

Ocean Acidification

Narrator: Beyond the breakers, 13 miles at sea off the Washington coast, a new sentinel: this buoy dubbed "Whale Tail." Among Whale Tail's multiple missions: measure carbon absorbed by the sea — the threat of ocean acidification.

Jan Newton: "Ocean acidification happens because on land, as we burn fossil fuels and create other releases carbon dioxide which go into the atmosphere, that carbon dioxide comes back into the ocean. You have increased CO₂ in the water and the water simply becomes more corrosive."

Narrator: Scientists at the Applied Physics Laboratory and the National Oceanic and Atmospheric Administration attract media attention with a new warning. Puget Sound faces a rising threat level posed by acidification.

Newton: "I would definitely say it's yellow and blinking at us."

Rep. Norm Dicks: "I have been in Congress for many years and of course this question of climate change and CO₂ is a major issue."

Narrator: And the subject of the recent motion picture *A Sea Change*. "Ocean chemistry is being altered on a scale not seen for millions of years and we don't know what the consequences will be."

One consequence feared by the Puget Sound shellfish industry: that acidification will eat away at the mussels and oysters they grow, harvest, and sell.

Newton: "Their shells will start to dissolve."

Narrator: Also at risk: pteropods, a favored food for salmon.

Richard Feely: "It permeates through the food chain all the way up to the upper levels. It'll affect whales. It'll affect walruses. It'll affect salmon and birds and mammals."

Narrator: Whale Tail is the latest addition to a growing network of buoys.

Matthew Alford: "The buoy is an APL product and there are NOAA sensors riding on the buoy. We're measuring the pH, which tells us directly how acidic the water is becoming."

Dicks: "These buoys are going to give us real time data every single day on the condition — the health — of Puget Sound, Hood Canal, and the coast of Washington."

