

Homer Spit Erosion

Condition of Improvements
31 December 2022
Homer Spit Erosion, Alaska
(CWIS No. 012379)

Authorization (1) The Water Resource Development Act of 1990, Section 101, dated 28 November 1990 (Public Law 101-640, 101st Congress) as adopted, provides for a 1,000 foot extension to an existing rubble mound revetment along an existing sheet pile wall to protect the State highway on Homer Spit. (2) The Energy and Water Development Appropriations Act of 1996 (Public Law 104-46) provided \$3,800,000 for the repair and extension of the existing project in order to fulfill its original purpose.

Table 1

Existing Project	Length ft.
Rock Revetment	4,830

Progress of Work

1991	Work on the plans and specifications are underway.
1992	A Local Cooperation Agreement is finalized which includes cost sharing. The construction contract is awarded
1993	Difficulties acquiring a quarry site prevent construction.
1994	All physical work on the original project is completed.
1996	A study of erosion along the southerly seaward face continues; a condition survey is conducted in August. A contract is awarded to extend the revetment 3700 feet.
1997	Repair and extension of the revetment is 77% complete; scheduled completion date is December 1998.
1998	The project is completed with a total placement of 52,598 cubic yards of stone and 6,051 cubic yards of gravel.
1999	The natural beach is surveyed out to (0) feet MLLW along the southerly seaward face.
2000	The Federal project and the areas it protects are found in good condition by the Corps' inspector.
2001	The project continues to be in good condition. No maintenance is recommended.
2002	The Corps inspector finds the project in good condition, August 2002.

Progress of Work

2003	The annual inspection finds the project in good overall condition. Continued monitoring is recommended.
2004	The project is found in good condition. No maintenance is required.
2005	The annual inspection conducted in September finds the project in good condition.
2009	Visible sections of the revetment appeared to be in good shape.
2011	The Homer Spit Revetment project was thoroughly inspected and found to be in good overall condition.
2012	The Homer Spit Revetment project was thoroughly inspected and found to be in good overall condition. There is storm damage on the road shoulder than may need to be addressed.
2013	The Homer Spit Revetment project was thoroughly inspected and found to be in good overall condition. There is storm damage on the road shoulder than may need to be addressed.
2015	The Homer Spit Revetment project was thoroughly inspected and found to be in good overall condition. AKDOT&PF increased the crest elevation of the project on the Federal section constructed in 1998.
2016	The Homer Spit Revetment project was thoroughly inspected and found to be in good overall condition. No change from the previous year.
2017	The Homer Spit Revetment project was thoroughly inspected and found to be in good overall condition. There is storm damage on the road shoulder than may need to be addressed.
2018	The Homer Spit Revetment was visually inspected and found to be in good overall condition. No repairs or maintenance is recommended at this time.
2019	The Homer Spit Revetment was visually inspected and found to be in good overall condition. No repairs or maintenance is recommended at this time.
2021	The Homer Spit Revetment was visually inspected and found to be in good overall condition. No repairs or maintenance is recommended at this time.

Table 2 Cost to Date

Project	Description	Cost \$
012379	CG Appropriation	5,679,119
	CG Costs	5,678,718
	CG Contributed Appropriation	2,973,359
	CG Contributed Costs	2,973,359

Table 3 Range of Tides in feet

Current Tide Station	Mean Range	Diurnal Range	Extreme Range
945 5558 Coal Point AK	15.94	18.43	

NOAA Publication Date: 04/10/2019

Legacy Tide Station	Mean Range	Diurnal Range	Extreme Range
945 5557 Homer AK	15.83	18.32	31.3

NOAA Publication Date: 08/11/2003

Homer Spit Erosion, Homer, Alaska



Rock revetment along the Homer Spit, July 2019



Rock revetment along the Homer Spit, July 2019

Homer Spit Erosion, Homer, Alaska



Sheet pile wall at the base of the Homer Spit, August 2010



Sheet pile wall at the base of the Homer Spit, June 2011