

WESTERN DREDGING ASSOCIATION

Is pleased to present the 2021 Annual Safety Excellence Award for a Dredging Project to

Ballard Marine Construction's

Ignacio-Mare Island Dutchman Slough Dredging

When a study identified multiple transmission towers as needing immediate repair in the San Pablo Bay National Wildlife Refuge on Dutchman Slough, the San Francisco District U.S. Army Corps of Engineers (USACE) issued an emergency permit in November 2020 to replace the three towers at highest risk of failure. According to the USACE, "a failure of one or more of these towers would lead to an extended outage, causing an unacceptable hazard to life."

Project-specific challenges included:

- **Difficult terrain:** The Dutchman Slough is extremely shallow, and the towers had no natural terrain access, so Ballard teamed up with Lind Marine to install 595 linear feet of sheet pile and dredge 32,000 cubic yards of sediment to create access for repair.
- **Wildlife preservation:** The project team came in with a focus on protecting wildlife and exceeded expectations with an independent biologist report indicating no fish take without return and no adverse impacts to the local bird population despite the project operating in a National Bird Refuge.
- **Sediment disposal:** Dredged material was originally planned to be transported to a containment area 3 miles downstream, but that plan had to change when sampling results revealed the sediment did not meet material disposal standards. Due to the urgent nature of the project, Ballard and Lind Marine continued dredging during the weeks of collaborative search for an alternative, eventually found at Montezuma Wetlands nearly 15 miles away. Ballard and Lind Marine then began 24/7 operations to dredging and transport material to Montezuma, exceeding anticipated daily production rates to meet the tight schedule.

Despite the logistical restrictions and potential for delays, the Dutchman Slough project was completed with a TRIR of 0.0, on schedule, and within the client's budget with a total of 10,912 manhours worked.

As the project lead, Ballard set the tone for project safe operations, establishing custom tools to gauge the health of the project, integrating subcontractor Lind into safety and management systems, conducting regular safety observations, completing proactive technical training, and maintaining an open feedback loop with the crew. This project is exemplary for incorporating numerous stakeholders into cohesive, safe operations.

WEDA congratulates Ballard sustained safe operations under adverse conditions and tight deadline and sees it as a sign of a safety system that is on the move towards sustained safety excellence.