

2023 Report of Working Group 42 on *Indicators of Marine Plastic Pollution*

The Working Group on *Indicators of Marine Plastic Pollution* (WG 42) held a final, virtual, meeting on August 22, 2023, prior to PICES-2023 in Seattle, USA. The meeting was chaired by Dr. Jennifer Lynch who welcomed four members online (*WG 42 Endnote 1*). The meeting agenda was reviewed by Dr. Lynch., and adopted. (*WG 42 Endnote 2*).



Virtual meeting participants during WG 42's final meeting. Top, left to right: Wonjoon Shim, Connie Ng. Bottom, left to right: Amy Uhrin, Matthew Savoca, Miran Kim, Jennifer Lynch (inset).

AGENDA ITEM 2

Review of achievements

- Sediment paper update was not available.
- Summary paper update – there are benefits to writing it, but it is not necessary. Perhaps the next group could take this up. Dr. Lynch does not have the time to finish it.
- Presentations were given at the 7th International Marine Debris Conference in Busan, Korea, in September 2022, from the ToR of this working group:

Technical Session 1.2 - The Future of the Science of Monitoring

- Uhrin AV, Hong S, Burgess H, Lim S, Dettloff K. *Progress toward meaningful monitoring: Confronting the challenges of survey design and reporting*
- Lynch J, Sun C, Shim W, Uhrin A, Tanaka S, Savoca M. *Guidelines to monitor plastic pollution and set science-based reduction goals in the North Pacific Ocean*

AGENDA ITEM 3

New expert group

Members discussed a request to MEQ for a new Expert Group. Drs. Matt Savoca and Amy Uhrin will ask Dr. Andrew Ross, the Vice-Chair of MEQ (and cc Dr. Sanae Chiba, PICES Deputy Executive Secretary) about the process to formalize an Expert Group on plastic pollution. They types of groups include:

- Sections (longer term 5+ years, but more difficult to create)
- Advisory Panels (easier to create because not all PICES countries need to be members)
- Joint working group with ICES

Dr. Matt Savoca is willing to chair the group. Dr. Uhrin may consider co-chairing if the group is joint with ICES. Dr. Savoca will need help, and the two chairs from PICES can come from the US.

AGENDA ITEM 4

Topic Session/workshop for PICES-2024

Members discussed proposing a session or workshop for PICES-2024. The submission deadline is September 22. Without knowing the location and dates of the Meeting at this time, and without an official Expert Group formed, members felt it was too early to make a decision on a topic session or workshop.

AGENDA ITEM 5

Open discussion

- Dr. Savoca received a marine debris grant from California Sea Grant and California Ocean Protection Council (OPC) - Watershed to Whales, in Monterey
- Dr. Savoca announced that the UN bioindicators group was approved and is undertaking a review of monitoring programs globally for bioindicators of plastic pollution.
- Dr. Lynch received a NOAA Sea Grant grant to scale up removal and recycling of marine debris across the Hawaiian Archipelago.
- Dr. Uhrin announced that the NOAA Marine Debris Program is sponsoring a working group through the National Center for Environmental Synthesis to tackle the social costs of plastic pollution in the US. The working group will lay the groundwork for determining a robust and scientifically-grounded approach for estimating the dollar value of avoided plastic pollution emissions that would allow agencies to understand the benefits of reducing plastic pollution emissions or the social cost of increasing such emissions. The project will also support a post-doc. In addition, the NOAA Marine Debris Program, in collaboration with Western EcoSystems Technology, Inc., is finalizing a spatially-balanced survey design for conducting shoreline monitoring across 10 US regions using the Program's established on-site protocol (MDMAP). The goal is to contract out the field surveys to begin in 2024, budget pending.
- Dr. Shim reported that funding for microplastic research has been cut due to a new Korean President coming into office.
- Dr. Ng reported that environmental organizations such as the World Wildlife Fund has run programs on marine debris removal in Hong Kong.

WG 42 Endnote 1

WG 42 participation list

Members

Jennifer M. Lynch (USA, Co-Chair)
Connie Ka-yan Ng (China)
Miran Kim (Korea)
Wonjoon Shim (Korea)
Matthew Savoca (USA)
Amy Uhrin (USA)

Members unable to attend

Canada: Peter S. Ross, Jennifer Provencher
China: Daoji Li, Chengjun Sun, Juying Wang
Japan: Kazuhiko Mochida, Hideshige Takada,
Shuhei Tanaka
Korea: Sang Hee Hong, Seung-Kyu Kim
Russia: Iana Blinovskaia, Nikolai Kozlovskii

WG 42 Endnote 2

WG 42 meeting agenda

1. Welcome and adoption of agenda
2. Review of achievements
3. New expert group
4. Topic Session/workshop for PICES-2024
5. Open discussion