



Government of Western Australia  
Department of Fisheries



**Good vessel maintenance  
is important**  
Keep your bottom clean

**PROTECTING OUR  
WATERS FROM AQUATIC  
PESTS AND DISEASES**

**All vessels entering Western Australia's waters, regardless of their size or frequency of visits, could pose a risk to Western Australia's aquatic biosecurity.**

**Prevent the spread of aquatic pests by following these 5 simple 'Rs'**

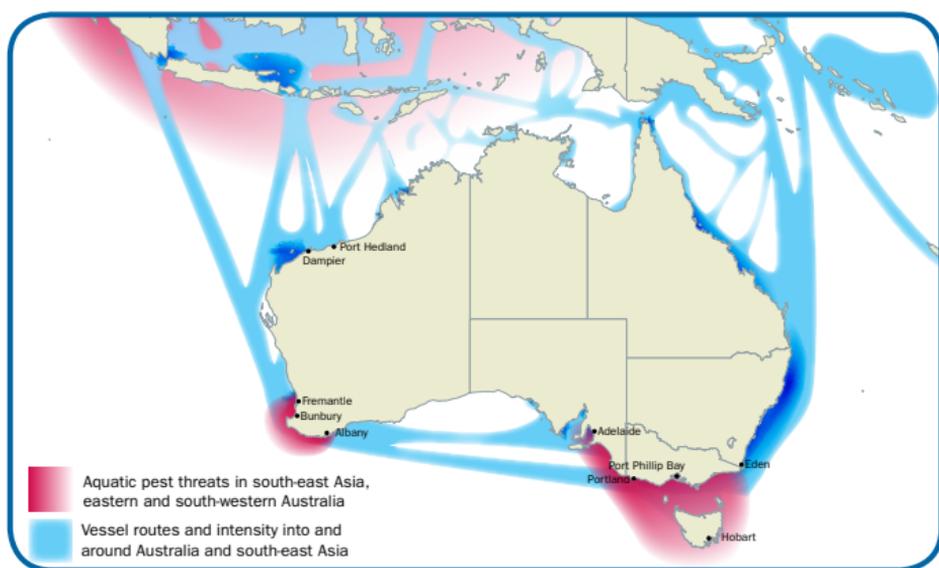
- 1. Regularly inspect and clean** areas most prone to biofouling (marine growth) such as niche areas like internal sea water systems, anodes, docking strips, sea chests, pipe openings, propellers, shafts and rudders, particularly after long periods of vessel inactivity.
- 2. Remember to dry and/or maintain** your boat and equipment. Air drying will kill most pest species in about 24 hours. Remove entangled seaweed etc from ropes, anchors, buoys and other equipment.
- 3. Re-apply or apply** a suitable antifouling coating (AFC) well within the life-span specified by the manufacturer, paying particular attention to coverage of niche areas.
- 4. Regularly check** and ensure marine growth prevention systems (MGPS) are operating correctly. In the absence of MGPSs, ensure the regular use of other effective methods for inspecting and treating internal seawater systems.
- 5. Report** any unusual sightings to **FISHWATCH** on **1800 815 507**, via email to [biosecurity@fish.wa.gov.au](mailto:biosecurity@fish.wa.gov.au) or through the free **WA PestWatch** app, available from the App and Google Play Stores.

## **Marine pests**

Marine biosecurity is the protection of our precious and unique marine environment from the spread of aquatic pests and diseases. Western Australia's beautiful marine environment with its significant fish and other aquatic resources is among the State's most valuable assets. Invasive marine pests (IMPs) are marine plants and animals that if introduced to WA, could out-compete native species.

IMPs are considered one of the greatest threats to the State's biodiversity and can have significant negative impacts on the environment, economy, social amenity and human health.

WA's marine environment, with its varied habitats and climates, provides suitable conditions for the establishment of many IMPs. Once well-established, many IMPs are virtually impossible to eradicate. Therefore, prevention of arrival, and early detection of new IMPs is essential to ensure a fast response, offering the best chance of stopping them from establishing in the wild. It can also prevent costly flow-on impacts to industry.



This map shows that there are high risk pest areas overseas, inter- and intra-state. Therefore, good vessel management is important for vessels travelling into and within Western Australia.

## How can they get here?

IMPs can be transported across thousands of kilometres of ocean and arrive in WA in or on the hulls of vessels big or small. These particularly include fishing and international yachts, petroleum production and exploration vessels and non-trading vessels like barges, dredges and seismic survey/research vessels.

It has been estimated that out of the 250 non-indigenous marine species identified in Australian waters, as many as three-quarters of them have arrived as biofouling on vessels. Many marine species are capable of being transported by vessel, whether in ballast water, through biofouling or attached to gear and equipment. Some of these species have the potential to survive long voyages, establish viable populations and become significant pests.

The likelihood of IMPs arriving in WA in this way or being spread further around the State increases with the number of ports vessels visit and the length of time spent in each port. It can be further increased by factors such as unsuitable AFC, significant time since the vessel was last cleaned, many complex vessel niches and slow operating speed.

## Benefits of managing aquatic pests

Good vessel maintenance not only prevents the introduction of new IMPs and the spread of those already here, it also provides a number of other benefits including:

- Increased vessel performance and speed;
- Reduced day-to-day running costs (lower fuel consumption);
- Reduced maintenance costs;
- Extended life of vessel and gear; and
- Protection of our marine and estuarine environments for future generations.

## Niche areas on a non-trading vessel where biofouling can accumulate

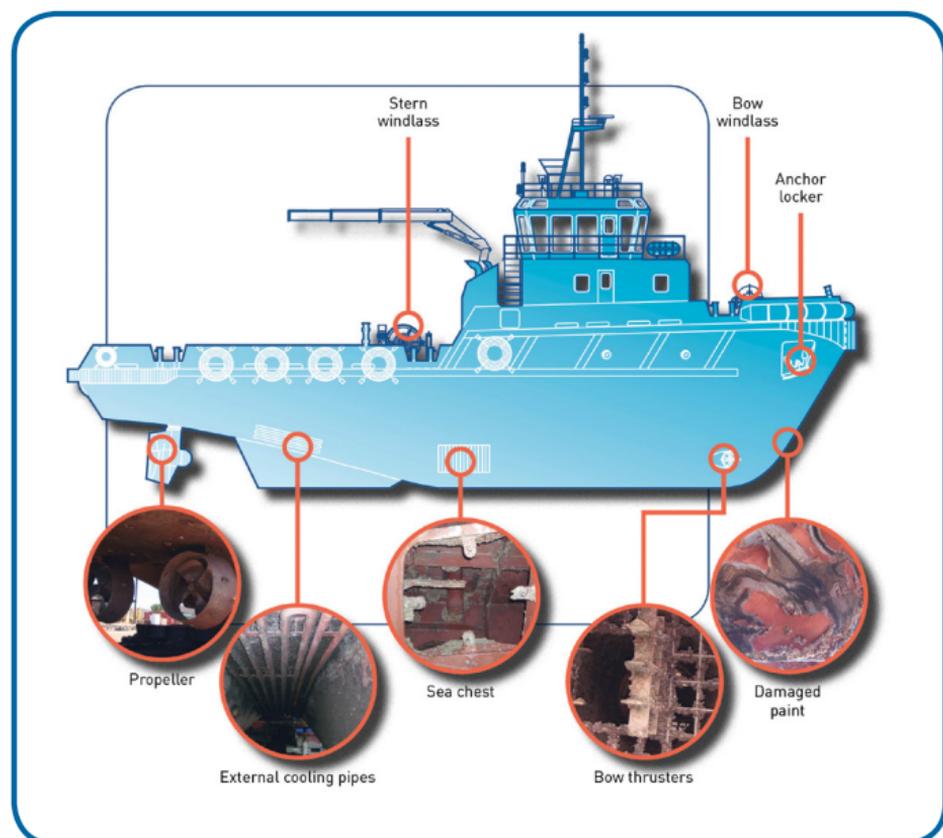


Diagram provided by the Department of Agriculture, Fisheries and Forestry. Images: John Polglaze, URS Australia (sea chest), John Polglaze, URS Australia courtesy of Helix ESG (bow thruster), Wallace McFarlane, Qld DPI (External cooling pipes).

## Does my vessel pose a risk?

The Department of Fisheries' policy is that vessels should be 'clean' before leaving for new destinations within WA, i.e. the risk of vessels transporting IMPs should be kept to an acceptable (low) level.

(To help manage the risk of marine pests in WA waters, the Department of Fisheries can also act under r.176 of the Fish Resources Management Regulations 1995 - a person must not bring into the State, or a particular area of the State, live non-endemic aquatic species other than with written approval or a licence. Without prior approval or a licence, a vessel manager who has allowed the transport of live non-endemic aquatic species into WA waters may have committed an offence.)

## Vessel risk assessment

A quick risk assessment of your vessel will help determine if any pre-voyage maintenance should be carried out to lower the risk of transporting IMPs. The Department can also provide advice on what you can do to improve vessel cleanliness and lower the level of risk. It's always a good idea to seek advice well in advance so there is time to carry out maintenance work if necessary.

If you can tick most of the following boxes for your vessel, it is likely to be considered 'clean' in WA reducing the risk of committing an offence.

- The vessel spends the majority of its time out of the water.
- The vessel spends considerable time in fresh water prior to marine voyages and vice versa.
- Management of the vessel's biofouling takes account of its operational history, for example, after a long period on a mooring and prior to travelling, the vessel hull is cleaned and or has a new AFC applied and/or is inspected for IMPs.
- Vessel has an operational MGPS (Marine Growth Prevention System) covering all internal seawater pipes or other methods are in place to inspect and treat the pipes.

## More Information

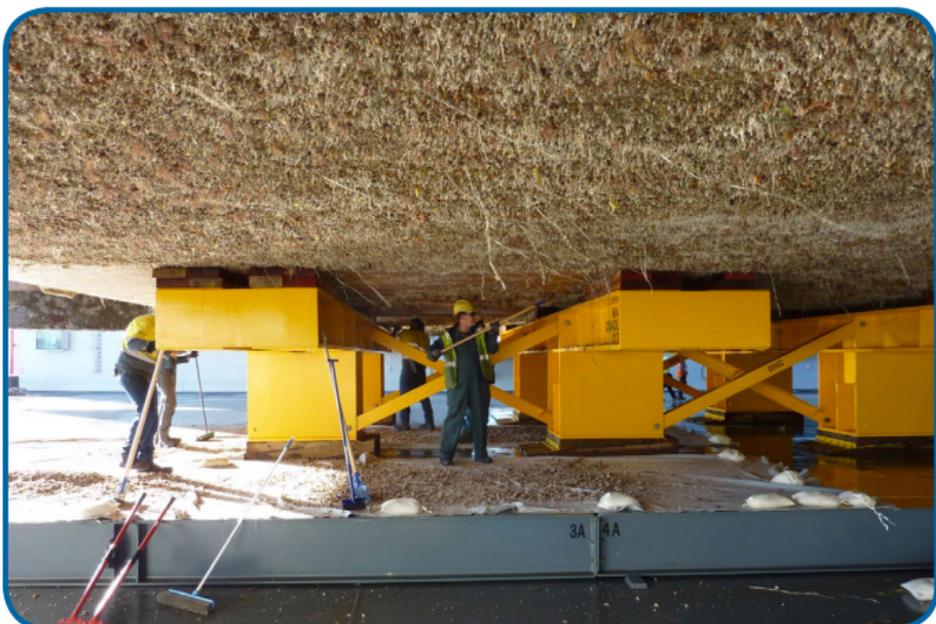
For more information please refer to the WA Marine Pest Management Guidelines found at:  
[http://www.fish.wa.gov.au/Documents/biosecurity/introduced\\_marine\\_pests\\_management\\_guidelines.pdf](http://www.fish.wa.gov.au/Documents/biosecurity/introduced_marine_pests_management_guidelines.pdf)

## In-water cleaning

In-water cleaning can manage biofouling to optimise the performance of vessels and other movable structures and to minimise biosecurity risks. However, in-water cleaning:

- can physically damage some anti-fouling coatings, shorten coating service life and release biocides into the environment;
- can also facilitate release of aquatic pests into the surrounding environment; and
- should not be considered a replacement for AFC maintenance and renewal at shore-based facilities where vessels and movable structures are removed from the water for cleaning and maintenance in preference to in-water operations.

In-water cleaning should therefore only be undertaken when removal of biofouling does not harm the coating and presents an acceptable biosecurity and contaminant risk.



Heavily biofouled vessel being cleaned in dry dock to reduce risk of invasive species translocation

## In-water cleaning in WA

Although the Federal Government released new national guidelines in mid-2013 covering in-water cleaning, you should check the Department of Fisheries' policy for in-water cleaning in WA.

Alternatives to in-water cleaning include:

- Removal to a jurisdiction where in-water cleaning is permitted;
- Removal of vessel components from the water for cleaning and waste containment on-board;
- Cleaning and containment of waste at low tide when vessel is out of the water;
- Hull or spot wrapping to kill biofouling; and
- Temporary lifting or turning to expose biofouling to the air to kill it.

**Your vigilance will help stop pests from entering and establishing in WA**

### **IF YOU THINK YOU HAVE FOUND OR SEEN A MARINE PEST:**

- 1. Photograph it** - from different angles, e.g. top, bottom, etc. Include a scale or ruler if possible and photos of the location where you found it.
- 2. Record it** - size, colour, depth and how and where it was found using GPS readings if available. Otherwise describe the area in which it was found in as much detail as possible.
- 3. Collect it** - collect a sample in a plastic bag and refrigerate or keep on ice but do not freeze it.
- 4. Report it** - contact **FISHWATCH** on **1800 815 507**, or through the free **WA PestWatch** app, which can be downloaded from the App Store and Google Play Store. (NOTE: If you collect samples please report it to FishWatch immediately).



Front cover (right hand side) image courtesy of  
The Department of Agriculture, Fisheries and Forestry

## Further information

For more information about:

- Aquatic pests and diseases, visit:  
<http://www.fish.wa.gov.au/biosecurity>



Supported by the  
Geraldton Port Authority

## Contact

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*Fish for the future*



WA PestWatch App



**FISHWATCH**



REPORT  
▶ Illegal Fishing  
▶ Aquatic Pests  
▶ Aquatic Diseases

**1800-815-507**