WHOI as a “National Asset”

- Scientific and engineering expertise
- Operational experience in deep water
- Oil spill experience
- Tools and processes
- Comprehensive/multidisciplinary/collaborative
- Science-based/balanced/impartial
- Project management

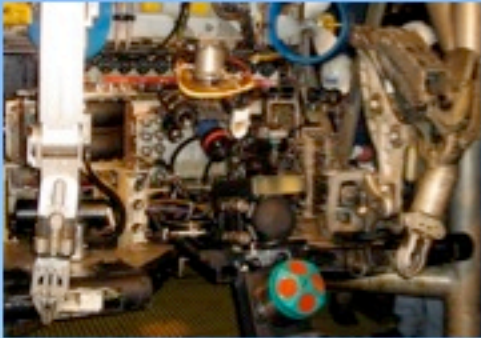
DWH Response

Tools



DWH Response

Current Projects



Measuring flow rate
Coast Guard



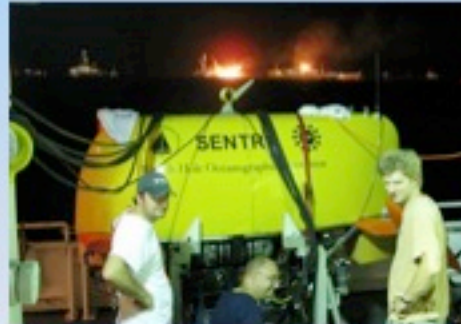
Mapping currents
NSF



Imaging oil droplets
NOAA (Sea Grant)



Sampling Gulf waters
NOAA



Mapping oil plume
NSF



Estimating impacts on
deep coral habitats
NSF

DWH Response

Congressional testimony:

U.S. House of Representatives Subcommittee
on Energy & Environment

May 19, 2010

June 10, 2010

U.S. House of Representatives Subcommittee
on Insular Affairs, Oceans, and Wildlife

June 15, 2010



Hearings and Meetings

Meetings:

White House Office of Science and
Technology Policy, Washington, D.C.

May 19, 2010

Ad Hoc Deep Ocean Group Meeting (with
Jim Cameron), Washington, D.C.

June 1, 2010

Consortium for Ocean Leadership Gulf Oil
Spill Scientific Symposium (at LSU)

Baton Rouge, LA

June 2-3, 2010

Schlumberger Ad Hoc Meeting

Boston, MA

June 18-19, 2010

Gulf Oil Research Program

- MOU between WHOI, LSU and LUMCON signed 6/12/2010
- Cooperative program for research related to the DWH spill
- Combines strengths of each institution
- Initial collaboration in response to BP RFP



Research Areas



- Circulation and physical dispersion, slick and plume distribution and fate
- Geochemistry and breakdown of oil in the ocean at all depths, coast, atmosphere
- Impacts on habitats and sea life: deep-sea, coastal and near shore, marshes, estuaries
- Toxicology studies of oil, byproducts, and dispersants
- Long-term monitoring and assessment
- Remediation methods
- Deep-sea technology and operations
- Economic effects, policy and regulation