

**INTAKE CHANNEL
SEDIMENT REMOVAL
UNION VILLAGE DAM
THETFORD, VERMONT**



CLIENT

U.S. Army Corps of Engineers
Contract W912WJ-11-C-0012

PROJECT FEATURES

Sediment Depth Survey
Land Clearing / Grubbing
Temporary Access Road
Construction
De-watering Ponds
Erosion Controls
Sediment Control Structures
Sediment Dredging / Excavation
Site Restoration

DURATION / COMPLETION

2011

PROJECT DESCRIPTION

The Ompompanoosuc River, in eastern Vermont, is a tributary of the Connecticut River, which flows to Long Island Sound. In Thetford, the river is dammed by the Union Village Dam, which was completed in 1950 as part of a USACE project for flood control. The structure is a 170-foot-high earthen dam.

In 2011, TANTARA was contracted to mechanically dredge accumulated sediment from the Ompompanoosuc River at the intake channel of the Union Village Dam.

Prior to the start of work, TANTARA performed a sediment depth survey to supplement the data presented in the USACE's *Final Report - Sediment Sampling and Testing* prepared in January 2011. The reported depths were utilized to finalize the design, permitting and work limits.

Initial clearing and grubbing was performed over 3.5 acres to the east of the Ompompanoosuc River, to gain access for the construction of temporary access roads and for the construction of two dewatering ponds.

Approximately 5,000 square feet of crane mats were utilized adjacent to a wetland area to allow access to the final section of dredging. Construction of the dewatering ponds was accomplished using existing on-site materials and a four-foot earthen berm. TANTARA maintained the detention basins and dewatered the dredged material through filter bags and sediment control structures.

Excavation of the sediments in the intake channel was accomplished utilizing a clam shell bucket mounted on a lattice boom crane. In excess of 800 linear feet of sediment was dredged from the dam's intake channel. TANTARA used an excavation basin, comprise of a series of suspended curtains, to control turbidity. TANTARA performed daily turbidity monitoring/reporting throughout the course of the project.

Dewatered sediments were placed into on-road trucks and hauled off-site to the Elizabeth Mine in Stafford for disposal. Approximately 3,500 cubic yards were dredged on this project. At the Elizabeth Mine SuperFund site, TANTARA staged, spread and compacted the dredged sediments on a weekly basis.

Upon completion of the project, TANTARA provided temporary seeding and restoration of the cleared areas.