

# **Juneau Harris Harbor**



Condition of Improvements  
31 December 2022  
**Harris Harbor**  
Juneau, Alaska  
(CWIS No. 072797)

**Authorization** (1) Rivers and Harbors Act, 26 August 1937 (House Doc. 249, 75th Congress, 1st Session) as adopted, provides for a small boat basin 11.5 acres in area, just north of the Juneau-Douglas bridge, by construction of two rock mound breakwaters of 430 and 1,540 feet in length, and by dredging to a depth of -12 feet MLLW.

**Table 1**

Existing Project	Length ft.	Width ft.	Depth ft.
Basin	11.5 acres		-12
South Breakwater	430		
North Breakwater	1540		

**Project Usage** Harris harbor is used as a base of operations for approximately 250 vessels. The combined Juneau-Douglas complex (see also Douglas Harbor and Aurora Harbor) gives protection and moorage to approximately 1,000 vessels, half of which are active in commercial fishing. All transportation to the area is by sea or air.

**Progress of Work**

1939	The original project adjacent to the Juneau/Douglas bridge, Harris Harbor, is completed to its present dimensions.
1950	The first maintenance dredging contract is completed in the summer for Harris Harbor.
1962	Limited maintenance dredging at the entrance of Harris Basin is performed in July.
1968	Harris Basin is dredged north of the alignment of the entrance channel with 39,353 cubic yards reportedly removed from July through September.
1973	A contract for the repair of the main northerly breakwater at Harris Harbor is awarded in June and completed in December.

## Progress of Work

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2002	A condition survey of the harbor is conducted in April.
2003	Vertical and oblique aerial photography is taken of Harris harbor.
2005	A condition survey of the harbor is conducted in April.
2009	A condition survey of the harbor is conducted in August.
2012	“Comprehensive Evaluation of Project Datums” Compliance report completed and recorded in September.
2013	A condition survey of the harbor is conducted in May.
2014	A control survey was performed to update all horizontal and vertical project control.
2016	Sediment sampling in the harbor is completed in September.
2017	A condition survey of the harbor is conducted in June. Vegetation is cleared from the north breakwater in August. Future clearing along University of Alaska Southeast property should be coordinated with UAS Landscaping Superintendent (in 2017 contact is David Lundrum, 907-321-4149)
2018	Additional sediment sampling for mercury and methylmercury concentrations in sediment and porewater is performed at two locations in the north part of the harbor in April by NewFields Government Services. The sample locations were previously sampled in 2016 and found to be contaminated with other contaminants.
2019	A condition survey of the harbor is conducted in March. Contract W911KB19C0031 is awarded to Western Marine Construction in September to dredge the southern half of the harbor. Contaminated material in the northern half of the harbor is left in place. The contract also includes work in Aurora Harbor. Contract amount for Harris Harbor work is \$712,500. Section 106 consultation with the State Historic Preservation Office (SHPO) results in a determination of no adverse effect for the 2019-2020 maintenance work based on the assumption the project is eligible for National Register of Historic Properties however a determination of eligibility is required prior to any future maintenance projects.
2020	Western Marine Construction adds rip rap to the nose of the north breakwater. The southern half of Harris Harbor is dredged with a total of 19,271 cubic yards removed between November 2020 and February 2021. Dredged material was placed in a Gastineau Channel open water placement site located southeast of Douglas Harbor and south of the Douglas Harbor capped placement site.
2021	A Determination of Eligibility for the National Register of Historic Properties is started.

**Table 2 Cost to Date**

Project	Description	Cost \$
087219/087227	CG Appropriations	1,910,563
087219/087227	CG Costs	1,910,563
087219/087227	O&M Appropriations (prior to FY78)*	429,023
087219/087227	O&M Costs (prior to FY78)*	429,023
072797	O&M Appropriations	3,559,312
072797	O&M Costs	1,715,876

**Table 3 Range of Tides in feet**

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 2210 Juneau AK	13.74	16.31	30.71

NOAA Publication Date: 02/16/2018

**Controlling Depth** In February 2021 a depth of -8.2 feet MLLW controls in the northeast corner of Harris Harbor in an area accessible only by small craft and a depth of -11.9 feet MLLW controls the ADF&G float at the south end of the harbor.

## **Maintenance Dredging Supplement**

### **A. General**

1. The first maintenance dredging of this project since 1968 is conducted in January 2021 (a 53-year span).
2. Maintenance dredging was performed in the south half of the harbor and at the ADF&G float. There was no maintenance dredging in the northern half of the harbor due to minimal volume available to the project depth of -12 feet MLLW and mercury contaminated material left in place.

### **B. Sampling and Testing**

1. In September 2016, samples were collected at four (4) locations within Harris Harbor; material was classified as sand with gravel (SM) in three (3) locations and silt with sand (ML) in one (1) location.
2. Chemical analysis was conducted on each of the four samples and evaluated against both ADEC (for upland disposal) and DMMP (for in-water disposal) screening criteria. The samples were evaluated using the test methods as outlined with results in Table 4 below.

3. In April 2018, two (2) sample locations on the north end of Harris Harbor were sampled for mercury and methylmercury in sediment and porewater. The sample test methods and results of the 2018 sampling is shown in Table 5.

**Table 4 Chemical Testing (2016)**

Method	Chemical Analysis	Results
AK101	Gasoline Range Organics	ND (none detected)
AK102/103	Diesel Range Organics/ Residual Range Organics	Exceeded ADEC screening levels for DRO; all below project screening limits as compared to DMMP screening limits (10) of (10) detected; Arsenic, Chromium and Mercury above ADEC and DMMP screening levels; all others below minimum levels
6000-7000's	(10) RCRA Metals	9,400-36,000 ppm
9060	Total Organic Carbon	ND
8260B	Volatile Organic Compounds	Z-layer exceeded DMMP limit for 4,4'-DDD, all others ND or below minimum levels
8081A	Pesticides	ND
8082	Polychlorinated Biphenyls	Exceeded DMMP and ADEC screening levels for several chemicals;
8270D	Semi-volatile Organics	1.9-4.1%
EPA 160.4	Total Volatile Solids	ND
EPA 350.1	Ammonia	ND
Krone et. Al.	Tributyltin	Z-layer exceeded DMMP screening level

*Screening levels are defined by ADEC 18 AAC 75 Method 2 Table B1 and B2 Cleanup Level and USACE Seattle District Dredged Material Management Program (DMMP) User's Manual, August 2016.*

**Table 5 Chemical Testing (2018) - Sediment Left in Place**

Method	Chemical Analysis	Results
7471B	Metals (Mercury) in Sediment	2 of 2 samples exceed DMMP screening level; 1 of 2 samples exceeds DMMP bioaccumulation trigger
1630M	Metals (Methylmercury) in Sediment	Detected below reporting limit
1613E	Porewater Metals (Mercury)	Detected below reporting limit
1630M	Porewater Metals (Methylmercury)	Exceeds Douglas Harbor threshold of 0.295 ng/L

*Screening levels are defined by USACE Seattle District Dredged Material Management Program (DMMP) User's Manual, August 2016.*

### C. Disposal

1. Dredge material from the 2021 maintenance dredging was placed in a deep-water site in Gastineau Channel with the geographic coordinates shown in the table below.
2. The disposal site is located 1500 feet south of the capped Douglas Harbor disposal site. Dredged material placement was controlled to prevent the Harris Harbor material from drifting into the Douglas Harbor site.

**Table 6 Disposal Area**

<b>Corner</b>	<b>Latitude (N)</b>	<b>Longitude (W)</b>
A (NE)	58°16'28.39"	134°21'55.60"
B (SE)	58°16'21.34"	134°21'40.98"
C (SW)	58°16'14.69"	134°21'52.52"
D (NW)	58°16'21.74"	134°22'07.15"

### D. Environmental Permits and Reports

**Table 7 Environmental Permits**

<b>Agency Name</b>	<b>Date of Issue</b>	<b>Date of Expiration</b>
AK Department of Governmental Coordination	June 30, 1987	n/a
AK Department of Environmental Conservation	July 2, 1987	n/a
Environmental Protection Agency	1986	n/a
Department of Army	August 1, 1992	n/a
Environmental Assessment	August 1, 2019	n/a
Finding of No Significant Impact	August 29, 2019	n/a
ADEC Water Quality Certification	August 29, 2019	August 29, 2024

# Harris Harbor, Juneau, Alaska



Oblique of Harris Harbor, June 2017



Harris Harbor, November 2020