

## Project Description

As originally described and evaluated in the 2012 EIR, the process of sand mining begins by using a tugboat to move a specialized suction dredge barge from its dock to a position within one of the lease areas. To begin mining, a dredge arm, which looks like a large pipe, with a metal drag head is lowered to the sandy bottom. Water from the bay or delta is entrained in the suction head generating a water and sand slurry to mobilize sand from the bay or delta bottom and pump it into a hopper on the barge. The drag head contains a screen to prevent large rocks or materials from being entrained. It also contains a suction vent fitted with a positive barrier fish screen and uses a suction velocity of 0.2 feet per second or less to prevent entrainment of fish.

Within the Central Bay leases, mining operations typically occur at water depths ranging from 30 to 90 feet and last 3 to 5.5 hours per event. Within the Middle Ground Shoal and Suisun Bay leases, mining operations typically occur at water depths ranging from 15 to 45 feet and last 5 to 7.5 hours per event.

A mining event is complete when the barge is full (to capacity) with sand. At that time, the pumping of sand is stopped, the dredge arm is raised, and the barge is moved by tugboat to one of several docking sites in the Bay Area for offloading. The barge (the Sand Merchant) operated by Martin Marietta is equipped with dry offloading capabilities (utilizing a conveyor belt system) and wet offloading capabilities (to pump the sand ashore). Lind's barge (J5200) is equipped for dry offloading only. An onboard front end loader transfers the sand to an onboard conveyor system that carries the sand to shore. Most offloading and sand distribution sites have limited capability to stockpile or store sand for an extended period.

The Project, as revised, proposes using equipment and methods that are substantially similar to those currently used and permitted under the existing leases and permits. The primary revision is to extend the activity analyzed in the 2012 EIR for 10 additional years. In addition to defining the geographic lease area boundaries, the CSLC leases identify the maximum allowable annual volume of sand harvested for each lease.