

Sergius and Whitestone Narrows

Condition of Improvements
31 December 2019
Sergius and Whitestone Narrows, Alaska
Peril & Neva Straits, Alaska
(CWIS No. 072744)

Authorization River and Harbor Act, 13 August 1968 (Senate Doc. 95, 90th Congress, 2nd Session) as adopted, provides for a channel through Sergius Narrows 450 feet wide to a depth of -24 feet MLLW, and modification of the previous project at Neva Strait by widening the channel to 300 feet with a depth of -24 feet MLLW through Whitestone Narrows.

Previous Authorization River and Harbor Act, 3 September 1954 (House Doc. 414, 83rd Congress, 2nd Session) as adopted, provides for improvement of Neva Strait by widening and deepening a channel through Whitestone Narrows to 200 feet in width and -24 feet in depth.

Table 1

Existing Project	Length ft.	Width ft.	Depth ft.
Channel (Sergius Narrows)	8000	450	-24
Channel (Whitestone Narrows)	4570	300	-24

Project Usage The channels provide protected passage for vessels traveling from Sitka Harbor to the Inside Passage. Improvement of the channels permits use of the passage by all commercial vessels serving the Sitka area, including fishing craft, cargo vessels, log raft tows, and the State ferries.

Progress of Work

1959	Work on the previous project is begun in Whitestone Narrows with the drilling and blasting of rock in June. The channel is completed to project dimensions in September with the removal of 6,135 cubic yards of ledge rock.
1971	Drilling and blasting of rock begins in December for the enlargement of Whitestone Narrows and the initial construction of the channel at Sergius Narrows.
1972	Work continues until completion in December with a total of 25,902 cubic yards of rock removed from Sergius Narrows and 21,534 cubic yards of rock from Whitestone Narrows.

Progress of Work

1977	Hydrographic surveys are performed in March.
2001	Multi-beam surveys provide complete survey coverage of both projects in April and May.
2003	Aerial photography is taken of both projects in May.
2005	A condition survey is conducted in May with single beam techniques.
2013	CEPD required NOAA Tidal Determination performed at Whitestone Narrows. A condition survey is conducted in April using multi-beam techniques.
2014	USACE Comprehensive Evaluation of Project Datums (CEPD) Compliance report completed and recorded in July.
2018	A project condition survey was conducted in April, both Whitestone and Sergius Narrows were surveyed using multi-beam techniques.

Table 2 Cost to Date

Project	Description	Cost \$
Old Project	CG	155,009
	O&M	6,906
072744	CG	1,798,010
	O&M	7,154

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 1853 Sergius Narrows AK	10.62	13.03	-
945 1741 Whitestone Narrows, Neva Strait AK	7.77	10.03	-

NOAA Publication Date: 945 1853 03/04/2009, 945 1741 07/14/2014

Controlling Depth Project depth is effectively available throughout both channels in April 2018. The controlling depth in Sergius Narrows is -11.0 feet on the South boundary of the NE portion of the channel, South of Channel Light 25205. The controlling depth in Whitestone Narrows is -12.4 feet located at the south end of the channel along the East boundary, South of Channel Light 25100.

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Northeast oblique of Sergius Narrows, 2003.



North oblique of Whitestone Narrows, 2013.