

Washington Northern Coastal Drainage

This area lies in the northwest corner of the Olympic Peninsula between the Chehalis River system and the Strait of Juan de Fuca and from the Pacific Ocean to the crest of the Olympic Range. The coastal area is dominated by high mountainous uplands with deep narrow valleys and forest-covered slopes. The climate of this coastal margin is moderate and humid. The temperature seldom rises above 90° F in summer, or drops below 20° F in winter. Annual precipitation ranges from 60 to 110 inches along the coast, to as much as 200 inches along the summit of the Olympic Mountains.

Neah Bay

Completed Navigation Project (Seattle District) Neah Bay lies just inside the Strait of Juan de Fuca. A U.S. Coast Guard station is located in the bay along with commercial wharves and logging facilities. Strong ocean winds and tides were a constant threat to navigation until a rubblestone breakwater was constructed by the Corps from Waada Island to the western shore of the bay in 1944. The breakwater gives protection to a large fishing fleet, pleasure craft, and other light and medium draft vessels. In 1979, the Corps began rehabilitation of approximately 4,000 lineal feet of the 8,200-foot breakwater. The work was completed in fiscal year 1981. The entrance to Neah Bay is between the southeastern tip of Waada Island and Baada Point. A rock revetment completed in 1956 extends 3,000 feet west from Baada Point, protecting the shoreline from erosion and preventing shoaling in the bay near the entrance. Federal investments through September 1998 totaled \$2,057,266 for new work and \$2,080,659 for maintenance. Commerce in 1997 totaled 93,000 tons.

Neah Bay

Completed Bank Protection, Section 14 (Seattle District) An emergency bank protection project has been constructed to protect the only access into the town of Neah Bay. The project was accomplished under the authority of Section 14 of the 1946 Flood Control Act. Total cost of construction was \$332,428 (federal funds \$253,995). Construction was completed in October 1990.

Neah Bay

Section 107 Navigation Project, Clallam County (Seattle District) Neah Bay is located on the southern shore of the Strait of Juan de Fuca, about 6 miles east of Cape Flattery on the Olympic Peninsula on the northwest tip of Washington State, and about 150 miles northwest of Seattle. The project is located within the Makah Indian Reservation. With the growth of the winter fishery, tribal fishing boats have needed protected, year-round moorage closer to the fishing grounds near the entrance to the Strait of Juan de Fuca. Prior to construction of the new breakwater, tribal fishermen would moor their boats 60 miles away, or risk

damage to their boats during adverse weather. The lack of nearby safe moorage imposed significant commute time on tribal fishermen and required them to enter into annual moorage leases at Port Angeles. The federal project consists of two rubblemound segments (1,450 feet and 350 feet), an entrance channel 800 feet long by 100 feet wide by 15 feet MLLW. The non-federal portion consists of floats, finger piers, and related facilities for moorage of up to 200 boats, vehicle parking, and restoration of adjacent intertidal habitat. Construction was initiated in September 1995 and completed in December 1995. Construction costs through September 1998 were \$3,848,920 (federal) and \$528,188 contributed funds. Under current cost sharing requirements, the local sponsor (Makah Indian Nation) is responsible for 20 percent of project costs and operation and maintenance of their features. A Project Cooperation Agreement was executed on May 2, 1995. Marina construction (100 percent non-federal) was delayed by federal fiscal year 1996 budget shortfalls, which resulted in a lack of funding of construction grants applied for by the Makah Tribe. Final design efforts were begun in spring of 1996 and marina construction began in September 1996. The marina was completed in May, and was dedicated on May 16, 1997.

Quillayute River

Completed Navigation Project (Seattle District) The Quillayute River provides the only harbor of refuge on the Washington coast between the Strait of Juan de Fuca, 30 miles north, and Grays Harbor, 62 miles south. Proximity to the fishing banks and absence of an entrance bar have made this harbor a favorite base for both sport and commercial fishermen. The Coast Guard mans a search and rescue station at La Push. The federal project, completed in 1960, includes a 2.3 acre small-boat basin and facilities for protecting the channel entrance. The Corps is responsible for maintenance dredging of the entrance channel and boat basin. The spit protecting the river entrance channel and boat basin from ocean storms was rehabilitated in the summers of 1978 and 1979 at a total cost of \$1,300,000. Again in 1982, 1,580 feet of the upper spit was rehabilitated, and a 500-foot lower spit breakwater was constructed at a cost of \$1,778,500. In the fall/winter of 1995, 200 feet of jetty was added to the lower spit and the entire spit revetment was rehabilitated. The boat basin training wall toe rock was raised three feet and rehabilitated. This work also included maintenance dredging. In 1996-1997, 1,700 feet of armored rock revetment was added to the upper spit to restore a 1996 break in the ocean spit. The boat basin training wall was raised from elevation +9.0 feet to elevation +16 feet. Federal cost through September 1998 was \$521,850 for new work and \$24,664,299 for maintenance. In addition, \$20,000 in contributed funds were expended on new work and the Port of Port Angeles spent \$46,000 for construction of mooring facilities and a public boat landing. Commerce in 1997 totaled 16,000 tons.

Taholah Seawall

Shore Protection Project, Section 14 - Completed (Seattle District) A 1,200-linear-foot seawall at Taholah received approval and funding in September 1978 under the authority of Section 14 of the 1946 Flood Control Act. The project was completed in the fall of 1978 at a cost of \$223,893.

Clallam Bay at Sekiu

Shore Protection Project (Seattle District) In 1993, at the request of Clallam County, Seattle District investigated the need for a shore protection project to protect Clallam Bay's wastewater treatment plant. Study was conducted under the authority of Section 14 of the 1946 Flood Control Act. Total cost of construction was \$218,618 (federal funds \$178,800). Construction was completed in November 1994.

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