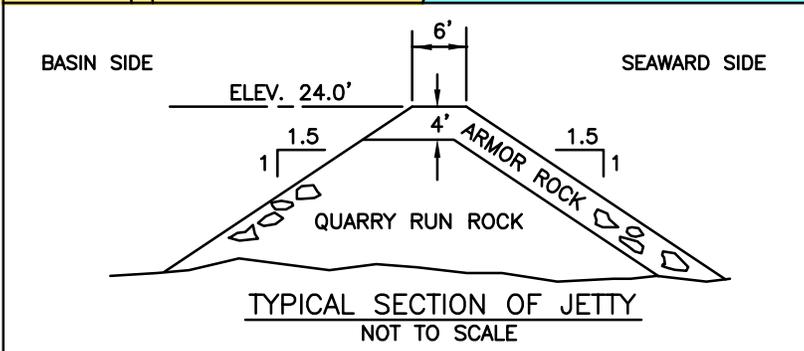
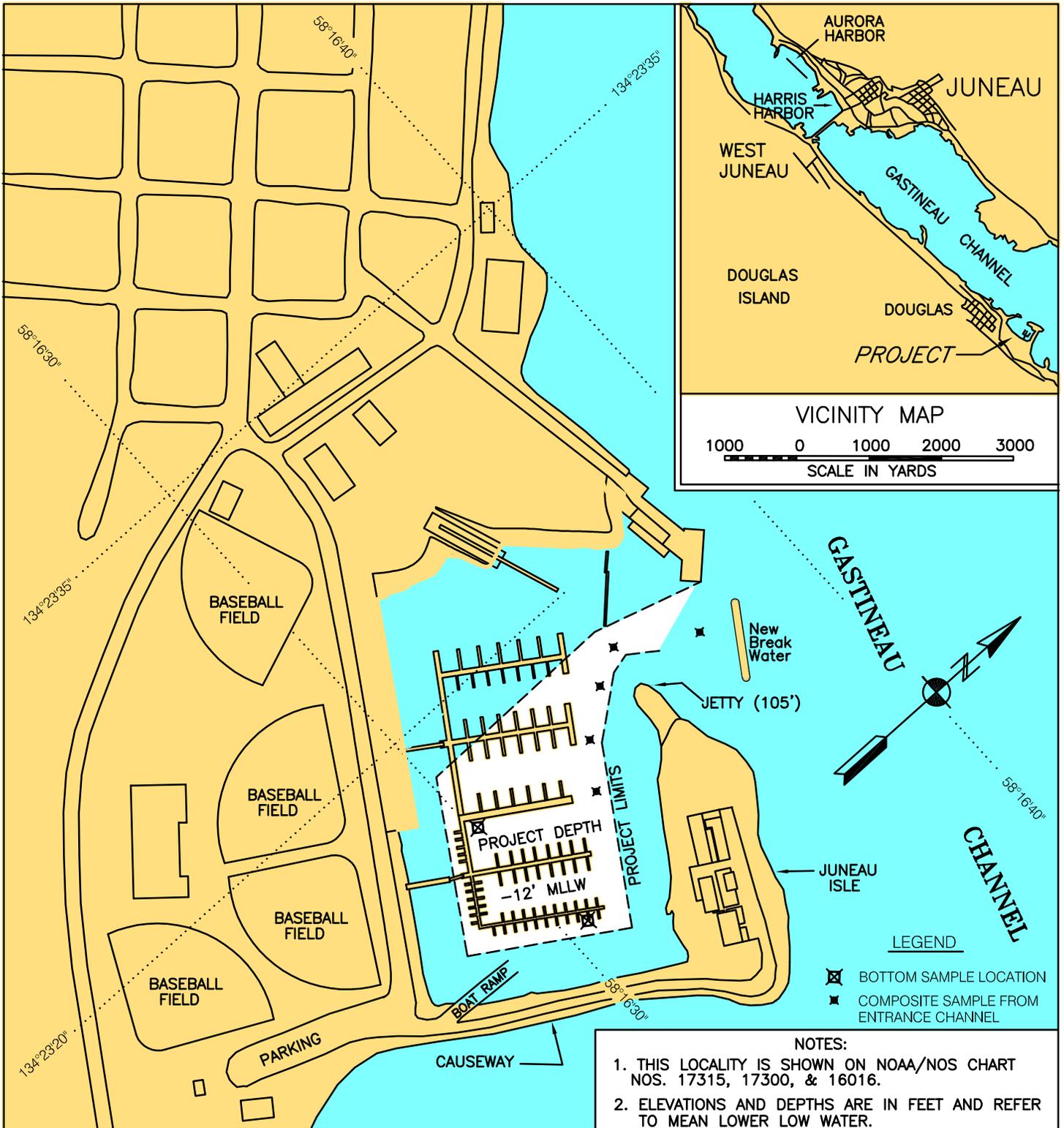


Douglas Harbor



DOUGLAS HARBOR
ALASKA

REVISED 2009

200 0 200 400 600

SCALE IN FEET

Condition of Improvements
 30 December 2014
Douglas Harbor, Alaska
 (CWIS No. 072789, 180942)

Authorization Rivers and Harbors Act, 3 July 1958 (House Doc. 286, 84th Congress, 2nd Session) as adopted, provides for a boat basin of 5.2 acres with entrance channel both to a depth of -12 feet MLLW and protected by a rock jetty about 90 feet long off the northerly shore of Juneau Isle adjacent to the basin entrance.

Table 1

Existing Project	Length (ft.)	Width (ft.)	Depth (ft.)
Basin	400	380	-12
Entrance Channel	345	60	-12
Jetty	105		
Floating Breakwater	230		

Project Usage The small boat basin provides protected moorage for 100 small craft. Douglas Harbor is one of three Corps of Engineers projects that provide moorage for the large commercial fleet and recreational vessels in the Juneau/Douglas area (see Juneau Harbor and Gastineau Channel). The government, commercial fishing, and tourism provide a unique and diversified economy in the metropolitan area. All transportation to the area is by sea or air.

Progress of Work

1961	Plans and specifications are prepared and the contract is awarded.
1962	Construction of the breakwater begins in January and is completed in June. Dredging of the basin follows in June and is completed in August. The finished project includes gravel berm protection, gravel slope protection, and quarry run slope protection rock.
1993	A condition survey is performed in April.
1995	Sampling and testing of harbor sediments is conducted.
1997	The entrance channel is straightened and dredged to two feet over project depth; 24,242 cubic yards of material are removed within the new limits.
2000	The condition of the Federal project is checked by hydrographic survey in May.

Progress of Work

2003	A Detailed Project Report is completed and approved in April for expansion of the project. Vertical aerial photography is obtained in May.
2004	A condition survey is performed in May.
2007	Breakwater plans and specifications are prepared to protect the new mooring area. Construction is scheduled for 2008.
2009	A project condition survey is completed in August.
2011	The project is selected to participate in a pilot program where the Corps provides engineering and design assistance to the local community for dredging the Federal project. Funds were received in late August to initiate the project and assist the community in obtaining environmental clearances for dredging the boat basin.
2012	A new concrete floating breakwater 230 feet long, 18 feet wide, and 8 feet tall with 20 inches of freeboard and supported by pipe plies, was installed in the entrance channel. USACE Comprehensive Evaluation of Project Datums Compliance report completed and recorded in September.
2013	A condition survey was performed in May. In addition to the project limits, a proposed disposal area was surveyed. There are 12,215 CY available to Project depth and 4,605 CY available along the side slopes.

Table 2 Cost to Date

Project	Description	Cost \$
072789	O&M Appropriation	1,173,240
	O&M Costs	1,075,214
180942	CG Appropriation	4,614,246
	CG Costs	4,614,246
	CG Contributed Appropriation	1,100,000
	CG Contributed Costs	1,083,057

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

Controlling Depth: A depth of -5.3 feet MLLW controls along the southern edge of the harbor basin in 2013.

Maintenance Dredging Supplement

A. General

1. The first maintenance dredging for this project is conducted Aug-Sep 1997 (a 35 year span).
2. The entrance channel was straightened and dredged under the 1997 dredging contract.
3. A “no dredging” window from 15 April to 15 June is established by the State of Alaska.

B. Sampling & Testing

1. A composite of five samples taken from the entrance channel were classified as silty sand (SM). Samples from two sites within the harbor were classified as silt with sand (ML), January 1995.
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	Acetone, 0.090 - 0.500 ppm*, 2-Butanone, 0.036 - 0.250 ppm*
8270	Semi-Volatile Organic Compounds	Fluoranthene, 2.9 - 3.5 ppm**, Chrysene, 1.9 ppm**
8080	Pesticides and PCB's	ND (none detected)
Series 6000-7000's	(8) RCRA Metals	Mercury, 1.54 - 2 ppm ***
350.2	Ammonia as Nitrogen	31 - 380 ppm
415.1	Total Organic Carbon	1.01 - 1.66 ppm
9030	Total Sulfides	40 - 2800 ppm
160.1	Total Solids	36.6 - 63.4 %

* Possibly caused by laboratory contamination; (8) other TIC's (tentatively identified compounds) were found in low concentrations.

** Found in the inner harbor and may be considered above the minimum management threshold.

*** All samples above minimum management threshold for mercury; all others below management levels or not detected.

C. Disposal

1. Two dredge disposal sites were considered as possibilities for the 1997 contract: one, a shallow water site across Gastineau Channel requiring additional improvement, and a deep water site (> 100' deep) near the project entrance.

- The deep water site was selected for this contract with the following NAD 27 geographic coordinates.

Table 5 Disposal Area

Corner	Latitude (N)	Longitude (W)
1	58°16'38.31"	134°22'49.88"
2	58°16'42.08"	134°22'58.05"
3	58°16'44.51"	134°22'54.00"
4	58°16'40.75"	134°22'45.83"

- Various options, including the possibility of upland disposal, must be considered for future soils disposal.

D. Environmental Permits and Reports

- An Environmental Assessment (EA) was disseminated by the Corps, 28 April 1997, and a Finding of No Significant Impact (FONSI) was signed by the District Engineer on 19 June 1997; a Chemical Data Report was previously prepared by the Corps in April 1995 subsequent to the sampling and testing of harbor sediments.
- The following permits or authorizations are listed by agency below:

Table 6 Environmental Permits

Agency Name	Date of Issue	Date of Expiration
AK Department of Governmental Coordination	6/16/1997 *	n/a
AK Department of Environmental Conservation	June 18, 1997	n/a
US Fish and Wildlife Service	May 14, 1997	n/a

**Indicated review by ADEC, ADF&G, ADNR, and the Juneau Coastal District.*

- Water Quality Seven physical parameters were measured at three locations through the water column, January 1995; temperature, pH, conductivity, oxidation-reduction potential (ORP), turbidity, dissolved oxygen, and salinity were measured in the field. No chemical analysis was conducted. Seven sediment samples were collected for mercury analysis in June 2008. Two of the samples exceeded the PSDDA screening level and the rest are believed to be impacted by a low bias from matrix interferences.

Douglas Harbor, Douglas, Alaska



Oblique of Douglas Harbor, 30 July 2013.



Douglas Harbor, 2013.