

Mekoryuk Breakwater

Condition of Improvements
31 December 2022
Mekoryuk Breakwater, Alaska
(CWIS No. 087331)

Authorization Rivers and Harbors Act, 14 July 1960 (under Section 107, Public Law 86-645) as adopted, and approved as amended by the Chief of Engineers, 7 May 1986, provides for a rock breakwater 510 feet in length to protect local craft from damage and the beach from erosion.

Table 1

Existing Project	Length ft.	Width ft.	Depth ft.
Breakwater	510		

Project Usage Small craft find protection behind the breakwater which also controls beach erosion along the town front. Mekoryuk is a semi-subsistence village: the main source of income comes from the Reindeer herd, and the resources of the sea provide for subsistence needs.

Progress of Work

1986	The final design calls for a single rubblemound breakwater, elevation 17.5 feet MLLW, that extends seaward from the bluff for 140 feet, and then breaks southward nearly parallel to the beach for 350 feet. This provides for a protected area of 1.2 acres. The contract is awarded in May, and construction is completed in September.
1991	A condition survey of the breakwater is performed in August.
1999	A condition survey of the breakwater and immediate vicinity is performed in July. The breakwater is found in good condition.
2004	A condition survey of the breakwater and the protected inter-tidal zone is performed in August. The breakwater is found in good condition.
2013	A condition survey was performed in October.
2014	Comprehensive Evaluation of Project Datums (CEPD) Compliance report completed and recorded in January.
2018	A condition survey of the breakwater and the protected inter-tidal zone was performed in June. The breakwater is found in good condition.
2022	A condition survey of the breakwater and the protected inter-tidal zone was performed in mid-June. The breakwater is found in good condition.

Table 2 Cost to Date

Project	Description	Cost \$
087331	CG Appropriation	1,259,400
	CG Costs	1,259,400

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
946 6217 Mekoryuk, AK	6.41	7.62	-

NOAA Publication Date: 01/14/2011

Controlling Depth The area protected by the breakwater is intertidal.

Mekoryuk Breakwater, Nunivak Island, Alaska



Oblique of Mekoryuk Breakwater, September 2013



Mekoryuk Breakwater, June 2022