

HAWAII INVASIVE SPECIES COUNCIL FINAL REPORT FY24

Project Title: Ballast Water and Hull Fouling

Project Period: March 2023– April 2024

Content area: Prevention

Applicant: Elizabeth Monaghan
DLNR, Division of Aquatic Resources

Abstract: The State of Hawaii has a unique biological heritage that has inherent, cultural, ecological, and economic value. The islands' geological history and biogeographic isolation provide a rich and distinct biodiversity that is threatened by introduced and invasive species. A report estimated that around 78% of the aquatic non-indigenous marine algae and invertebrate species arrived as hitchhikers in ballast water (BW) and as biofouling (BF). This proposal aims to minimize further introduction through coordinating policy development, outreach/education, biosecurity risk assessments, and monitoring efforts.

The funding from this proposal supported the Ballast Water and Biofouling Planning Associate (Sarah Tom, October 2022 – current) position.

A list of accomplishments in reference to the HISC FY23 Ballast Water and Hull Fouling Project proposal is provided below:

- 1. A summary of meetings and list of ballast water and biofouling technical input**
 - Attended the 2023 and 2024 Pacific Ballast Water Group Meetings, including presenting on data collected on vessel arrivals and ballast water management.
 - Collaborated with Pacific States in creating a dashboard for sharing ballast water related data (PacDash).
 - Participated in numerous Stony Coral Tissue Loss Disease (SCTLD) Working Groups to address concerns with ballast water transport in the Pacific.

- 2. A status report on relevant policies (i.e. VIDA)**
 - The final rule for VIDA is anticipated from the EPA in Fall 2024. Once the rule is finalized, DLNR-DAR will need to extensively review it to plan future directions of the Ballast Water and Biofouling Team.
 - DLNR-DAR has been participating in quarterly state engagement meetings with the USCG to provide comments and guidance on the development of VIDA enforcement procedures.
 - A supplementary notice for VIDA was released at the end of 2023. The State provided official comments on the supplementary notice which can be found in the official docket.

- DLNR will be entering the official rule-making process for next legislative season to address the issue of Stony Coral Tissue Loss Disease transport via ballast water. Scoping meetings have been held and will continue as this process progresses.

3. Summary statistics on ballast water risk assessments

- Risk assessments in 2023 highlighted areas where management may focus: Honolulu and Barber's Point Harbors with the most vessel arrivals (554 and 119) and ballast water discharge in the State; ~5% of vessels discharge ballast water; 10% of vessels not in compliance with reporting requirements; and 6 high priority vessels.
- Improved ballast water risk assessment tool by separating regulatory exemptions from safety exemptions and lowering the risk number on vessels that have source water within Hawaii.
- Continue to use the SCTLTD transmission risk tool to the Ballast Water Reporting Form database to prioritize vessels that are of high risk of introducing SCTLTD to Hawaii.

4. A status report on the small boat survey project

- Six small vessel harbors on Oahu and one harbor on Kauai have been surveyed to gather information about hull husbandry practices, voyage history, and general knowledge of biofouling and aquatic invasive species.
- 385 recreational vessels and 12 harbor users were surveyed.
- Harbors on Hawai'i Island, Maui, and Molokai will be surveyed in Summer 2024.
- A final report on the project will be anticipated by end of 2024.

5. A summary of any rapid response or other surveys conducted

- Received training on how to conduct hull inspections for vessels travelling to the Papahānaumokuākea Marine National Monument.
- Performed hull inspections on two vessels as part of permit applications for entry to the Papahānaumokuākea Marine National Monument.
- Assisted with SNAPS surveys of Kāne'ōhe Bay and the Waikiki MLCD.
- Surveyed a pinch point in South Kāne'ōhe Bay for reef vessel damage and potential reef marker installation.
- Responded to non-native aquatic plant, manatee mudflower (*Micranthemum glomeratum*) found in Nu'uānu stream by Ginger Pond.
- Helped with initial surveys for a potentially invasive coral, *Montipora foliosa* found during non-native coral removal follow-up surveys in Kāne'ōhe Bay.

6. A list of completed outreach documents, materials, and presentations produced.

- Presented on current ballast water and biofouling projects and initiatives at the 2024 Hawaii Invasive Species Awareness Month.
- Designed a poster used at numerous outreach events on aquatic invasive species, ballast water and biofouling.
- Implemented quarterly updates on the Ballast Water and Biofouling Team website to inform stakeholders of vessel statistics and team activities.

- Created a pamphlet on coral disease, impacts it has to Hawaii, how to prevent spread and to identify different diseases.
- Developed new outreach materials including pamphlets, stickers, displays, and a plan for implementing new outreach at recreational harbors

Final Report submitted by:

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