

Hugh Shipman

Managing Development On An Eroding Shoreline: Challenges For Puget Sound

Biography

Hugh Shipman is a coastal geologist with the Department of Ecology, Washington State's Coastal Program. He specializes in shoreline erosion, coastal natural hazards, and environmental geology, providing technical assistance to state and local agencies and public education to shoreline property owners. Hugh is particularly interested in littoral drift, alternative erosion control techniques, and the environmental impacts of shoreline modification. He received a B.A. in Earth Sciences and Engineering from Dartmouth in 1981 and an M.S. in Geological Sciences at the UW in 1986. He grew up on the coast of Maine, but is now firmly rooted in the Pacific Northwest.

Presentation Abstract

Historical modifications of the Puget Sound shoreline have disrupted natural processes, leaving the region with a legacy of eliminated or severely modified nearshore ecosystems. Modern regulations largely preclude the industrial fills and canaled residential communities of the past, but do not address well the the cumulative impacts of small scale, residential development that currently accompanies the region rapid urban development.

Efforts to control erosion eliminate sources of littoral sediment, modify beach hydrology, and sanitize the aquatic-terrestrial edge. Erosion threatens upland development, yet it is critical to the long-term sustainability of nearshore habitats. Solutions include unpopular restrictions on residential land uses, the development and application of softer erosion control techniques, and creative approaches to restoring natural habitat functions in heavily urbanized areas.