## Metlakatla Erosion Protection

## Condition of Improvements 31December 2017 **Metlakatla Erosion Protection, Alaska** Cemetery and Fuel Tank Facility (CWIS No. 092796, 092830)

**Authorization** Section 14, 1946 Flood Control Act (Public Law 79-562; 33 USC 701r), dated 24 July 1946, as amended by Public Law 93-251, provides for emergency bank protection not to exceed \$1,000,000 in federal funds.

#### Table 1

Existing Project	Length ft.
Rock revetment, cemetery	935
Rock revetment, tank farm	295

### **Progress of Work**

1993	Project receives approval from the appropriate agencies. A Finding of No Significant Impact (FONSI) is signed in May.
1994	A Project Cooperation Agreement is finalized with the City in June. Funding will be split between the Federal government (75%) and local sponsors (25%). A storm in October causes extensive damage to the cemetery bank site. Immediate riprap work is initiated to prevent further deterioration; an estimated 1,000 cubic yards are placed. A contract for the work at both sites is awarded in December.
1995	Construction begins in March and is completed in April. The project is turned over to the Metlakatla Indian Community for any required maintenance.
1998	Both works are inspected and found to be in good condition.
1999	An inspection in June finds both projects in excellent condition. A damaged culvert at station 9+00 of the cemetery revetment is functional but requires monitoring for debris build up.
2001	Both projects are found in good condition by the Corps' inspector.
2003	Both revetments are found in good condition by the Corps' inspector in August. Damage to the culvert is cited as a problem at the cemetery site, and some non- Corps stone work immediately west of the tank farm revetment is noted as inadequate.

# Progress of Work

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2004	Both the tank farm and cemetery revetments are found in good condition. The damaged culvert at the cemetery site remains un-repaired.
2005	The inspection in September reveals that 15 armor stones are missing or displaced from the top of the slope at the cemetery site. These stone should be replaced to provide full protection. The tank farm revetment is found in very good condition.
2007	The Corps' inspector finds both projects in acceptable condition. The culvert and both ends of the cemetery revetment need to be monitored.
2009	The revetment slope of the project appears in good condition with essentially no displacement of rock.
2010	The revetment slope of the project appears in good condition but showing signs of wear with some stone fractures (both sites) and rounding due to abrasion (cemetery site only).
2012	Project inspection shows the revetments to be in good condition with no significant changes from previous years.
2014	Project inspection shows the revetments to be in good condition with no significant changes from previous years.
2015	Project inspection shows the revetments to be in good condition with no significant changes from previous years. No repairs to the armor layer of either project is needed at this time. Tree growth should be controlled on the top of the revetments.
2016	Project inspection shows the revetments to be in good condition with no significant changes from previous years.
2017	Project inspection shows the revetments to be in good condition with no significant changes from previous years.

Table 2 (	Cost to Date
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Project	Description	Cost \$
092796	CG Appropriations	207,399
	CG Costs	207,399
	CG Contributed Appropriations	64,000
	CG Contributed Costs	64,000
092830	CG Appropriations	119,561
	CG Costs	119,561
	CG Contributed Appropriations	87,610
	CG Contributed Costs	87,610

### Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 0314 Metlakatla AK	12.43	14.87	-

## Metlakatla Erosion Protection, Metlakatla, Alaska



The cemetery rock revetment, August 2017

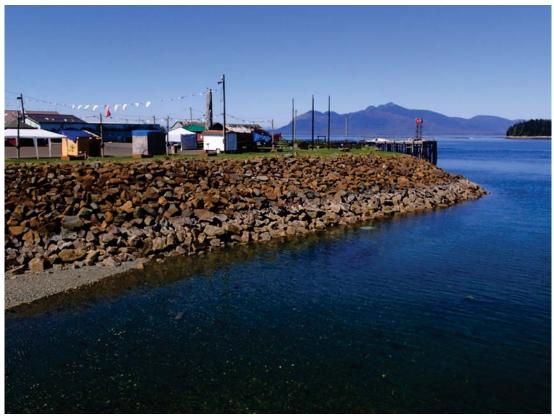


The cemetery rock revetment , September 2010

## Metlakatla Erosion Protection, Metlakatla, Alaska



The east extent of the tank farm rock revetment , September 2010



City Park rock revetment, August 2017