

Eyes Over Puget Sound

http://ecy.wa.gov/programs/eap/mar_wat/eops/

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Up-to-date observations of visible water quality conditions in Puget Sound and the Straits

Field log

Weather

Water column

Aerial photos

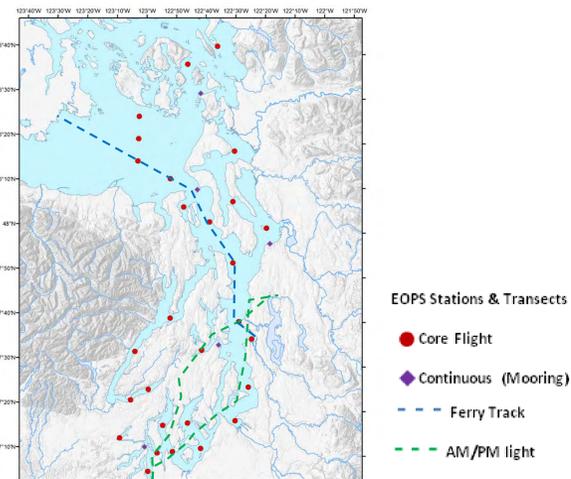
Ferry and Satellite

Moorings

Eyes Over Puget Sound (EOPS) was started as a cost-effective way to utilize transit flights between Seattle & Olympia to document surface features:

- Blooms
- Plumes & fronts (water mass boundaries)
- Debris
- Animal aggregations
- Oil sheens

EOPS is updated monthly. Examples of previous reports are shown.



EOPS focus on surface variability provides:

- Up-to-date snapshot of visible observations at the water surface
- A public resource with educational value and a unique perspective
- Information on location, characteristics and duration of surface features presented on multiple temporal and spatial scales

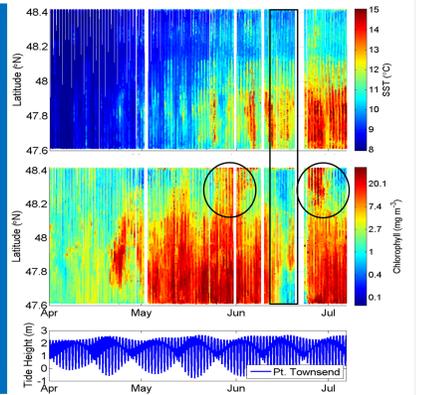
Victoria Clipper Surface Transects

Widespread algae bloom in Main Basin continues...

Temperatures have warmed to ~14-15 °C.

Brief clearing (black box) of Main Basin waters in mid-June (i.e., reduced fluorescence and turbidity); associated with cooler surface temperatures and higher winds generating more mixing in the near-surface waters.

Two intense blooms observed across Strait of Juan de Fuca (black circles).



Marine flight 3, Central Sound Jun. 20, 2011

It was an action-packed field day, which was fitting for the longest day of the year. We enjoyed clear, sunny skies and calm, flat water. If you have seen Central Sound lately you may have noticed some shocking orange streaks on the surface of the water. We stopped and took a sample near Indianola and later confirmed it was *Noctiluca*, a plankton species that is not harmful to human health. (Although I wouldn't jump in it!) To learn more visit our website: http://www.ecy.wa.gov/programs/eap/mar_wat/mwalgae.html.

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Nautiluca patches in Central Sound



Summary: Aerial Photography Jun. 20, 2011

Extensive *Noctiluca* bloom (confirmed by microscopy on 6-21-2011) in Central Basin of Puget Sound, red brown and turquoise blooms in South Sound

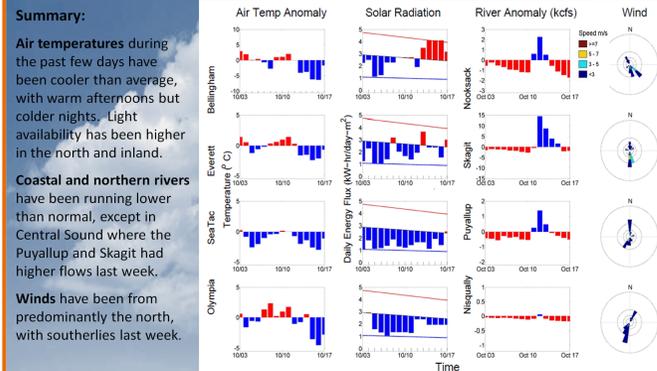


Evening flight from Olympia to Seattle at 2500 ft altitude

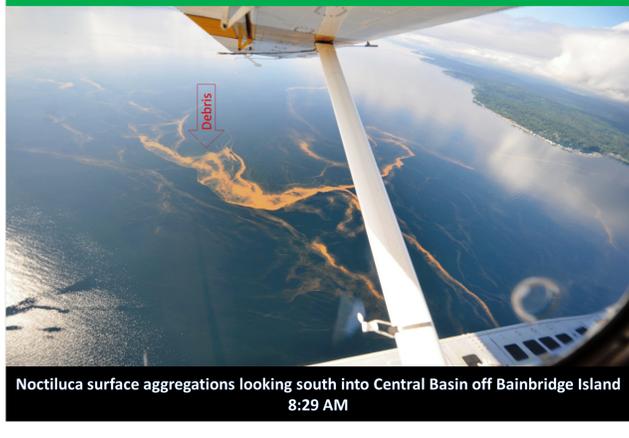


Weather of the last two weeks: Oct. 3-17, 2011

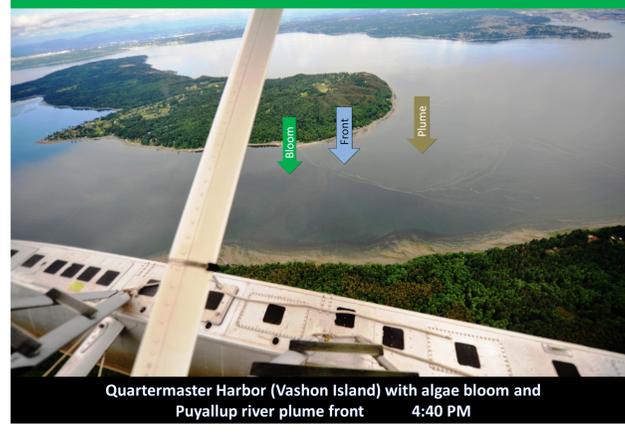
Meteorological conditions typically explain up to half of the variance in observed marine variables particularly in shallower waters like those of South Puget Sound. I summarized the specific conditions prevalent during the past two weeks, from north to south, below.



Morning flight from Seattle to Olympia at <2500 ft altitude



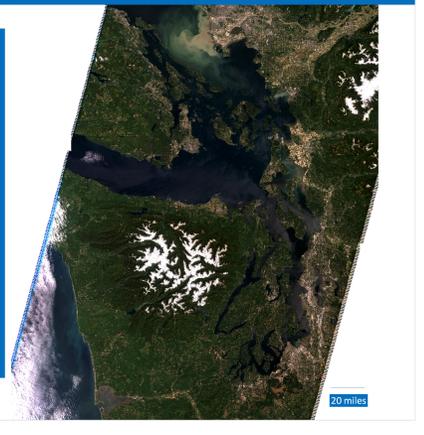
Evening flight from Olympia to Seattle at 2500 ft altitude



Remote Sensing - Landsat

Landsat 5 July 2011 (30m True Color)

Fraser River plume entering Strait of Georgia north of San Juan Islands.



Water Masses and DO from Moorings: Oct. 4 - 18, 2011

