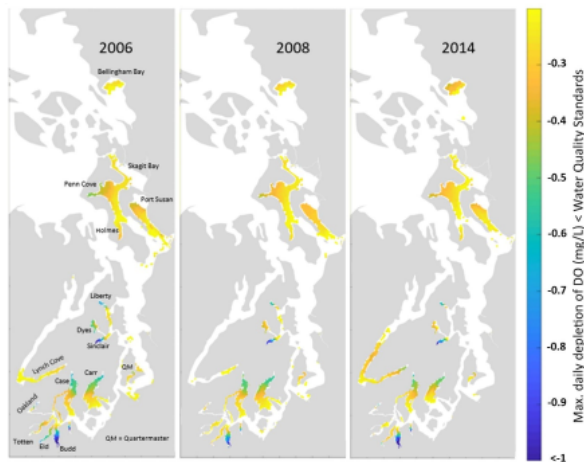


PUGET SOUND VITAL SIGNS

INDICATOR DISSOLVED OXYGEN IN MARINE WATERS

This indicator reports on the modeled reduction of dissolved oxygen in marine waters caused by human impacts. Low dissolved oxygen in marine waters can create significant problems, such as extensive fish kills in extreme conditions. Excessive nitrogen and carbon from human activities can create or exacerbate the conditions that lead to low oxygen in Puget Sound.



Model results for the spatial distribution of the maximum daily dissolved oxygen (DO) depletion below the water quality standard in 2006, 2008, and 2014. Areas that are green to blue show the highest levels of predicted DO depletion resulting from human-related contributions of nitrogen.

Key Vital Sign Indicator Results

- Human sources of nutrients have a significant impact on dissolved oxygen in Puget Sound in multiple embayments.
- The cumulative impact of all human activities cause dissolved oxygen concentrations to decrease by more than 0.2 mg/L at multiple locations throughout Puget Sound.
- In several areas throughout Puget Sound, human-related oxygen depletion persists for three months or more.
- A combination of nutrient reductions from marine point sources and watershed sources will be needed to meet the indicator target.

Contributing Partners



Indicator
Progress

Indicator
Status



Recovery Target

By 2020, human-related contributions of nitrogen do not result in more than 0.2 mg/L reductions in dissolved oxygen levels anywhere in Puget Sound.

Data Source

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