

Foss Solves Sacramento River Riddle, Moving a Derelict Crane Barge 40 Miles Without Towing It



Dan Porter Photos

The deck of the submersible barge MZB287, with the Monarch on board, breaks the water as the pumps run full tilt.

Foss and National Response Corporation (NRC) joined forces in late February in an unusual and challenging salvage operation, using a submersible barge to lift and transport a derelict dredge that was threatening the environment in the Sacramento River Delta.

The 140-by-60-foot dredge *Monarch*, built in 1916 with riveted iron sides and a wooden bottom, had been abandoned by its elderly owner and sank at its mooring in Shag Slough, said Foss San Francisco Port Captain **Dan Porter**.

Last September, NRC (then Foss Environmental, before its acquisition by NRC) was called in by the Coast Guard when oil started spilling from the dredge's bilges and fuel tanks. Crews put pumps on the barge to keep it afloat, and they plugged the oil leaks.

Frank Igaz, a Bay Area salvage master, surveyed the dredge, and later worked with **Bob Ireland** of NRC and Porter to put together a salvage bid.

Their challenge was to move the dredge about 40 miles to a scrapping facility on Mare Island near San Francisco without towing it, because the Coast Guard was afraid the dredge would sink in the ship channel.

So the team came up with the idea to use a submersible barge, even though they didn't have one yet.

They solved that problem with the deck barge *MZB 287*, leased by Foss from Zidell Marine in Portland and used in last summer's Sakhalin Island project. The 286-by-78-foot deck barge was towed south from Seattle and refitted as a submersible for the job.

Captain **Dave McCloy** oversaw the modifications, including installation of pumps, standpipes that would allow air to re-enter the barge after it was ballasted down, and fittings to secure the dredge to the deck.

On February 24, the Foss tug *Twilight* pushed the CS Marine derrick barge *CSM Carquinez* and a flat barge from Mare Island to Shag Slough and



The boom of the old crane barge Monarch is inspected before the derelict is salvaged on the Sacramento River Delta.

alongside the *Monarch* to begin prep work, including picking the dredge bucket from the bottom of the slough.

Two days later, the *Arthur Foss* and *Edith Foss* brought the *MZB 287*, already heavily ballasted, to a location near Shag Slough, but with deeper water. The *Edith* then retrieved the old dredge and the derrick barge and brought them to the work site.

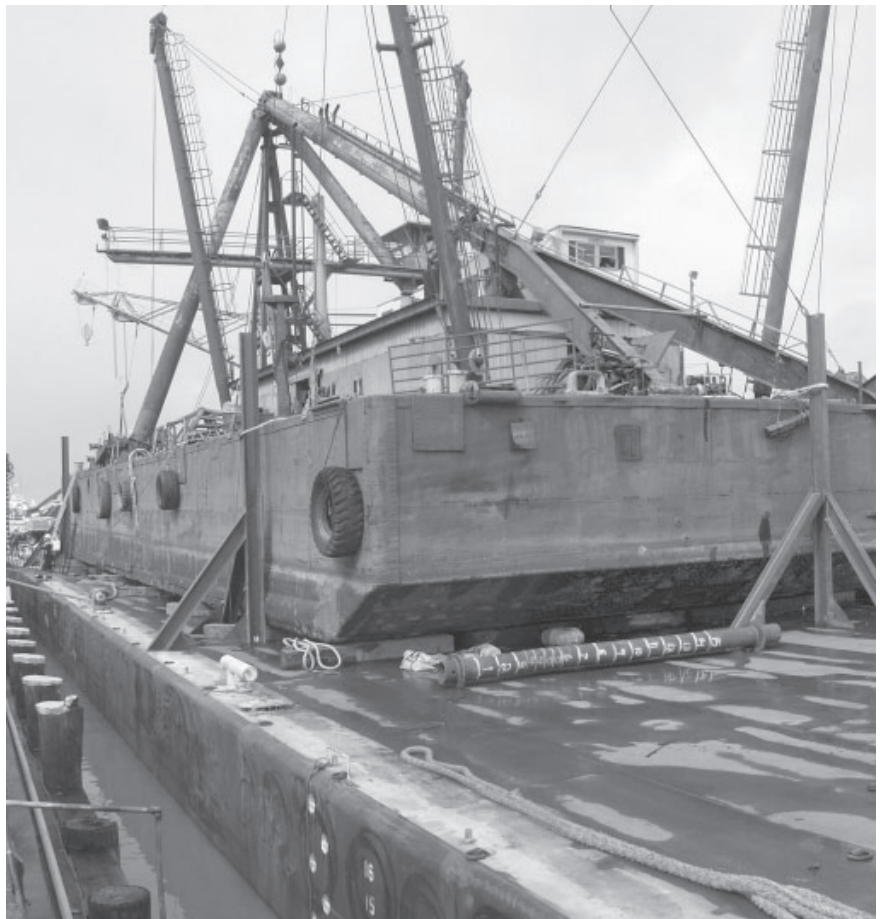
McCloy pumped more ballast water onto the *MZB 287*, completely sinking it, and on February 27, the *Edith* and *Twilight* moved the *Monarch* into position over the sunken barge. Then they began pumping water out of the *MZB 287*.

“As she floated, Igaz, McCloy and **Frank van Hoorn**, the marine architect who wrote the ballasting plan, monitored everything,” Porter said.

The dredge slipped out of position the first time the *MZB 287* came up. So they re-sank the barge, held the dredge in place with a line to the tug *San Joaquin River* and again began pumping water out of the *MZB 287*.

The dredge was towed the next day to Mare Island.

“Zaccor Company scrapped her right on the barge,” Porter said.



The Monarch, still resting on the MZB 287, is ready for scrapping.

New Life for ‘Super D’ Tugs As Engines are Pulled, Replaced

The tugs *Benjamin Foss* and *David Foss*, known as “Super Ds” and considered to be among the workhorses of the Pacific Northwest fleet, are undergoing extensive overhauls that will extend their lives by about 15 years.

The two Caterpillar D-398 engines on each tug are being pulled and replaced with remanufactured engines. Both tugs also are receiving new marine sanitation systems and other upgrades, including renewal of steel where necessary.

Pacific Northwest Port Engineer **John Barrett** is overseeing the work, which is being performed at Foss



The David Foss, shown above, and the Benjamin Foss are being overhauled at Foss Shipyard.

Shipyard. The *Benjamin* was in the yard in April and will be drydocked in August. The *David* was drydocked last year and back in the yard in January 2005.

Both tugs were built at Main Ironworks in Houma, Louisiana, in 1980. Regular work for the two tugs includes towing chip barges from Shelton to Tacoma, towing barges with Boeing airplane parts to Everett from Puget Sound’s large ports.

The tugs also regularly tow Navy oil barges and barge loads of Canadian chips.

FES Acquisition Boosts NRC Presence on U.S. West Coast

Former Foss Maritime sister company Foss Environmental Services (FES) is now NRC Environmental Services. FES was purchased by National Response Corporation, the nation’s largest commercial oil response organization with operations on all three coasts.

Through the acquisition of FES from SaltChuk Resources, Inc., NRC picks up 175 employees throughout the West Coast and becomes the largest commercial spill response and environmental contracting organization in the states of California, Oregon, Washington and Hawaii.