



Hood Canal Bridge West-Half Retrofit and East-Half Replacement Project

History

Building a Bridge: In the Beginning



Crews construct columns and a transition span for the Hood Canal Bridge in 1958.



The first Hood Canal Bridge pontoons are floated out of Tacoma in 1960.



Cars travel the Hood Canal Bridge after the 1961 opening.

The Hood Canal Bridge is the longest floating bridge in the world located in a saltwater tidal basin. Construction began in 1958 and the bridge opened to traffic in 1961. It was the second concrete floating bridge constructed in Washington State.

The full title of the Hood Canal Bridge is the William A. Bugge bridge, named after the director of the Department of Highways from 1949 to 1963. Bugge was a leader in the planning and construction of the bridge. On February 13, 1979, a storm with wind gusts up to 120 miles per hour caused the west half of the bridge to fail and sink. In order to decrease the amount of time the bridge was closed to traffic, three pontoons were built in place of the draw span. A year later the draw span was built and floated in, and the three pontoons in its place were moored in Port Gamble Bay. These pontoons from the 1980s will be retrofitted to match the new east-half pontoons and used in the new east-half of the bridge.

Historical Construction Facts

- Construction of the Hood Canal Bridge, located on State Route (SR) 104, began January 1958 and opened to traffic on August 12, 1961.
- Cost to construct the original bridge was \$26.6 million.
- The pontoons for the floating bridge were constructed at a graving dock along the Duwamish River in Seattle and towed by tug boats to the bridge site.
- After the west half of the bridge sank in 1979, the costs for replacement of the west half and minor repairs to the east-half was \$143 million.
- The west-half replacement was complete in 1982 and the bridge was reopened to traffic.

Bridge Facts

- The overall bridge length is 7,869 feet, which is approximately 1.5 miles. It has a center draw span opening of 600 feet.
- The east approach span weighs more than 3,800 tons and the west approach span weighs more than 1,000 tons.
- Average daily traffic across the Hood Canal Bridge is approximately 15,000 vehicles. Peak volumes reach 20,000 vehicles on summer weekends.
- The water depth below the pontoons ranges from 80 to 340 feet. In its marine environment, the bridge is exposed to tidal swings of 16.5 feet.
- During inclement weather, the draw span is retracted (closing the bridge to vehicle traffic) when winds of 40 miles per hour or more are sustained for 15 minutes.