

# **Emmonak Streambank Protection**



Condition of Improvements  
31 December 2019  
**Emmonak Streambank Protection, Alaska**  
(CWIS No. 092872, 325884)

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

**Table 1**

<b>Existing Project</b>	<b>Length ft.</b>
Rock Revetment	1,445

**Project Usage** The City of Emmonak is located on Kwiguk Pass, 8 miles from the Yukon River entrance into the Bering Sea, and 475 air miles from Anchorage. Commercial salmon fishing and a subsistence lifestyle predominate the local economy. Many Yukon River travelers end their trips at Emmonak which is also the air hub of the Yukon delta region.

**Progress of Work**

1997	Plans and specifications are prepared.
1998	A contract is awarded and construction of the revetment is completed in the fall.
1999	Inspection by the Corps finds the project in good condition.
2001	The project is found to be in good condition by the Corps' inspector for the third straight year.
2002	The Corps' inspector finds the project in good condition. No maintenance is recommended.
2003	The project is found in good condition by the Corps' inspector.
2004	The two sections of revetment are found in good condition, June 2004.
2009	The damaged areas of the revetment appear to be in poor condition; likely damaged during the spring flood and from subsequent erosive action of normal river flows undermining the revetment.

## Progress of Work

2010	The damaged areas of the revetment appear to be in poor condition; the city has hired DOWL Engineers to design a repair.
2011	The upstream portions of the revetment (STA 10+450 to 10+513), that were damaged by the 2009 flood, have been repaired recently under a FEMA repair contract. The remaining damaged areas of revetment (upstream of STA 10+340 and downstream of STA 10+425) are in critical condition and require immediate repair action. Without immediate repair the damaged areas will be susceptible to significant erosion which could lead to additional damage in adjacent portions of the revetment.
2015	The repaired upstream section of the revetment is in good condition. The revetment downstream of the revetment repair is in poor condition and should be repaired to the original revetment cross sections.
2016 - 2019	The revetment was inspected and found to be in good condition with no significant changes from previous years.

**Table 2 Cost to Date**

Project	Description	Cost \$
092872	CG Appropriation	787,757
	CG Costs	787,757
	CG Contributed Appropriation	368,200
	CG Contributed Costs	368,200
325844	CG Appropriation	43,224
	CG Costs	43,224

**Table 3 Tide Reference in feet**

Tide Station	MLLW	MSL	MHW
946 7701 Emmonak, Kwiguk Pass, Yukon River	0	0.79	1.51

*Preliminary Data from 2019 Tidal Determination*

# Emmonak Streambank Protection, Emmonak, Alaska



Oblique of the Emmonak streambank protection, May 2007



Oblique of the Emmonak streambank protection, May 2007



# Emmonak Streambank Protection, Emmonak, Alaska



Emmonak revetment downstream of fish processor, August 2016



Emmonak revetment near fish processor, August 2016



# Emmonak Streambank Protection, Emmonak, Alaska



Emmonak streambank protection, 16 May 2007



Emmonak streambank protection, 16 May 2007