Monitoring Water Quality for Aquaculture using NASA Remote Sensing Observations

March 23, 2026

09:15 a.m. - 12:15 p.m.

Remote sensing observations provide near-real-time assessments of water quality, enabling informed decision-making for managing aquaculture, harvesting, and restoration efforts related to shellfish. In addition to present-day monitoring, historical remote sensing data can offer predictive insights into water quality across coastal and freshwater environments. Satellite observations can be used to detect harmful algal blooms (HABs), water temperature, turbidity, and salinity—factors that impact vibrio outbreaks and significantly affect fishery and aquaculture operations.

This 3-hour introductory workshop will provide an overview of NASA remote sensing data and its applications in supporting shellfishery activities in both marine and freshwater environments. We will introduce observations from multiple satellites that offer frequent and enhanced spatial coverage of coastal and freshwater areas for monitoring water quality parameters.

No prior knowledge or experience with remote sensing is required to attend this training.

- Introduction and workshop overview
- Introduction to NASA Water Resources Program
- Introduction to NASA Earth observations, data products and interactive web tools for supporting aquaculture & fisheries activities
- Break
- Learn to use Worldview and STREAM for detecting water quality parameters
- Training summary and question and answer session
- Survey

ARSET empowers the global community through remote sensing training.