



**Shipwreck  
Productions**

## The Puget Sound Model

By Kevin Monahan

April 2022

In this world of computer modelling and computer simulation, it is refreshing to find a pure analog system for modelling physical processes. The Puget Sound model is one such model that is still used to demonstrate the patterns of tidal flow in Puget Sound.

The Puget Sound Model is an actual physical model of the underwater topography of Puget Sound from Point Wilson and Deception Pass in the north to Olympia in the south. Built to scale and measuring approximately 15 feet in length, the model is capable of reproducing tidal currents into and out of Puget Sound, both at the surface and at depth and also reproduces the effects of the discharge of fresh water from rivers in the Puget Sound Basin.

This marvelous model was constructed in 1950 by Clifford Barnes and John Lincoln at the University of Washington School of Oceanography and is still in use today as an educational tool. In the 21<sup>st</sup> century it has been largely superseded by computer simulations such as the Salish Sea Model, which is capable of modelling many different marine processes, and which covers a much larger area, including Juan de Fuca, Georgia and Queen Charlotte Straits, and the offshore waters from the Columbia River to northern Vancouver Island, to the edge of the continental shelf.

Youtube videos of the Puget Sound model reveal the model's complexity.

The Puget Sound Model: Construction and Operation ( [https://www.youtube.com/watch?v=0-2y\\_j66xAE](https://www.youtube.com/watch?v=0-2y_j66xAE) )

The Puget Sound Model: Puget Sound Geography ( <https://www.youtube.com/watch?v=WHrgZECoybA> )

The Puget Sound Model: Tides and Currents ( <https://www.youtube.com/watch?v=OEQP5BwVh7A> )

Oceanography and the Puget Sound Model ( <https://www.youtube.com/watch?v=dO4-O5JkWq4> )

Visit the site of the Salish Sea Model at the University of Washington ( <https://ecology.wa.gov/Research-Data/Data-resources/Models-spreadsheets/Modeling-the-environment/Salish-Sea-modeling> )

