

PICES 2026 Workshop 6

Toward Harmonized Plastic Pollution Indicators for the North Pacific: Data, Methods, and Action

Sunday, October 25, 9:00 am-5:00 pm PDT | Room 3

Morning schedule

9:00-9:10 am Welcome, objectives, and overview: Orient participants to the goal, schedule, and expected outputs.

9:10-10:00 am Invited talk by Dr. Win Cowger of the [Moore Institute for Plastic Pollution Research](#)

Keynote talk title: *“Why is measuring little particles such a big problem to harmonize?”*

This talk will explore opportunities to overcome the challenges and barriers to harmonizing data, methods, and action, kicking off the session. The main highlights will be: Microplastics are a diverse suite of materials that require complex, often unstructured data to fully interpret. Study goals and available resources often limit the quality and quantity of data a group can collect. Researchers are not typically trained in best practices for data sharing, leading to a lack of data sharing or critical metadata missing for interpretation. There is no silver bullet method capable of accurately characterizing all types of samples. Policy and management actions often rely heavily on non-scientific evidence unless science is built in from the start. People will walk away ready to participate in the activities and with a more holistic understanding of how to harmonize data, methods, and actions in their future work.

10:00 am–12pm Lightning talks

Format: 5–7-minute presentation + 2-minute question(s) + 1-minute transition.

Fifteen-minute coffee break at approximately 10:45 am. Speaker order TBD.

Lighting talk speakers:

- Kazi Belayet Hossain:
A Global Analysis of Microplastics Research: Mapping Strategic Funding, National Research Capacity, Scientific Priorities, and Policy Frameworks
- Sara-Jeanne Royer:
A decade of collection data reveals fishing-related plastics dominate floating debris in the North Pacific
- Shan Zheng:
Occurrence and Characteristics of Microplastics in Jellyfish across China Seas
- Margaret Shiple:
Assessment of anthropogenic microparticles in Cassin’s auklets on Southeast Farallon Island
- Chengjun Sun:
Methodology versus Data Comparability in Microplastic Research
- Jennifer Lynch:
Metadata Across the Plastic Continuum: Lessons from Marine Debris Characterization in Hawai‘i
- Ryota Nakajima:
DeepLitterAI: Automated detection and quantification of deep-sea benthic plastic and macrolitter
- Hyojin Chang:
Evaluating surf clams as bioindicators of microplastic pollution: Behavioral and physiological responses and interactions with marine heatwaves
- Sarah Dudas:

Mapping Plastic Pollution in Coastal British Columbia

- Mark Manual:
Optimizing Marine Debris Shoreline Monitoring in the United States
- Matthew Savoca:
GPIB bioindicator assessment, progress and early results

11:50 am-12:00 pm Lightning-talk synthesis and review of afternoon plans.

12:00-1:30 pm Lunch / informal discussion

Afternoon working session (draft)

The afternoon is intentionally flexible, with final details still under consideration.

1:30-2:30 pm Small-group breakout:

- Discuss components of a harmonized North Pacific Plastic Monitoring Plan. Participants will be organized by topics that may include biotic indicators; abiotic indicators; analytical methods including QA/QC parameters; data management and reporting; and other components needed for a coordinated North Pacific monitoring plan.
- The goal is to surface priorities, opportunities, gaps, and questions that should be carried forward into the whole-group discussion. Groups should capture key points rather than aim to resolve every issue.

2:30-3:00 pm Small-group report-out to the full workshop

3:00-3:30 pm Coffee break

3:30-5:00 pm Whole-group discussion to co-design the path forward

- Discussion topics may include: what existing long-term efforts can be built upon; what we want the ultimate outcome of this work to be (e.g., a paper, a report to PICES and governments, or another product); what we can learn from related efforts such as ICES WGML and the AMAP Arctic plastic program; pathways to fund such efforts, and what next steps are needed after the workshop.