

PUGET SOUND VITAL SIGNS

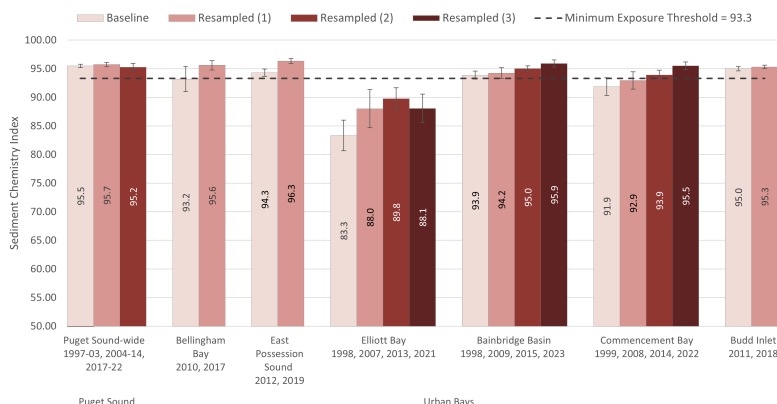
INDICATOR SEDIMENT CHEMISTRY INDEX

The Sediment Chemistry Index (SCI) combines data on the concentrations of selected chemicals for which state Sediment Quality Standards Chemical Criteria have been set into an overall index of chemical exposure. Sediment quality is a key indicator of a healthy ecosystem, and high-quality sediments support a diverse and important biological community.

Indicator
Progress



Target Status



The Sediment Chemistry Index ranges from 0 to 100, with higher index values indicating less exposure to chemicals and thus healthier sediments. Sediments sampled between 1997 and 2022 met or exceeded the SCI threshold value of 93.3 in greater Puget Sound (error bars represent the 95% confidence intervals). Sediments sampled between 1998 and 2023 met or exceeded the SCI threshold value of 93.3 in five of six Puget Sound urban bays.

Target

No targets are currently set for this indicator.

Data Source

Department of Ecology's
Environmental Information
Management (EIM) System: Marine
Sediments

Indicator Lead

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Key Vital Sign Indicator Results

- The Sediment Chemistry Index (SCI) can range from 0 to 100, with higher values indicating less exposure to chemicals and thus healthier sediments. Values greater than or equal to 93.3 reflect minimum exposure to harmful contaminants.
- Sediments in greater Puget Sound sampled between 1997 and 2022 were in good condition with regard to the measured set of chemicals. SCI measures were above the minimum exposure threshold value.
- Five of six urban bays sampled from 1998 through 2022 also show sediments in good condition or improving. SCI scores in Elliott Bay have improved from baseline sampling in 1998, but still do not reach the threshold level of minimum exposure.
- Sediment contamination typically changes very slowly over time unless contaminant inputs increase. SCI values generally held stable in subsequent rounds of sampling (did not make gains or lose ground relative to the baseline), therefore, progress for this indicator is assessed as No Trend.

CONTRIBUTING PARTNERS



TO LEARN MORE ABOUT THE VITAL SIGNS VISIT: vitalsigns.pugetsoundinfo.wa.gov OR CONTACT: vitalsigns@psp.wa.gov