

Review of National Marine Pest Biosecurity

Background:

The Burnett Mary region is situated in south East Queensland and includes the southern section of the World Heritage-listed Great Barrier Reef Marine Park and the Great Sandy Ramsar Wetland. Both sites are listed for their biodiversity values.

The region supports a sizable fishing industry - based on scallops, prawns, spanner crabs, mackerel, mullet and reef fish. It is estimated to be worth about A\$37 million with a competitive edge based on the export quality of the region's fresh and frozen products. Current markets include local, interstate and export destinations predominantly in Asia and Europe.

Since 2003, the Port of Bundaberg and adjacent marinas have recorded the highest annual arrival figures for international small craft and yachts. Bundaberg is considered the most frequently used first port of call for a number of international yachts visiting and from New Zealand and the Pacific Islands and hosts the popular Port 2 Port (Port Villa, Vanuatu to Port Bundaberg, Australia) race.

While the Port of Bundaberg is considered low risk from marine pest incursions from large/commercial shipping (such as bulk sugar carriers), small craft pose considerably higher risk, with lower levels of self-management and surveillance found in the commercial shipping / maritime industry. For this reason, the Port of Bundaberg was considered one of the top ten locations most at risk from the introduction and translocation of marine pests in Australia (under the National System for the Prevention and Management of Marine Pest Incursions, 2005).

To date, no baseline survey for marine pests or monitoring has been undertaken at the Port.

1. What do you consider to be the main impacts (consequences) from marine pests to your business, industry, activities or the environment?

Both our natural (environmental) and fishing industries – as well as associated industries such as tourism and hospitality could be jeopardised by a potential marine pest incursion. This would have devastating impacts on the local economy, as well as longer term implications for biodiversity assets (including listed species and ecological communities protected under the *Environment Protection and Biodiversity Conservation Act, 1999*). .

2. What activities should the Australian Government do to manage the biosecurity risks associated with marine pests to an acceptable level (to protect your business, industry, activities or the environment)?

It is suggested that the following activities should be undertaken by the Australian Government:

- Leadership and coordination – taking a lead and delegating responsibilities, where appropriate to the States, Territories, and where appropriate, industry.
- Responsibility for Matters of National Environmental Significance (MNES).
- Monitoring – identifying a baseline and undertaking monitoring at 'high risk sites' within a risk management framework (taking into consideration MNES). Evaluating and reporting back on findings. Monitoring could also be enhanced through an on-line Citizen Science detection capacity – similar to the recent community response to the Asian paddle crab in Western Australia.
- Communications and engagement – increasing public and specific user group (for example yachts) awareness of marine pests and their implications for Australian biodiversity and our economy.

- Research – to enable Australia to be proactive in responding to new pests and offer world’s best management practice and delivery in response to potential marine pest incursions.
- Resourcing (through a negotiated multilateral agreement) in partnership with the States and Territories and maritime industry, to support response.

3. What information or data should the Australian Government collect to support ongoing national commitment to managing marine pest biosecurity?

- Baseline data with respect to ports considered most at risk of a marine pest incursion (most, although not all high risk sites were surveyed in 2001-2010).
- Ongoing monitoring and citizen science data (minimum of every 2 years) – analysed via a respected taxonomy group such as the Australian Museum.
- International marine pest incursions – to enable Australia to assess risks to Australia (and to implement protective measures if required) from vessels travelling or transiting through these locations.
- Level of risk – based on the number and size of vessels, to enable Ports risk status to be reviewed and up- or down-graded as appropriate.

4. What are the best ways to manage and monitor the biosecurity risks of biofouling on vessels?

It is strongly suggested that Australia develop and adopt minimum standards (such as the IMO Biofouling Guidelines) and regulations for biofouling management practices across all jurisdictions. In addition, the Commonwealth should take responsibility for all international vessels arriving in Australia (both large and small craft). While standards could be self-assessed, there should be random spot-checks (through the Australian Quarantine and Inspection Service / Department of Agriculture, Fisheries and Forestry) and enforcement to ensure compliance.

5. If the Commonwealth progresses to regulate the management of biofouling on international vessels, what role should it take in the development of domestic controls by the states and territories?

It is agreed that the Commonwealth should regulate the management of biofouling on international vessels. In addition, it is suggested that Australia adopt the International Maritime Organisation’s Biofouling Guidelines (IMO Biofouling Guidelines) but should also look at the introduction of regulatory measures that are appropriate for all vessels – including commercial vessels, yachts, cruise ships, recreational fishing vessels and moveable structures.

In terms of domestic controls, while it is envisaged that primary control for these would lie with the jurisdiction – state or territory, that the Commonwealth would take responsibility for cross-jurisdictional issues that have the potential to affect multiple jurisdictions or that have the potential to impact on exports / overseas (international) interests. For this reason, the Commonwealth should at least be considered as a referral agency in the first instance, with the ability to upgrade their role and response depending on the level and scope of risk.

6. Should the department consider a regulatory framework for international biofouling management that is:

- **A species-based approach (as currently proposed in the Biofouling RIS) or**
- **An approach based on a requirement for vessel operators to adopt IMO Biofouling Guidelines, including onboard biofouling management plan and record book.**

An approach based on a requirement for vessel operators to adopt the IMO Biofouling Guidelines including onboard biofouling management plan and record book is supported, although it should also include a risk-based approach to the ‘level of bio-fouling’. This places the onus on the operator to

conform / demonstrate that appropriate efforts have been made to manage the level of fouling on the vessel. It is suggested that if a vessel seeks to extend its operating time in Australian waters, that a full inspection should be required to minimise risk.

The concerns relating to identification and treatment of 'Species of Concern' – both in terms of costs and training are considered valid. However, there is a need to provide increased knowledge and awareness of marine pest species to stakeholders, as well as supporting ongoing taxonomic specialists through the Australian Museum (or similar) to maintain our knowledge of species and appropriate management intervention where required.

7. How can the Australian Government cost-effectively manage domestic ballast water risks while preventing the spread of established marine pests?

Offering exemptions from managing domestic ballast water in low risk voyages would be one way of reducing costs for vessel operators, although this would require Ports to be regularly monitored for marine pests to determine the level of risk. Where no monitoring program is in place, domestic ballast waters should be afforded a level of risk based on the location of the departing and receiving Ports.

8. Should species specific assessments of port-to-port movements, with associated monitoring be used?

All high risk Ports (to both commercial shipping and small craft) should be regularly monitored to enable 'real' risk to be assessed. This would then enable port-to-port movements to be assessed and management interventions – including ballast water risk assessments, to be undertaken. Where level of risk is elevated e.g. by an increase or change to shipping patterns, then the port should be re-assessed for level of risk. All high risk ports should have species specific monitoring.

9. Should we restrict ballast water movements between suitably determined regions?

Yes, this is considered to be a positive action to support the Ballast Water Risk Assessment, reducing the risk of inadvertent spread of marine pests and reducing costs for both the Commonwealth and industry. As stated previously, this method does require monitoring at more Australian Ports to be undertaken.

10. What are the most important aims(s) for monitoring in a cost-effective national marine pest biosecurity system?

- i. That monitoring is able to detect and identify marine pest species that are considered a risk to the biodiversity and/or economy of Australia at all high risk ports.
- ii. That early detection through regular monitoring is also encouraged – to trigger and inform response / management intervention where required.

11. How should this monitoring be achieved?

- i. Establishment of a multi-jurisdictional 'Marine Pests Monitoring Team', incorporating museum taxonomists to ensure quality assurance of data across Ports. This will enable more cost-effectiveness and specialised skills to be developed with costs shared between the Commonwealth, jurisdictions and Ports.
- ii. Accepting citizen science as part of ongoing surveillance methods – to enable the community and other stakeholders to participate.