NOAA Scientists Putting Gulf Coast Oysters to the Test

NOAA Mussel Watch scientist brings up a trawl full of Gulf Coast oysters for contamination testing.

High resolution (Credit: NOAA NCCOS)

Will oil from the BP spill contaminate shellfish in affected areas of the Gulf of Mexico? NOAA researchers are fast at work trying to answer that very question.

Two teams of scientists from NOAA's **National Centers for Coastal Ocean Science** and **Southeast Fisheries Science Center** are collecting oysters and sediment from nearly 60 Gulf Coast shoreline sites stretching from the Texas/Louisiana border to southwestern Florida.

Working in tandem with colleagues from Louisiana State University and the Mote Marine Laboratory, researchers will be testing the samples for 120 chemical and microbial contaminants — including 60 oil-related compounds — to determine their baseline contamination.

Once oil reaches the shoreline, new samples will be collected and tested. By comparing these two sets of data, scientists can determine any pre-existing level and type of contamination, and identify any change in contamination that might be linked to the spill.

Exploring the Toxic Effects of Oil

NOAA's Dr. Terry McTigue, a Mussel Watch researcher, holds a sieve to retrieve burrowing animals from a sediment sample taken along the Gulf Coast.

High resolution (Credit: NOAA NCCOS)

Researchers also will look at the toxic effects that the oil may have on sediment-dwelling creatures, which play an important role in the food chain.

The chemical structure of oil-related compounds — known as polycyclic aromatic hydrocarbons (PAHs) — make it easier for scientists to differentiate between contamination related to the BP spill versus other sources, such as factory emissions or runoff.

PAHs come with a distinctive chemical "fingerprint" that distinguishes them from other contaminants. NOAA scientists and partners will test for the presence of PAHs in water samples taken at the selected Gulf shoreline sites.

About NOAA's National Centers for Coastal Ocean Science

For more than 25 years, NCCOS has been actively monitoring contamination in the Gulf through its **Mussel Watch program** — the longest running continuous contaminant monitoring program in U.S. coastal and Great Lakes waters. To learn more about NCCOS, please visit **NOAA's National Centers for Coastal Ocean Science** website.

Learn More About the Federal Response to the BP Oil Spill

- **NOAA's Office of Response and Restoration**
- **NOAA's Oil Spill Response Effort in the Gulf of Mexico**
- Ongoing timeline of the federal response to the BP oil spill can be found on the **White House Blog**