

Action Learning Scenario – Leadership 201 – June 2010

USGS Response to the Deepwater Horizon Oil Spill

Champion: Sue Haseltine, Associate Director, Biology
Dave Bornholdt, Acting Program Coordinator for the Ecosystem Program

Issue: How should the expertise of the USGS be assembled to meet the growing science needs associated with the oil spill?

Background: On April 20, 2010 Deep Water Horizon, a Transocean deep sea drilling rig working for British Petroleum in the Gulf of Mexico caught fire, burned fiercely for 36 hours, and then sank in 5,000' of water. The flames from the rig fire were 200-300 feet high and visible from a distance of 35 miles when the fire was its height.

This accident is producing the largest oil slick in American history. Oil is estimated to be leaking out at 200,000 gallons per day. The environmental mess could be larger than the 1989 Exxon Valdez disaster, when an oil tanker spilled 11 million gallons off Alaska's shores. No effective means to contain the Deepwater Horizon oil slick in the Gulf of Mexico has yet been found. High winds have blown through this portion of the Gulf of Mexico on many days since the spill. Several foot high waves take apart the barriers built from inflatable booms. Likewise in a high wind environment burning is not an option, nor are skimmers that suck oil from the surface effective. Other chemicals that break up oil before it reaches the surface are being applied at heretofore untested depths. These winds will also drive oil slick into inlets and creeks when it reaches the coastline. The loss of wildlife, endangered species and otherwise, commercial fishing stocks etc., is incalculable and numbers in the millions of individual animals. This is the birthing season for ~5,000 dolphins that frequent this region of the Gulf of Mexico. For dozens of affected species that are rare and officially endangered, this area is one of their last possible breeding habitats.

Challenge Questions:

1. At what level should leadership for this effort be established?
2. What work will not be completed and how does this affect scientists, customers and partners?
3. How should the cross-bureau efforts be coordinated and who should lead the effort?
4. How should DOI coordinate with others parts of the Federal Government – e.g. Coast Guard, EPA, DOI lawyers?
5. How will communications with the affected States, press and television be coordinate?
6. Would it make sense to develop investigations in a stage approach (e.g. immediate response/short-/long-term approaches)?
7. How can critical resources be identified and are the resources the USGS might identify the same as our DOI resource management partners?

Resources:

www.deepwaterhorizonresponse.com

www.usgs.gov

Deepwater Horizon oil spill response (external website)