# Sand Point Humboldt/Robert E Galovin Harbor

## Condition of Improvements 31 December 2022

### **Humboldt/Robert E Galovin Harbor**

Sand Point, Alaska (CWIS No. 074949)

**Authorization** Rivers and Harbors Act, 27 October 1965, as adopted under Section 201, 20 September 1970 (House Doc. 91-393, 91nd Congress, 2nd Session) and authorized by the Chief of Engineers, 29 September 1970, provides for construction of two rubble-mound breakwaters totaling approximately 1,635 feet in length, a protected basin with an area of about 16.6 acres, an entrance channel 120 feet wide by 1,200 feet long to a depth of -18 feet MLLW, a rubble-mound diversion dike 1,175 feet long, and a diversion channel 775 feet long. The project was authorized as Humboldt Harbor and is locally known as Robert E. Galovin Harbor.

Table 1

<b>Existing Project</b>	Length ft.	Width ft.	Depth ft.
Entrance Channel	1200	120	-18
North Breakwater	1025		
South Breakwater	740*		
Diversion Dike	1175		
Diversion Channel	775		

<sup>\*</sup>South breakwater has a 120-foot breach for the Sand Point New Harbor entrance channel starting 288 feet from shore.

**Project Usage** The small boat basin provides protected moorage for 230 local and transient fishing boats. It is also an important harbor of refuge for commercial fishing vessels in the Alaska Peninsula region.

#### **Progress of Work**

1975	Contract is awarded in June and construction begins in August.
1976	Project is completed in July 1976.
1987	June, a survey of the south breakwater is conducted to determine possible erosion. The survey indicates no damage to the breakwater as constructed by the Corps.
1991	A condition survey of the harbor is performed in August.

## **Progress of Work**

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1993	Sampling and testing of bottom material is accomplished followed by maintenance dredging in November with only 817 cubic yards of material removed within the project dimensions. The contractor reports that hard bottom conditions prevented dredging activity.
2002	A condition survey is conducted in August.
2006	The latest condition survey is carried out in June, and aerial photography is taken in May.
2007	The 740-foot south breakwater is breached to create the entrance channel for Sand Point New Harbor. The breach is 120-foot wide and approximately 288 feet from shore.
2010	A condition survey was conducted in July.
2012	USACE Comprehensive Evaluation of Project Datums Compliance report completed and recorded in September.
2014	A condition survey was conducted in July.
2019	A condition survey was completed in May.
2020	A magnitude 7.8 earthquake occurs on July 21st with an epicenter approximately 60 miles southeast of Sand Point. The breakwater is surveyed in August and inspected in September. The breakwater slopes appeared to be in good condition showing neat slope lines with no evidence of stone movement down the slopes. Armor stone had good stone to stone contact. The post-earthquake survey shows that the nose of the north breakwater experienced some settlement from the earthquake. No repair work is recommended because the breakwaters are intact and able to perform the function of protecting the mooring areas of the harbor.

**Table 2 Cost to Date** 

Project	Description	Cost \$
74949	CG Costs	3,679,683
	O&M Appropriation	309,536
	O&M Costs	284,936

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 9450 Sand Point AK	5.19	7.23	15.40

NOAA Publication Date: 10/06/2011

**Controlling Depth** A depth of -6.6 feet MLLW controls the entrance channel near the sheetpile bulkhead, August 2020.

#### **Maintenance Dredging Supplement**

#### A. General

- 1. The Federal project was dredged in 1993 for the first time since construction (1976).
- 2. Material was apparently present for dredging within the basin along the southerly project limit, but that portion of the project was found to be undredgeable with the conventional hydraulic cutterhead resulting in a substantial under run; only 817 cubic yards were removed from the project in November 1993 from a possible 2934 cubic yards.
- 3. Local interests have the maneuvering area dredged to project depth sometime from 1998 2001.
- 4. The dredging window runs from 16 July to 14 May. Fall and winter dredging activity would be preferred to avoid conflicts with fishing vessels.

#### B. Sampling and Testing

- 1. Two sites were sampled in the Federal project and classified as silty sand (SM), the upland disposal and marine disposal sites were classified as silty sand (SM), and the inner harbor site was classified as silt with sand (ML), January 1993.
- 2. Chemical analysis was conducted using (6) tests as outlined with results below:

**Table 4 Chemical Testing** 

Method	Chemical analysis	Results
8080	Pesticides and PCB's	ND (none detected)
8270	Semi-volatile Organics	Fluoranthene 2.1 ppm*, all others ND or below management levels
8260	Volatile Organic Compounds	ND
6000-7000's	(8) RCRA Metals	(5) of (8) detected; Cadmium 5.9 - 13 ppm**, all others below management levels
415.1	Total Organic Carbon	0.44 - 2.2 %
160	Total Solids	43.0 - 71.0 %

<sup>\*</sup> Found in the inner harbor outside the Federal project; minimum management level 1.7 ppm.

<sup>\*\*</sup> Found above minimum management level of 5.8 ppm for all samples.

#### C. Disposal

- 1. Dredge spoils were conveyed via a portable pipeline from the floating dredge plant to a bermed site within the harbor.
- 2. The upland site was contained by a stone breakwater and constructed as an extension of the fill behind the sheet pile bulkhead. The axial dimensions are roughly 130 by 250 feet with the site center at 55°19'58.709"N latitude and 160°29'43.488"W longitude. An alternate deep-water site (3330 feet x 4350 feet) is located about 1.85 miles south of the project in Popof Strait with depths in excess of 120 feet. Corners have the following geographic coordinates:

**Table 5 Disposal Location** 

Corner	Latitude (N)	Longitude (W)	
1	55°19'03"	160°32'58"	
2	55°19'03"	160°31'44"	
3	55°18'30"	160°31'44"	
4	55°18'30"	160°32'58"	

3. Future disposal can use the current upland site; there is room to expand another 600 feet adjacent to the Federal project.

#### D. Environmental Permits and Reports

- 1. The U.S. Fish and Wildlife Service issued a Coordination Act Report in December 1985, and the Corps released a Draft Environmental Impact Statement in 1986.
- 2. The following permits or authorizations are listed by agency below:

**Table 6 Environmental Permits** 

Agency Name	<b>Date of Issue</b>	Date of Expiration
AK Department of Governmental Coordination.	June 30, 1987	n/a
AK Department of Environmental Conservation	July 2, 1987	n/a
Environmental Protection Agency	June 8, 1905	n/a
Department of the Army	August 1, 1992	n/a

3. Water Quality: Four physical parameters were recorded at five sites, two within the Federal project, one in the harbor basin, one at the intertidal disposal site, and one at the proposed deep water disposal site. Temperature, pH, salinity, and conductivity were measured, January 1993; no chemical analysis was conducted.

## **Humboldt / Robert E Galovin Harbor, Sand Point AK**



Oblique of Humboldt / Robert E Galovin Harbor , July 2014



Humboldt / Robert E Galovin Harbor, May 2019