Sediment Quality In Hood Canal
*Sandra Aasen, Margaret Dutch, Kathy Welch, Ed Long
Washington State Department of Ecology

Keywords: Sediment Quality Triad, Hood Canal, PSAMP

Sediment quality in Puget Sound is monitored by the Department of Ecology annually as a component of the Puget Sound Ambient Monitoring Program (PSAMP). The primary objectives of this program are to quantify the spatial extent and geographic patterns of degraded sediment quality. During June 2004, the Department of Ecology collected sediment from 30 stations in Hood Canal, selected with a stratified-random sampling method. Using the Sediment Quality Triad approach, samples were analyzed for quantification of 118 potentially toxic chemicals, urchin fertilization toxicity, and to evaluate the structure of the infaunal community. Results of these analyses were used to identify spatial patterns and spatial extent of the degraded sediment quality in the Hood Canal sampling region. Data indicate that chemical contamination and toxicity of the sediments in the canal are low, and infaunal communities tend to display a decrease in total abundance and species richness in the central and southern portions of the canal. Values are compared with sediment data collected previously in this region to determine whether changes in these triad parameters are evident over time, and whether any relationships between the variables are evident.