Skagway River

Condition of Improvements
31 December 2022
Skagway River, Alaska
(CWIS No. 000013, 016900, 091000)

Authorization Rivers and Harbors Act, 20 June 1938 (House Doc. 547, 75th Congress, 3rd Session) as adopted, provides for a rock, brush, and earth training dike 6,700 feet long on the east bank of the Skagway River, and a rubble-mound breakwater 1,800 feet long across the tide flats as a prolongation of the training dike.

Modification Flood Control Act, 24 July 1946 (House Doc. 695, 79th Congress, 2nd Session) as adopted, provides for (1) restoration of the existing breakwater (1,800 ft) to the original project cross-section, construction of a 300 foot extension thereto, and the addition of two groins on the river side, (2) reconstruction and extension of the existing dike (6,700 ft) adjacent to the city, and (3) reconstruction of the existing dike at the sanatorium.

Table 1

Existing Project	**Length** ft.
Training Dike	6700

Project Usage This project provides flood protection for the business and residential areas of Skagway.

Progress of Work

1939	Construction of the dike and breakwater commences in September.
1940	The original project is completed in June with Government plant and hired labor.
1946	Emergency repairs are made to the dike under authority of the Flood Control Act of 12 July 1943.
1950	The Definite Project Report, approved in 1950, deleted the sanatorium dike (due to relocation of sanatorium) and the groins, and provided for an increased cross section of the dike and breakwater.

Progress of Work

1951	Extensive emergency repairs are made to the dike, including modification of the channel and raising the elevation of the 23rd Avenue Bridge 4 feet. Work was conducted pursuant to the Flood Control Act approved 30 June 1948 and additional river clearing under Section 3 of the River and Harbor Act, 2 March 1945.
1966	A re-study of the project is completed, and a negative report submitted. The project is placed on the "deferred" status.
1968	The breakwater below station 10+00, including the proposed extension, is incorporated into a fill constructed by the White Pass and Yukon Railroad.
1986	The modifications authorized in 1946 are de-authorized (Public Law 99-662, 17 November 1986, Section 1002). Annual inspections indicate, however, that extensive repairs are needed; local interests have been notified.
1993	The City of Skagway has corrected the most critical deficiencies in the project. The Alaska District and the State of Alaska are looking at potential upgrades to the project. The Corps continues to perform annual inspections in keeping with the agreement of local cooperation.
1998	The project is found to be in satisfactory operational condition.
1999	Construction activities at the airport bury some of the physical features of the project. No inspection by Corps personnel is conducted.
2000	Inspection finds some displacement of armor stone upstream from the airport. Locals have been notified of the needed repair.
2005	The Corps inspector finds the remaining 500 feet of federal dike to be in good condition. The City has constructed and maintains the revetment above and below the federal works.
2007	The condition of the project is given a “poor” rating under the National Levee Safety Program and the City is notified.
2008	The overall rating for the levee system is Acceptable; however, a few maintenance deficiencies were found during the inspection.
2009	Overall inspection rating is acceptable.
2010	The Skagway Levee was inspected September 2010. The levee was in good condition along the section parallel to the airport. Vegetation was starting to take over along the North end on both side slopes.
2011	An October inspection found the levee in an acceptable condition; vegetation was removed on the levee, but additional removal is needed. Encroachments also need to be removed. Areas of minor rip rap launching need to be monitored.

Progress of Work

2012	An October inspection found vegetation needed to be removed and encroachments. Once culver needed to be replaced.
2013	The levee system received an overall rating of Minimally Acceptable based on unwanted vegetation growth and erosion and the metal culverts have not had a complete visual inspection.
2014	The Skagway Levee was inspected in October. The levee was in good condition along the section parallel to the airport. Vegetation was starting to take over along the North end on both side slopes.
2015	The levee system was inspected received an overall rating of Minimally Acceptable.
2016	The levee system was inspected received an overall rating of Minimally Acceptable. Culvert inspection issues were addressed. The remaining reason for the minimally acceptable rating is evidence of riprap launching along the toe of the riprap revetment.
2017	The levee system was inspected received an overall rating of Minimally Acceptable. Review of airport revetment construction drawings show that erosion has launched the revetment toe in some locations.
2019	The Skagway Levee was inspected in October. The levee was in good condition along the section parallel to the airport. Vegetation was starting to take over along the North end on both side slopes. A Section 408 request was approved to construct a levee on the right (west) bank of the Skagway River downstream of the Klondike Highway Bridge.
2021	The levee system was inspected in June and received an overall rating of Minimally Acceptable. Erosion of the riverbed at the toe of the revetment was noted, as well as thick vegetation on the levee with trees approaching two inches in diameter.
2022	USACE inspected the levee on 3 May 2022 and found the levee to be in a minimally acceptable condition. Vegetation growth and riprap erosion issues were noted and communicated to the sponsor. A new risk assessment was finalized for the project using the Levee Screening Tool.

Table 2 Cost to Date

Project	Description	Cost $
091000	CG Appropriations	33,885
	CG Costs	7,500

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 2400 Skagway, Taiya Inlet AK	14.11	16.73	32.92

NOAA Publication Date: 02/16/2018

Skagway River Levee, Skagway, Alaska

Oblique of Skagway , 2009

Downstream view of the Skagway River Levee, June 2021

Skagway River Levee, Skagway, Alaska

Skagway River Levee near Klondike Highway Bridge,June 2021

Upstream view of the Skagway River Levee along the runway, April 2019