



## S.S. *Catala* shipwreck oil removal project Final update, September 2007

The wreck of the *SS Catala* is completely removed and the beach at Damon Point State Park near Ocean Shores, Washington is on its way to a full restoration thanks to a 17-month multi-agency effort to protect the sensitive area from the threat of a major oil spill.

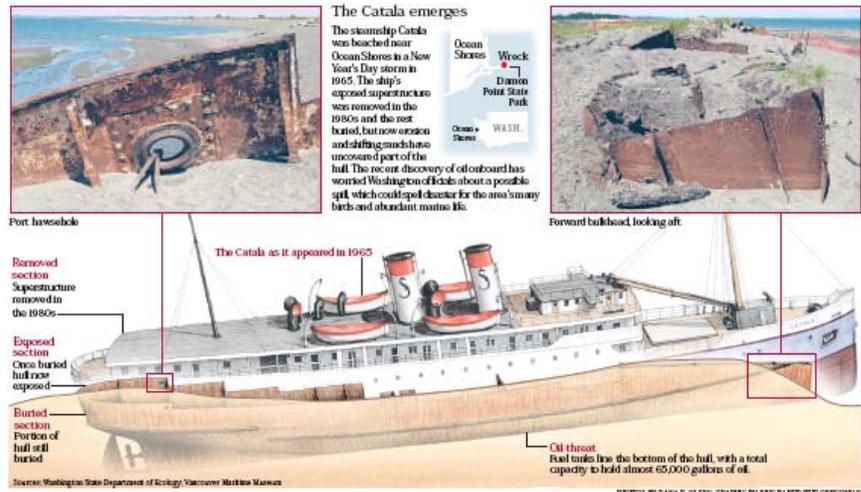
The *Catala*, part of Northwest lore, ran aground during a storm on January 1, 1965. Years later, after the upper portions of the ship were cut off, the hull was buried in the sand.

Time, winds and tides shifted the beach, once again exposing the rusty remains. Then, in April 2006, a beachcomber poked a stick into an opening on the hull's side and discovered an oily, thick sludge inside.

The state Department of Ecology (Ecology) and four other natural resource agencies quickly teamed up to plan the cleanup of oil from the *Catala* and prevent the threat of an oil spill from her unstable tanks.

### Protecting Natural Resources

Damon Point provides important habitat for a range of wildlife, including Dungeness crab, harbor seals, salmon, trout and herring. Some nesting birds, such as the western snowy plovers and streaked horned larks, are threatened or candidates for the federal Endangered Species Act. Gray whales migrate just offshore and feed in the bay. The agencies knew the risk of an oil spill would require a well-crafted response to protect the public, the workers, and the environment.



Graphic courtesy of the Oregonian

### Accomplishments in 2006 and 2007

By the end of August 2007, all of the oil, asbestos-containing materials, oil-contaminated sand, and the remaining hull of the *Catala* had been completely removed from the beach and sent offsite for recycling, treatment or disposal. The following is a list of major accomplishments by the agencies and contractors involved:

Heavy fuel oil removed and recycled	34,500 gallons
Oily water collected and transported offsite for treatment	360,000 gallons

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Visit the *Catala* Web site: <http://www.ecy.wa.gov/programs/spills/incidents/catala/cata.htm>

Oil-contaminated sand removed and disposed	2,585 tons
Asbestos-containing materials removed and disposed	33 cubic yards
Scrap steel removed and sent for recycling	345 tons
Worker hours with no reportable injuries	36,000 hours
Amount of oil spilled as a result of site operations	0
Total project cost for removing oil and restoring beach (Ecology)	\$6.5 million
Cost of removing ship's hull (Natural Resources)	\$0.5 million

## Successful Teamwork

The successful removal of the oil from the *Catala* and protection of the natural and man-made resources surrounding Damon Point and Grays Harbor resulted from excellent teamwork by local, state and federal agencies and contractors. State agencies included Ecology, Natural Resources, Fish and Wildlife, and Parks and Recreation. Local agencies included the city of Ocean Shores and Grays Harbor County. Federal agencies included U.S. Fish and Wildlife and the U.S. Army Corps of Engineers. The project also coordinated with the U.S. Coast Guard.

Contractors working on the *Catala* in 2006 and 2007 included Global Diving and Salvage, Philip Services Corporation, NRC Environmental Services, Manson Construction, Walker Specialties, and numerous subcontractors.

## Removing the *Catala's* sticky oil

There were many challenges to reaching the oil in the tanks of the *Catala*. The ship lay at an angle from bow to stern and tilted at almost 20 degrees from port side to starboard side. While the bow was exposed by winter storms in 2006, the stern was buried nearly 20 feet below the surface. In addition, the back half of the 215-foot-long hull was covered by seawater. In order to get workers safely into the tanks at the bottom of the ship in this dynamic environment, a complicated plan was carried out.

The main features of the plan were to:

- Completely surround the ship with a sheet pile wall that was driven 35 feet below surface
- Remove sand on top of the hull by using an excavator and heavy-duty vacuum systems
- Monitor the movement of the hull carefully ... *it still wanted to float!*
- Cut openings in tank tops, starting with tanks located in the bow (with appropriate monitoring to ensure no fire or explosive hazard)
- Pump out oily water and liquid oil from tanks into vacuum trucks and temporary storage tanks
- Heat up thick oil with a hot water-circulating system so it could be pumped
- Send workers inside the tanks to scrape, steam clean, and wash down the remaining oil once tanks were pumped down as much as possible
- Starting with the bow and moving sequentially, cut off the tops of the tanks, place them on the intact portion of the hull, and clean off any remaining oil
- Cut the cleaned tanks from the hull and lift them out of the sheet pile cell to be cut into 5-foot by 5-foot sections for off-site recycling
- Sample the sand beneath the hull after it was completely removed to ensure the sand was clean (no remaining oil layers)



- Address a layer of oil discovered in the sand near the bow (the sand was excavated and further sampling confirmed that no contamination remained)
- Remove the sheet pile wall and arrange for the steel to be resold for another project
- Reshape the beach sand in the vicinity of the hull and work zone and replace drift logs
- Remove heavy equipment and vehicles from the site



The three photos above show the progression of the cleanup, from the initial stages in April 2006 and the end of the first work season in September 2006, through the final beach restoration in early August 2007.

## Funding

Ecology funded the cleanup using the state's Oil Spill Response Account, which comes from a tax on oil that passes through Washington marine terminals. The fund will only pay for cleaning up oil and contaminated sand and for ensuring the old hull is clean. Ecology will seek reimbursement from the federal government for part or all of the costs. The Legislature provided the Department of Natural Resources with funds to remove the hull.