

Elfin Cove

Condition of Improvements

31 December 2022

Elfin Cove, Alaska

(CWIS No. 072793)

Authorization Rivers and Harbors Act, 2 March 1945 (House Doc. 579, 76th Congress, 3rd Session) as adopted, provides for an outer entrance channel 60 feet wide and 10 feet deep MLLW, and an inner entrance channel 40 feet wide and 8 feet deep MLLW. The authorizing documents also state that “Maintenance will not be required.” Under Section 1109 of the WIIN Act (Public Law 114-322), maintenance to restore the dimensions for federal harbors of refuge was authorized.

Table 1

Existing Project	Length ft.	Width ft.	Depth ft.
Outer Channel	300	60	-10
Inner Channel	574	40	-8

Project Usage Elfin Cove is mainly a harbor of refuge that also supports a small local fleet of commercial and recreational fishing vessels. It is one of two protected harbors in the vicinity of the busy fishing grounds of Cross Sound. The channels provide all tide access to a natural landlocked anchorage basin of approximately 50 acres that is almost totally shielded from the wind. Small boats operating in the vicinity seek shelter from storms and obtain supplies at Elfin Cove.

Progress of Work

1957	Dredging of the inner channel begins in November.
1958	New work continues with dredging of the outer channel beginning in April. The project is successfully completed in May. Removal of 2,730 cubic yards of rock and 2,146 cubic yards of common material is reported.
1992	A condition survey is performed in July.
2003	A condition survey is conducted in May. Vertical and oblique aerial photography is also taken in May.
2007	A condition survey is conducted in May.
2011	A condition survey is conducted in July.

Progress of Work

2012	“Comprehensive Evaluation of Project Datums” Compliance report completed and recorded in September.
2018	A geophysical survey was conducted in late October to identify the character and extent of materials in the Federal navigation channels to support the planning efforts for a future dredging contract.
2019	A public meeting was hosted in the community in May to discuss the planning efforts for a future dredging contract. Samples from the Federal navigation channels were taken for chemical analysis in May. The Joint Airborne Lidar Bathymetry Technical Center of Expertise surveyed the project area in July. An intertidal dredged material placement area within Elfin Cove is evaluated for benthic and cultural resources in August with additional sampling in October.
2020	The second biological survey of the Port Althorp area was conducted in January; however, the continuation of field data collection is delayed due to the coronavirus pandemic.
2021	Preparation of a maintenance dredge contract continues including additional biological surveys.
2022	A condition survey is conducted in March and a maintenance dredge contract is awarded in August to Duwamish-Pacific JV.

Table 2 Cost to Date

Project	Description	Cost \$
072793	CG Costs	161,869
	O&M Appropriations	3,576,512
	O&M Costs	947,580

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 2634 Elfin Cove, Port Althorp, AK	8.66	11.00	19.64

NOAA Publication Date: 10/13/2020

Controlling Depth For the Outer Channel a depth of -3.5 feet MLLW controls near the middle of the channel along its northern limits and for the Inner Channel a depth of -4.2 feet MLLW controls along the southwesterly limits, March 2022.

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Southeast oblique of Elfin Cove, July 2011



Elfin Cove, July 2011