

Notes from MPSC for the period - November 2022 – June 2023

The Marine Pest Sectoral Committee (MPSC) held its 25th Committee Meeting and Partners' Workshop via a hybrid format at the Shangri-La Hotel, Cairns on 6-7 June 2023.

Notes from the Chair

MPSC utilised a hybrid format to allow members, partners and observers who cannot travel to participate. MPSC will continue to strive to work with its partners and stakeholders to improve Australia's marine pest biosecurity.

The Partners' Workshop focused on communication, engagement and education of marine pest biosecurity issues. Representatives from industry partners, Australian Government, and State and Territory biosecurity agencies showcased the ways in which they effectively bring awareness to marine pests and activities being undertaken to support their early detection. The MPSC partners, observers, and members were also given a tour of the Port of Cairns.



View of Port of Cairns. Image by Ports North.

The MPSC meeting reviewed the MPSC work plan for 2023/24, received an update from MPSC task groups and discussed the development of the National guidelines on achieving proof of freedom, emergency response manual progress and implementation of activities as outlined in the National Marine Pest Surveillance Strategy 2021-26.

The official implementation period of MarinePestPlan 2018-2023 has now finished. MPSC has made significant progress on the delivery of MarinePestPlan 2018-2023 across multiple aspects of marine pest management including vector management, surveillance, preparedness, emergency response and stakeholder engagement. A review of MarinePestPlan 2018-2023 is now underway. The review will identify the strengths and opportunities for improvement in objective setting and the development, implementation and extension of activities.

I would like to thank the MPSC members, observers and partners for another productive and constructive MPSC sessions and for valuable contributions to the committee. I look forward to working with all of you in the future.

Matthew Osborne
Chair MPSC25

MPSC25 Partners' Workshop

The MPSC25 Partners' Workshop was held via hybrid mode on 6 June 2023, with the theme focused on communication, engagement and education of marine pest biosecurity issues.

The workshop began with presentations from the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) showing the progress of MarinePestPlan 2018–2023 activities and the

planned approach for its review. Following this was a presentation by the Queensland Government Department of Agriculture and Fisheries on the nationally consistent communication approaches delivered by the National Biosecurity Communication Engagement Network, a subcommittee of the National Biosecurity Committee.

The Australian Government Department of Climate Change, Energy, the Environment and Water presented the development of the Sustainable Ocean Plan which encompasses all ocean interests to support the sustainable growth of our blue economy, underpinned by a healthy ocean.

Marina Industry Australia showcased industry initiatives and programs that bring education and awareness to promote proactive best practice, environmental management, promote healthy fish populations and prevent marine pests. The presentation also highlighted opportunities for agencies to engage with the boating and marina sector. Similarly, the Victorian Government Department of Energy, Environment and Climate Action highlighted the engagement strategy developed in which they raise awareness of marine pests with different community and industry sectors.

The Northern Australia Quarantine Strategy (NAQS) gave an overview of the program's surveillance of pests, diseases and weeds that may enter via unregulated biosecurity risk pathways. A Community Liaison Officer with the NAQS Indigenous Ranger Biosecurity Program, gave further insight into the effectiveness and importance of the program to First Nations communities in the Torres Strait.

The final presentation by DAFF showcased the passive surveillance, education and awareness material developed for the ports, marinas, divers and aquaculture sectors. The presentation included display of the visual communication material designed to assist the sectors enhance passive surveillance capabilities.

During the Partners' Workshop updates were well received from several key MPSC stakeholders from sectors such as boating industries, port authorities, environmental non-governmental agencies, Defence, and the jurisdictions. The updates and discussions highlighted that the next Partners' Workshop theme will be 'Marine Pest Research Network and Research Priorities', providing the opportunity for stakeholders to present on the marine pest research they are undertaking (or are seeking) as well as for MPSC to discuss research priorities.

Any feedback and suggestions are welcomed and can be sent to MPSC@aff.gov.au. These will be used in preparation for the next Partners' Workshop.

MPSC High Priority Work Items

Since MPSC24, MPSC has progressed the following high priority work items.

National Strategic Plan for Marine Pest Biosecurity: MarinePestPlan 2018–2023

The MarinePestPlan 2018–2023 implementation period ended June 30, 2023. A review of MarinePestPlan 2018–2023 is underway with an expected completion and publication in 2024.

Out of the 29 activities listed in MarinePestPlan 2018–2023:

- 23 activities are complete
- 4 have commenced
- 2 are yet to commence.

More information on MarinePestPlan 2018–2023 activities and current status can be found on the [Marine Pests](#) website.

National Marine Pest Surveillance Strategy 2021–2026

The National Marine Pest Surveillance Strategy outlines Australia’s national surveillance priorities and sets the strategic direction for investment in surveillance.

Out of 15 activities listed in the National Marine Pest Surveillance Strategy 2021–2026:

- 1 activity has been completed
- 13 have commenced
- 1 has not commenced.

More information on National Marine Pest Surveillance Strategy 2021–26 activities and current status can be found on the [National Marine Pest Surveillance Strategy](#) website.

Passive Surveillance Education and Awareness (PSEA)

Passive surveillance materials for marine pests are now complete for the ports, marinas, divers and aquaculture sectors through consultation with the PSEA Task Group and key stakeholders. All ports, marinas, divers and aquaculture sectors materials have been distributed to the jurisdictions and stakeholders for use.

Emergency Response (EMPPlan)

The development of the new response manuals for invasive marine bivalves and the generic marine pest response manual is expected to be progressed this financial year. MPSC also discussed the need to prioritise an ascidian manual, the manual scope is to be drafted this financial year.

Marine Pest Research Network

The Marine Pests Research Network (MPRN) was established independently of MPSC to fill knowledge gaps that existed across all marine pest research, for researchers nationally to collaborate, cooperate, and minimise replication. MPSC agreed to support the MPRN and oversee what direction the MPRN is taking with their research. Working with MPRN will help raise awareness for marine pest issues in the research across different universities and institutes.

Principles for Determining the Current Status of Marine Pests

MPSC has develop National policy principles for determining the current status of marine pests. The policy principles will inform development of proof of freedom surveillance plans. For a copy of the policy principles, please email MPSC@aff.gov.au.

Jurisdictional updates

Since the last update to MPSC24, there has been progress on a range of marine pest biosecurity work:

Australian Government (AG)

- Played a significant role in finalising a revision of the IMO’s 2011 Guidelines for the control and management of ships’ biofouling to minimise the transfer of invasive aquatic organisms. The amendments complement new requirements put in place in June 2022 for managing biofouling on international vessels arriving in Australia.
- The Department of Agriculture, Fisheries and Forestry (DAFF) is reviewing comments received during a targeted consultation on a revised draft of the Australian In-water Cleaning Standards.

- DAFF continue to provide support in the response to the detection of carpet sea squirt (*Didemnum vexillum*). Information on the response is available on the [National Pest and Disease Outbreaks Website](#).
- The Indigenous Ranger Biosecurity Program progressed with strong completion rates of scheduled aquatic biosecurity surveillance activities.
- Marine pest surveillance activities were undertaken at Christmas Island in September 2022 and Cocos (Keeling) Islands in May 2023, no marine pests or species of concern were detected. The complete results will be communicated in the final report.

New South Wales (NSW)

- DPI are continuing to perform surveillance activities in accordance with the five-year Marine Pest Surveillance Plan 2022-2026. To-date, the surveillance has not detected target marine pest species.
- DPI are working closely with the Australian Navy to implement formalised surveillance arrangements at several naval sites.
- DPI has investigated a suspected detection of Asian green mussels (*Perna viridis*) on another naval vessel during maintenance activities. Laboratory analysis did not detect any sequences indicative of Asian green mussels (*P. viridis*).
- DPI is working with partner agencies in the NSW Marine Pest Working Group (MPWG) to discuss the feasibility of implementing the Australian in-water cleaning standards.

Northern Territory (NT)

- Quarterly surveillance in Darwin harbour was completed and no marine pests detected.
- Investigated reports of ascidian resembling carpet sea squirt (*Didemnum vexillum*) from a vessel that had been in WA region of interest. Molecular assays confirmed that it was not carpet sea squirt (*D. vexillum*).
- Marine pest surveillance, risk mitigation and communication activities continued during this period.

Queensland (QLD)

- Queensland continues to deliver the Queensland Seaports eDNA Surveillance (Q-SEAS) program in partnership with port authorities to facilitate early detection of marine pest threats and continues to respond to and manage risks associated with detections of invasive marine species as they arise.
- Detections of white colonial sea squirt (*Didemnum perlucidum*) continue with a recent report confirming its presence offshore within the Great Barrier Reef Marine Park on boat mooring infrastructure. Queensland is working with the Great Barrier Reef Marine Park Authority to implement management actions to minimise the potential threat to the reef from this pest species.
- Participated in a knowledge gap analysis workshop for eDNA and eRNA methods for detecting invasive marine pests facilitated by Curtin University. Outputs from the workshop will be used to develop research priorities to address identified gaps and improve confidence in the application of eDNA/eRNA methods.

South Australia (SA)

- South Australia continues the development of In-water Cleaning of Vessels in SA - Guidance Document.
- Prevention activities with provision of advice continue to be undertaken.
- PIRSA Biosecurity hosted the Marine Biosecurity South Australia Forum in November 2022. The Marine Biosecurity South Australia Forum is a stakeholder network that assists with managing marine pests at state and regional levels.

- Several molecular surveillance and qPCR assay projects have been completed for marine pest species.

Tasmania (TAS)

- The *Biosecurity Regulations 2022* were proclaimed in November 2022 and will enhance Biosecurity Tasmania's ability to manage marine pest biosecurity matters.
- A possible range extension of Japanese soft-shelled clam (*Mya japonica*) has been detected at Dunalley, Tasmania. These positive results occurred in three archived eDNA samples collected by Biosecurity Tasmania during 2017 and 2018 and suggest a wider distribution of Japanese soft-shelled clam (*Mya japonica*) than previously known. While a wider distribution has long been suspected, it is important to note that the results do not confirm the existence of this species within Boomer Bay, but the repeated positive results at the same location, over different sampling periods, are highly suggestive of the presence of a localised population of Japanese soft-shelled clam (*Mya japonica*).
- To assist in managing the risk of invasive marine pests, a temporary moratorium on the approval of any in-water vessel biofouling cleaning requests on vessels arriving from interstate or overseas, in Tasmanian waters, has been applied as from April 2023. This will allow Biosecurity Tasmania to undertake, in consultation with key stakeholders, best practice risk assessment and policy development to guide the response to future requests.
- A vessel that may have been exposed to carpet sea squirt (*Didemnum vexillum*) during visits to the Australian Maritime Complex at Henderson, WA in late 2022 and early 2023 had two visual hull inspections in Hobart during March 2023 with no carpet sea squirt (*D. vexillum*) being detected.

Victoria (VIC)

- Victoria continues the marine surveillance program of commercial ports in Melbourne, Geelong, Westernport and Portland using settlement plate arrays and eDNA water samples for early detection of marine pests. Victoria is also building in-house capability for molecular analysis of marine samples.
- Is responding to the detection of Asian kelp/wakame (*Undaria pinnatifida*) in Westernport on two vessels that were subsequently slipped for cleaning with all visible plants growing on local infrastructure removed. Follow up surveys and staff training will occur in the coming months.
- Research is continuing into diet analysis and use of chemical cues as a potential management option for northern Pacific seastar (*Asterias amurensis*).
- Research is also continuing into diet analysis of Asian shore crab (*Hemigrapsus sanguineus*) as well as the behavioural interactions between Asian shore crab (*H. sanguineus*) and native crab species in Port Phillip Bay.
- Victoria has developed an activity book for distribution at the Sea Life Melbourne. Scientific models of marine pest species have been provided to the aquarium for use in school group educational activities.

Western Australia (WA)

- The Department of Primary Industries and Regional Development (DPIRD), WA continues to focus its resources using a risk/resource-based approach to ensure the prevention and early eradication of priority invasive marine pests.
- DPIRD has been involved with activities for the ongoing response to carpet sea squirt (*Didemnum vexillum*) at the Australian Marine Complex (AMC), Henderson and at HMAS *Stirling*.
- The State-Wide Array Surveillance Program (SWASP) season at 10 port locations was completed in October 2022, with the successful implementation of crab condos as an additional surveillance tool in the program.

- DPIRD are continuing the development of draft regulations for the transition of legislation in late 2023.
- DPIRD continue to respond to and manage detections of *Perna* species on vessels operating in WA.
- Marine biosecurity surveillance for the Port of Cocos Keeling Islands was completed in May 2023, with initial reports indicating no detections of marine pest species.

Upcoming MPSC Meetings

MPSC26

The twenty-sixth MPSC meeting and corresponding Partners' Workshop will be held via hybrid mode 15 – 16 November 2023 and will be hosted by Victoria.