

Deering Streambank Protection

Condition of Improvements
31 December 2017
Deering Streambank Protection, Alaska
(CWIS No. 092906, 180355)

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 stream bank protection not to exceed \$1,000,000 in federal funds.

Table 1

Existing Project	Length ft.
Rock revetment, mile 0.5	804
Rock revetment, mile 0.95	575

Project Usage The completed work provides permanent protection for the Deering-Inmachuk Road and the city's water supply. Deering is an incorporated native village about 57 air miles south of Kotzebue, Alaska. All transportation to the village is by water or air.

Progress of Work

1994	Local sponsors indicate need to halt the bank erosion caused by the Inmachuk River. State agency review of the recommended plan is initiated.
1995	The recommended plan is found to be consistent with the state Coastal Zone Program, and the project receives a Finding of No Significant Impact from the Corps of Engineers. A construction window from 31 August through 15 April is established.
1996	A Project Cooperation Agreement is completed between the City of Deering and the Corps of Engineers. Project costs will be split between the Federal government (75%) and the State and local Native Corporation (25%). A construction contract is awarded in the fall.
1997	The work is physically completed in October.
1998	The contract is closed out, and the project is turned over to the local sponsors for maintenance. The project was inspected by the Corps and found to be in good condition.
2000	Inspections in September 1999, and again in August 2000, find the project in good condition with no recommendations for maintenance.
2001	The project is found in good condition by the Corps' inspector.

Progress of Work

2002	The Corps' inspector finds both revetments in good condition, August 2002.
2003	The project is reported to be in excellent condition by the Corps' inspector.
2004	Both revetments appear to be in good overall condition. Continued monitoring is recommended due to the dislocation and sloughing of the rip-rap at several locations.
2005	The project is inspected in September: evidence of fracturing of the revetment rock is apparent throughout, some erosion of the stream banks downstream of the revetments is on-going and some stones are not keyed well, but both sections appear to be in good overall condition.
2009	The project is inspected in October. The general condition of both revetment sections is good with no evidence of significant stone movement. The condition of the rip rap with regard to fracture was not confirmed during this inspection due to snow cover. Erosion of the stream banks continues. The presence of sink-holes along the riverbank suggests that thawing permafrost may be contributing to erosion.
2014	The project is inspected in September: evidence of fracturing of the revetment rock is apparent throughout, some erosion of the stream banks downstream of the revetments is on-going and some stones are not keyed well, but both sections appear to be in good overall condition.
2015	The project is inspected in September: Erosion was noted at the downstream end of the Area 2 revetment near the airport and a sandbar formation was noted at the upstream end of the Area 1 revetment along the airport road.
2016	The project is inspected in September: No significant changes were noted from previous inspections.
2017	The project is inspected in August: No significant changes were noted from previous inspections.

Table 2 Cost to Date

Project	Description	Cost \$
092906	CG Appropriation	490,657
	CG Costs	490,656
	CG Contributed Appropriation	152,908
	CG Contributed Costs	152,908
180355	CG Appropriation	83,494
	CG Costs	83,494

Deering Streambank Protection, Deering, Alaska



Aerial of Deering, 2014



Looking downstream at the approximately 800-ft long revetment, September 2013

Deering Streambank Protection, Deering, Alaska



Looking at the revetment along the airport road, September 2016



Revetment near the airport, September 2016