

Dry Pass

Condition of Improvements

30 December 2019

Dry Pass, Alaska

(CWIS No. 072791)

Authorization (1) Rivers and Harbors Act, 30 August 1935 (House Doc. 470, 70th Congress, 2nd Session) as adopted, provides for a channel 60 feet wide at 6 feet below MLLW through 5 shoals between El Capitan Passage and Shakan Strait. (2) The Rivers and Harbors Act dated 3 September 1954 (House Doc. 414, 83rd Congress, 2nd Session) modifies the previous project by providing a channel 70 feet in width to a depth of 12 feet below MLLW through 7 shoals.

Table 1

Existing Project	Length (mi)	Width ft.	Depth ft.
Channel	3.5	70	-12

Project Usage The El Capitan/Dry Pass/Shakan route provides a protected waterway for fishing vessels, towed log rafts, and small boats between the west coast of the Prince of Wales Island and Kosciusko Island in southeastern Alaska. The economy of the vicinity is based on logging and commercial fishing.

Progress of Work

1937	The original project is completed in September.
1957	A hydrographic survey in November reveals a channel at -6 feet MLLW with a 40 foot width in several sections.
1958	Further pre-design investigation indicates the need for blasting as well as dredging to reach the new project dimensions. A contract is awarded in October which includes Rocky Pass.
1959	New work commences in February consisting of drilling and blasting of ledge rock and the removal of common and ledge rock material from the shoals. The project is completed in September.
1994	A landslide 350 feet outside the eastern entrance calls for a survey of the immediate vicinity including Shoal No. 1.
2000	The entire channel is surveyed in May with multi-beam survey techniques.
2005	The project is surveyed with single beam techniques in April.

Progress of Work

2011	A project condition survey was done in September. Two tidal determinations are scheduled for data collection in the Spring of 2012 and the resulting survey will be published after the tidal datum publication by NOAA.
2012	Tidal determination completed and waiting on NOAA approval to be CEPD compliant.
2014	Tidal determinations published by NOAA. USACE Comprehensive Evaluation of Project Datums Compliance report completed and recorded in July.
2017	A project condition survey was completed at the end of March, starting of April.

Table 2 Cost to Date

Project	Description	Cost \$
072791	CG Costs	966,280
	O&M Appropriations	143,858
	O&M Costs	141,787

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 0998 Dry Pass, EL Capitan Passage AK	9.53	11.74	-
945 0997 EL Capitan Passage AK	8.95	11.16	-
945 0987 Shakan Strait (NE End) AK	9.27	11.49	-

NOAA Publication Date: 945 0998 & 0997 07/14/2014, 945 0987 04/26/2011

Controlling Depth In March of 2017 a controlling depth of 4.3 feet MLLW is found near day beacon No. 9. Adequate depth is found outside the Federal project in this vicinity.

Maintenance Dredging Supplement

A. General

1. No dredging activity has occurred since 1959 when “new work” widened and deepened the channel. Dredging scheduled for FY98 has been postponed.
2. Shoaling has occurred at several locations, most prominently along shoals No. 1 and No. 2 on the west end, and in the vicinity of shoal No. 7 on the east end.

3. A dredging window from 1 November to 31 March was established in the Environmental Assessment, July 1981.

B. Sampling & Testing

1. Seven of the eight samples taken in May 1996 were tested for physical properties: (5) were classified as well graded gravel with sand (GW), (1) as poorly graded gravel with sand (GP), and (1) as poorly graded sand with gravel (SP). Fines ranged from 0.7% to 4.0%.
2. Chemical analysis was performed using (8) test methods as outlined with results below.

Table 4 Chemical Testing

Method	Chemical analysis	Results
8260	Volatile Organic Compounds	Methylene chloride, 7.1 ppb*; 4-Chloro-3-methyl phenol 95-2300 ppb**; phthalates, 110 - 1200 ppb***; Phenol, 320 ppb****
8270	Semi-Volatile Organic Compounds	All ND or below cleanup levels
8080	Pesticides and PCB's	ND (none detected)
415.1	Total Organic Carbon	710 - 22,600 ppm
350.2	Ammonia as Nitrogen	3 - 170 ppm
353.3	Nitrate as Nitrogen	ND - 1.8 ppm
9030	Sulfides	ND - 46 ppm
Series 6000-7000's	(8) RCRA Metals	All below minimum management levels

* Found in one sample; probably caused by laboratory contamination.

** Not listed as an analyte of concern by PSDDA.

*** Possibly caused by laboratory contamination; no maximum levels set by PSDDA.

**** Below the minimum management threshold.

C. Disposal

1. Future disposal sites are yet to be determined. Since no significant sediment contamination was found, disposal restrictions should be minimal.
2. Dredge material from new work was placed on each side of the channel in the intertidal zone.

D. Environmental Permits and Reports

1. The Corps' Environmental Assessment was completed in July 1981, followed by the Finding of No Significant Impact (FONSI) in October 1981.
2. The following permits or authorizations are listed by agency below:

Table 5 Environmental Permits

Agency Name	Date of Issue	Date of Expiration
AK Department of Natural Resources	March 10, 1981	n/a
AK DOT & Public Facilities	March 3, 1981	n/a
AK Department of Fish and Game	August 31, 1981	n/a
AK Department of Environmental Conservation	November 3, 1981	n/a
AK Department of Governmental Coordination	September 11, 1981	n/a
US Environmental Protection Agency	October 1, 1991	n/a
US Fish and Wildlife Service	October 2, 1981	n/a
NOAA -National Marine Fishing Service	August 27, 1981	n/a

Note: The dredging effort planned for the early 1980's was never finalized

3. Water Quality Six physical parameters were measured at five locations through the water column in May 1996; temperature, pH, salinity, turbidity, conductivity, and oxidation-reduction potential (ORP) were measured in the field. No chemical analysis was conducted.

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Oblique of the eastern entrance, August 2005



Oblique of the southern entrance, August 2005

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Dry Pass, April 2017



Dry Pass, April 2017