

Suisun Bay National Reserve Fleet Assessment Project

Update – JUNE 2008

N OAA's Office of Response and Restoration is investigating environmental contaminants in and around the National Reserve Fleet in Suisun Bay, California. More than 70 vessels make up the fleet, which is maintained by the United States Maritime Administration (MARAD) for national defense or emergency purposes. Potential environmental concerns include heavy metals and antifouling agents in paint that is peeling off of the vessels, as well as PCBs and other hazardous materials that may have been released. NOAA began work on this project in January. Since then, NOAA's team has assessed existing data from the area to determine data gaps, researched the history and environmental setting of the site, discussed the project with numerous stakeholders, conducted a site visit, and developed a final sampling and analysis plan. NOAA will collect sediment and bivalve tissue samples from the area later this summer. The following information is part of a continuing series of monthly project updates.

Recent Progress

NOAA held a web-assisted meeting with stakeholders on June 2nd to review the final sampling and analysis plan and highlight the changes made to accommodate stakeholder comments.

NOAA's technical team has been preparing for the field sampling effort that will take place in late June and July. Key tasks include:

- developing clear field procedures and a Health and Safety Plan;
- adjustments to the field sampling and laboratory equipment contracts to ensure sampling success;
- working with MARAD to finalize field logistics; and
- obtaining sampling equipment for field deployment.

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) collaborates with other agencies, industry, and citizens to protect and restore coastal and marine resources threatened or injured by oil spills, releases of hazardous substances, and vessel groundings.

In late June, NOAA team members deployed mesh bags of mussels in and around the Reserve Fleet based on sampling and analysis plan objectives. During deployment sample locations had to be adjusted slightly from the pro-



NOAA field boat coming on station for mussel deployment with MARAD Reserve Fleet in background.



Example of bivalve (*Mytilus* complex) that was deployed to measure contaminant uptake, both the dissected and whole body mussel are shown here.



Example of the mesh bags (above, right) used to deploy mussels. These bags were hung at locations of interest based on the sample and analysis plan.



U.S. MARAD and NOAA field staff preparing to deploy mussel bags from a Reserve Fleet vessel.

posed locations due to lower than expected salinity and the potential stress this would have on the transplanted mussels. These mussels will be left in place for approximately 2 months, and then sent to a laboratory, where the soft tissue will be analyzed for contaminants. This test will help determine whether contaminants present in Suisun Bay are being taken up by organisms that live and feed in the area. The mussels deployed by the NOAA team were collected from a reference site in Tomales Bay, California.

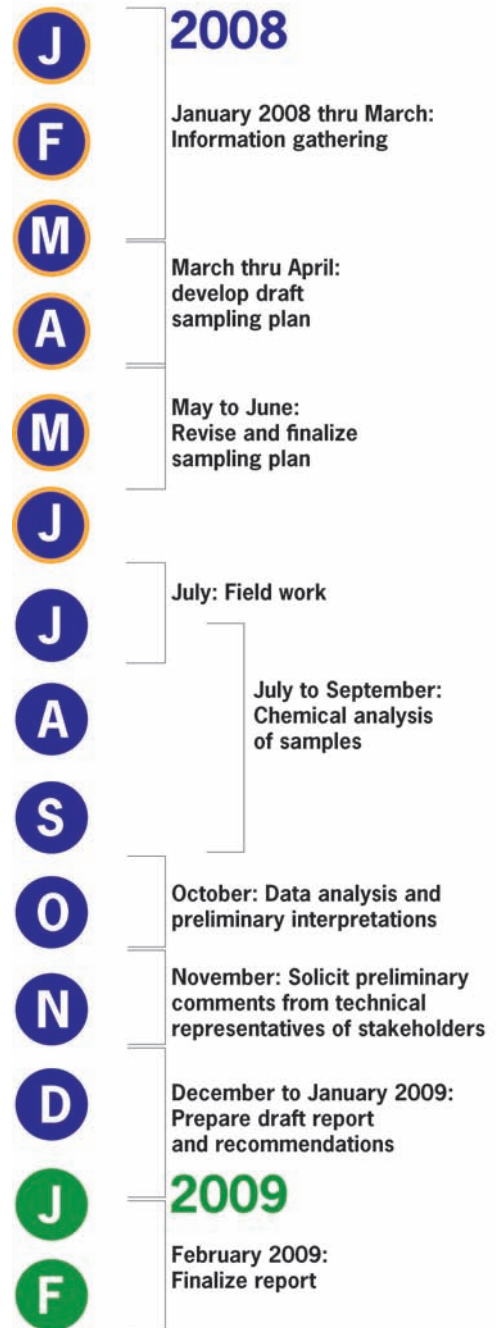
Next Steps

The majority of the field sampling work will take place in early July, when surface and subsurface sediment samples and resident bivalve tissues will be collected for chemical analysis. Sediment and bivalve samples will be sent to various laboratories for analysis and results are due in the fall.



This is an example of the placement of mussel bags between the Reserve Fleet ships. The white rope seen to the left between the two vessels is attached to several mesh mussel bags.

Suisun Bay Timeline



For More Information

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To learn more about this project and NOAA's program to protect and restore natural resources injured by releases of hazardous materials, visit our Web site:

<http://www.darrp.noaa.gov/>

