

Notes from MPSC for the period May–October 2021

The Marine Pest Sectoral Committee (MPSC) held its twenty-second committee meeting online on 13 October 2021.

Notes from the Chair

2021 has drawn to a close and I would like to thank all MPSC Members and Partners for their involvement and contribution in 2021.

It has been a confusing year for most with lockdown and nervous border openings but despite those challenges, MPSC has continued to meet some significant milestones:

The facilitated marine biosecurity response exercise in June 2021 that focused on the response to a suspected heavily biofouled vessel approaching Australia. The post exercise meeting in August reviewed our response and identified next steps including clarifying internal and cross jurisdictional processes, facilitating information sharing, harmonising in-water cleaning standards and documenting the risks surrounding how long a vessel remains in port.

Effective MPSC Partners Workshops on topics such as in-water cleaning (MPSC 21) and the joint government–industry surveillance programs in the NT and Qld (MPSC 22). Such sessions have been very informative and created much discussion. These forums have also demonstrated how well the virtual meeting format and focus theme works; design choices to be continued.

Progress on *MarinePestPlan 2018-2023* continues well, with several activities recently completed or newly commenced. Implementation of the National Marine Pest Surveillance Strategy has commenced.

MPSC has made significant progress on high priority work items across multiple aspects of marine pest management including surveillance, emergency response, communication, records management, and research & development.

It has been a challenging yet productive year and I would imagine 2022 will bring its own insights.

I again thank everyone for their involvement through this year, and I look forward to working with you again in 2022.

John Robertson
Chair MPSC22

MPSC22 Partners' Workshop

The MPSC21 Partners' Workshop was held virtually on 12 October 2021, with the theme 'Ports surveillance: what's in it for me?'

The workshop began with a presentation on the history of marine pest surveillance in Australia, and the Northern Territory in particular. A representative from INPEX then provided insight into marine pest management in the natural gas export industry.

This was followed by a presentation on the Q-SEAS surveillance program; how it has developed in collaboration between the Queensland Government and five Queensland ports, based off learnings from the WA ports monitoring program.

There was a brief opportunity towards the end of the workshop for updates on recent activities from the Australian Government, the University sector (eDNA community of practice) and OceanWatch.

These presentations prompted discussion on different surveillance methods and tools, particularly with regards to eDNA. Several participants shared their experiences and recommendations. There was also discussion around how eDNA results should be interpreted and levels of certainty.

MPSC22 saw further discussion on how surveillance cost-sharing is handled across various jurisdictions.

51 devices joined the virtual Partners' Workshop. Several Partners and Members commented on how valuable the workshops are as a communication forum, allowing for two-way feedback and group discussions. Participants highlighted the importance of including some background for newer members.

Potential themes for future workshops include: up-and-coming technology opportunities, international and national implementation of biofouling management guidelines, and a follow-up on the in-water cleaning guidelines.

MPSC High Priority Work Items

In the second half of 2021, MPSC progressed the following high priority work items.

National Strategic Plan for Marine Pest Biosecurity: *MarinePestPlan 2018-2023*

Activities in *MarinePestPlan 2018-2023* are being progressed.

Of the 29 activities listed:

- 15 activities are complete
- 9 have commenced
- 2 are ongoing
- 3 are yet to commence.

This includes three activities completed (Activities 2.7, 2.9 and 4.3), and one newly commenced (Activity 4.1).

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

National Marine Pest Surveillance Strategy and Work Plan

MarinePestPlan activity 2.1 – Develop a national marine pest surveillance strategy.

MarinePestPlan activity 2.9 – Develop the marine pest surveillance strategy work-plan.

The [National Marine Pest Surveillance Strategy](#) was endorsed at MPSC17 (May 2018) and is now published. The accompanying Work Plan was endorsed in September 2021, and implementation has commenced.

The Surveillance Strategy outlines priority requirements for enhancing surveillance of marine pests in Australia over the next 5 years, and aims to improve coordination and implementation of surveillance activities.

Surveillance Strategy project 2.2.7 – Identify the need for and scope of proof of freedom for marine pest biosecurity.

Three suggested projects within the Surveillance Work Plan relate to proof of freedom.

There are various benefits to having a consistent and quantifiable level of certainty in the absence of a marine pest from an area, however there is currently no economic imperative to develop a marine pest proof of freedom policy.

MPSC met to discuss this topic further in December 2021. It was agreed that a proof of freedom policy for marine biosecurity is desired. A small group was assigned to develop a scoping document for presentation at MPSC 23.

Passive Surveillance Education and Awareness

MarinePestPlan activity 2.3 – Promote tailored education and awareness materials to engage marine pest observer groups in passive surveillance activities.

Four sectors have been identified as likely to benefit from the provision of passive surveillance education and awareness material: aquaculture, commercial divers, ports and marinas.

A poster template has been developed, targeting marine pest awareness and reporting in the ports sector. This template is designed to be customised for specific locations with local marine pests and contact details. The poster is available from the National Biosecurity Communication and Engagement Network.

Feedback on the poster will be used when carrying the theme across to other materials and priority sectors.

NIMPIS

MarinePestPlan activity 2.7 – Review surveillance information management needs and ensure an appropriate information system is in place.

The [National Introduced Marine Pest Information System \(NIMPIS\) website](#) provides information on the biology, ecology and distribution of marine pests either established or that pose a risk of future introduction to Australia, and acts as a central repository for validated Australian marine pest surveillance data.

Indicative species range maps for 20 key species, based on sea surface temperature, have been developed and uploaded. A new species profile for *Magallana (Crassostrea) bilineata* (Black scar oyster) has been added.

Updates of existing species profiles and improvements to functionality are ongoing. If you see any corrections or omissions, please contact us so we can keep it as accurate as possible.

Emergency Response (EMPPlan)

MarinePestPlan activity 3.5 – Plan and implement procedures to develop and update the EMPPlan rapid response manuals and related guidance materials.

A draft Emergency Response Manual for invasive crabs is being finalised. This is the first draft of the new structure for marine pest emergency response manuals, focusing on a functional group instead of a species.

These manuals provide guidance on developing a response to a marine pest incursion, including types of information needed and technical advice on control, eradication and management methods.

Development of an Emergency Response Manual for invasive marine bivalves is due to start in 2022.

A Marine Pest Management Manual – covering topics including destruction, decontamination and disposal of marine pests – is currently in development, being reviewed for linkages with other manuals in the emergency response series.

Research and Development Priorities review

MarinePestPlan activity 4.1 – Periodically review the national marine pest biosecurity research and development priorities.

The [National priorities for introduced marine pest research and development 2013-2023](#) was developed to provide direction on areas for marine pest R&D investment.

These priorities have been reviewed and updated in light of current progress and new developments.

Feedback has been received from research organisations and MPSC members. This is being collated into a review of the progress of current priorities and a draft outline with suggested changes and additions for a new R&D priorities document.

Marine Pest Impacts

MarinePestPlan activity 4.3 – Review the economic, environmental and social impacts of marine pests in Australia.

The Marine Pest Impacts Task Group has completed its review of the economic, environmental and social impacts of 16 significant established marine pest species in Australia.

The review found that, for most of the sixteen reviewed species, there is a notable lack of data or other evidence of environmental, economic, or social impacts, whether negative or positive. For a small number of species where impacts were identified, these were found to be positive, negative or sometimes both. Positive impacts relate to those occasions where species provide economic benefits.

MPSC did not endorse the final report as an MPSC publication as there was concern over the presentation of some opinions that do not reflect current policies, and disagreement over some of the statements made, particularly in the front and back text. However, members agreed that the document was a useful source of information and thanked the task group assembled to write the report for the considerable amount of work that went into it.

Some members of the task group will seek to independently publish the report in a peer-reviewed journal.

National Awareness Campaign

MarinePestPlan activity 5.3 – Design a targeted national campaign to improve awareness of marine pest biosecurity risks, management actions and shared responsibilities.

The task group – led by DAWE communications specialists and the National Biosecurity Communication Engagement Network – aims to design simple and consistent national messaging for marine pest awareness.

Development of material aims to commence in mid-2022 and will be focussed on digital mediums such as a digital media advertising and a potential short educational video. The national campaign will align with the style and theme of the passive surveillance material developed under activity 2.3.

Social research is proposed prior to and at the end of the rollout of the campaign. This knowledge will guide the development of the communications to facilitate behaviour change in reducing marine pest risks. It will also be used to measure the effectiveness of the campaign before and after implementation.

Jurisdictional Updates

Australian Government

The Department of Agriculture, Water and the Environment has progressed a range of marine pest biosecurity work, including:

- implementation of domestic and international biofouling and ballast water management policies
- collaboration on international marine pest biosecurity partnerships
- projects under administered funding from several sources
- activities under *MarinePestPlan 2018-23* and the *National Marine Pest Surveillance Strategy*.

New South Wales

NSW Department of Primary Industries are working to deliver several programs and projects:

- a marine preparedness and capability project to be completed this financial year
- a five-year marine pest species surveillance plan has been drafted and consultation is underway, for completion in December 2021
- a current NSW Marine Estate Management Strategy (MEMS) project using recent social research to inform an intervention and communications campaign to improve biofouling management in NSW, aimed at key stakeholders
- a funding application has been submitted under MEMS to continue implementing and improving upon the outcomes of the above awareness activities over the next six (6) financial years, 2022-2028
- the review of the NSW Guidelines for Responding to Marine Pest Incursions (April 2015) has been completed (May 2021) and is available upon request.

There have been 3 investigations of suspected marine pest occurrences in NSW. No new pests have been confirmed. An unconfirmed report of suspected *Botryllus* spp. was made in Botany Bay. *Caulerpa taxifolia* and *Carcinus maenas* have been reconfirmed in locations where they are already known to occur.

Northern Territory

Marine pest surveillance and risk mitigation and communication activities continued during this period. The focus is on community and industry education along with risk base resourcing to help ensure the prevention and early eradication of priority invasive marine pests.

Queensland

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.

Queensland has also continued to respond to and manage risks associated with detections of invasive marine species including: Asian green mussel and other non-indigenous marine species in Cairns; new detections of black scar oyster (within the known range Cooktown to Mourilyan); and white colonial sea squirt at Magnetic Island.

South Australia

Key activities in South Australia have been:

- increased collaboration with SA Department for Infrastructure and Transport to extend marine pest risk messaging and management
- ongoing provision of advice regarding proposed developments along South Australia's coast.
- molecular assay projects undertaken by SARDI.

Tasmania

Biosecurity Tasmania has recently investigated a number of reports of *Perna canaliculus* but have either ruled out or are still investigating reports.

The ROV project trialled digital recognition software to assess biofouling on hull inspections undertaken in Hobart.

Victoria

During this period, Victoria has focussed on surveillance activities including completion of:

- a state-wide marine pest surveillance project that determined the distribution of 14 marine pest species across 14 local ports.
- the initial winter sampling period in the collaborative surveillance program with the Port of Melbourne and Station Pier.

Western Australia

The Department of Primary Industries and Regional Development (DPIRD) has been involved in a range of marine biosecurity science, compliance, policy and communications activities since the last report.

Highlights of these activities include continued surveillance of 11 ports and targeted surveillance at high value and high-risk assets.

DPIRD has implemented the Vessel-Check portal as part of its biofouling management strategy, and also continues to contribute to the portals development.

Upcoming MPSC Meetings

MPSC23

The twenty-third MPSC meeting and corresponding Partners' workshop will be held as videoconferences in May 2022.

Dates and workshop theme to be decided.

MPSC24

The twenty-fourth MPSC meeting and corresponding Partners' workshop is proposed be held as a hybrid face-to-face/virtual meeting in October 2022.