### GASTINEAU CHANNEL JUNEAU



#### GASTINEAU CHANNEL, ALASKA (CWIS NO. 72794)

#### Condition of Improvement 30 September 1998

**AUTHORIZATION:** Rivers and Harbors Act, 2 March 1945 (House Doc. 325, 77th Congress, 1st Session) as adopted, provides for a channel from Juneau to Fritz Cove, approximately 5.5 miles long and 75 feet wide with a depth of 0.0 feet MLLW.

EXISTING PROJECT:									LENGTH	<u>DEPTH</u>	WIDTH				
٠	Channel .								•		•	•	28,667 ft	+10 ft	75 ft

**PROJECT USAGE:** Gastineau Channel provides direct access from the Juneau/Douglas area to fishing grounds north of the cities and saves about 20 miles over the alternate route around the south end of Douglas Island. More than 1,000 commercial fishing and recreational vessels are berthed in the Juneau/Douglas complex (see Juneau and Douglas Harbors).

#### **PROGRESS OF WORK:**

- 1958 Hydrographic survey and pre-design investigations are carried out in October.
- 1959 Plans and specifications are completed and a contract is awarded in April. Dredging of the channel begins in August and continues into October.
- 1960 Dredging is resumed in March and successfully completed over the length of the channel in July.
- 1962 Serious shoaling is apparent in the channel, particularly at the mouths of Jordan, Sweitzer, and Lemon Creeks. The Committee on Tidal Hydraulics begins an in-depth study of the problem.
- 1964 A WES (Waterways Experiment Station) model study is undertaken over a three year period through 1967.
- 1972 Based on the results of previous studies, the Corps rejects a proposal to re-dredge the channel.
- 1978 A survey report on the revised project, including new economic justification, determines the project is not feasible due to the excessive cost of annual maintenance dredging.
- 1998 The entire channel is surveyed in April.

COST TO DATE:	New Work	Maintenance	Total
	\$ 789,461	\$ 252,284	\$ 1,041,745
RANGE OF TIDE:	<u>Mean Range</u> 13.8'	<u>Diurnal Range</u> 16.4'	Extreme Range 28.4'

**CONTROLLING DEPTH**: The worst depth encountered was +10.2 feet MLLW about 100 feet south of day beacon 17. The shallowest portion of the channel runs between day beacons 15 and 17, April 1998.

## Gastineau Channel, Alaska



Survey vessel aground at low tide, April 1998.



A navigation aid marking a section of the channel, April 1998.

# Gastineau Channel, Alaska



Aerial view of the Gastineau Channel adjacent to the Juneau Airport taken in August 2011.