

More than 130 local fish and flood projects have been completed across the Chehalis basin coordinated and funded through the Office of Chehalis Basin (OCB). The diverse OCB board is comprised of local officials as well as tribal and environmental representatives. These projects are done in cooperation with the Flood Authority, local governments, tribes and the Aquatic Species Restoration team. Together these projects are action steps of the Chehalis Basin Strategy to restore aquatic species and to reduce flood damage for families and communities.

# Chehalis-Centralia Airport Pump Station Replacement Project Performs Flawlessly [Chehalis, WA]

## **Summary**

The Chehalis-Centralia Airport Pump Station Replacement Project involves the design and replacement of the WWII-era Airport pump station located at the northeast corner of the Chehalis-Centralia Airport property. During the 2007 flood event, the pump house was submerged, failed to operate (i.e., pump), and was subsequently shut down. This in turn necessitate breaching to existing airport levee to let the water out. The new pump design includes a redundant pump in case the primary pump fails during a significant flooding event.

#### The Problem

The Chehalis-Centralia Airport was one of many casualties as a result of the December 2007 flood. Failure of the 1940's WWII era pump necessitated a breaching of the airport levee and further added to the catastrophic impact and delayed recovery from the 2007 event.

### The Project

The purpose of the Airport Pump Project was to replace an aged WWII-era levee pump station located inside the levee at the northeast corner of the airport with a new modernized and flood-proofed redundant pump station with back-up generator and substantially greater pumping power. The new pump station has two new electric pumps capable of pumping 10,000 to 12,000 gallons per minute, a new generator capable of supplying electricity to the pump station in the event the local electrical grid should fail, and auxillary back-up pump capacity.



# The Impact

The new pump station protects the airport, commercial facilities, businesses, bike and jogging trail, and associated airport infrastructure, including roads, utilities, runway, etc. The new pump station is essential to maintaining the operational capability of the airport, especially during times of flood and other natural disaster emergencies.

According to a recent economic impact study conducted by the Washington State Department of Transportation, the Chehalis-Centralia Airport contributes 1,658 jobs, \$68,050,000 in labor income, and \$186,473,000 in business revenue annually to the state and local economy. This translates to \$1,267,630 in local tax revenue, \$7,839,860 in state tax revenue, and \$9,107,490 in total tax revenue. Read more <a href="here">here</a>.

In January 2022, the Basin was hit with a big flood. The replacement airport pump performed flawlessly.

- It pumped water continuously for several days at 10,000 gallons per minute or a total of 518,400,000 gallons of water!
- For the duration of the event, the entire area within the levee was protected from inundation. This translates to protecting millions of dollars of infrastructure, over 1,000 jobs, and ensuring continuity of local, and state tax revenue.

Chehalis-Centralia Airport Pump Station Replacement Project	
Cost	\$1,146,000
Start	10/01/2015
End	1/03/2018
Days to Complete	825 (2 years, 3 months)
Value Protected / ROI	\$44,856,300 / 39 to 1
Future Damage Avoided (Per Event) / ROI	\$1,000,000 / 1 to 1

#### Quotes

Said airport manager Brandon Rakes, "With funds from the Chehalis River Basin Flood Authority, the airport has been able to maintain itself as a central community asset in the basin." Rakes further adds, "The bang-for-the-buck generated by the state's investment in the airport pump project is incredible. For the \$1.14M spent by the state, nearly \$45M in assets are protected which in turn generate \$9M in tax revenue annually. This is an incredible investment for state taxpayers."



# **Photos**



Figure 2 – After, today's pump station

Figure 1 – Before, 1940's ear pump station

#### More pics . . .



Photo Credit: January 7, 2022, Steve Bankuti and Tanner (Scooter) Mainero





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