Marine pollution

What kind of waterways do we want?

Queensland Government

Garbage

Everyday items such as cigarette butts, plastic bags, bottles, cans and discarded fishing gear are common causes of marine pollution.

These objects, whether discarded intentionally, or simply blown overboard, contribute to increasing pressures on marine ecosystems.

Marine animals and sea birds can mistake plastic material for food, and often end up dying a slow and painful death from starvation or strangulation.

Years to decompose:

Glass bottle: 1 million years

Plastic ice cream tub: 600 years

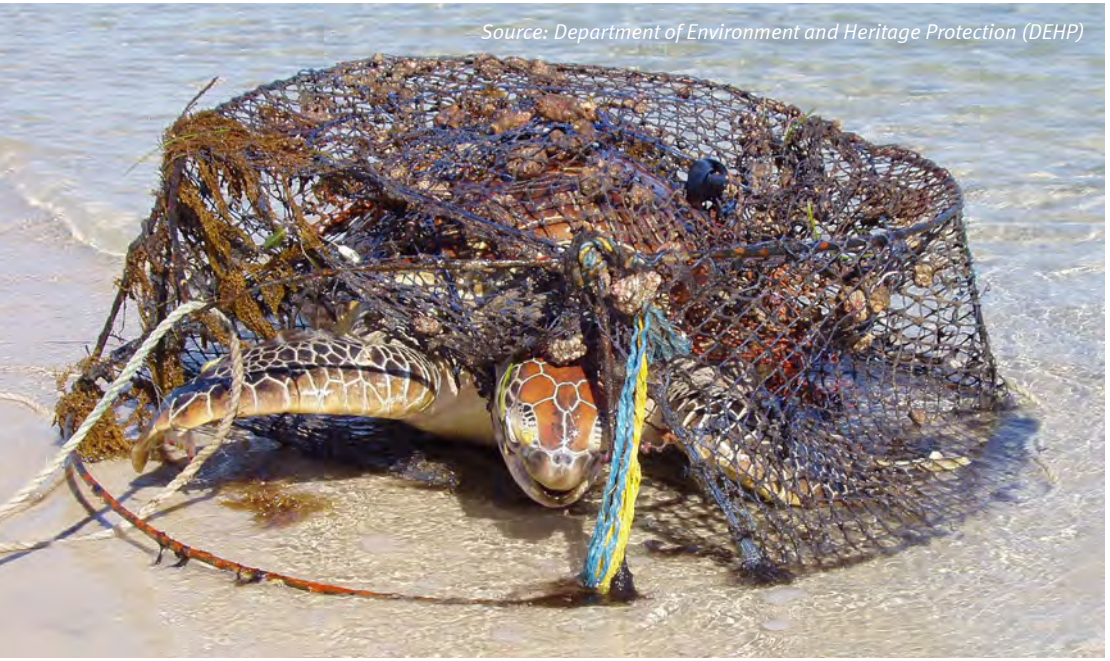
Plastic bottle: 450 years

Aluminium can: 80–200 years

Plastic shopping bag: 20 years

Cigarette butt/filter: 1–5 years

Source: The Ocean Conservancy, Pocket Guide to Marine Debris 2006



Source: Department of Environment and Heritage Protection (DEHP)

Simple measures can help protect marine wildlife and save you the embarrassment and cost of a fine.

- **Don't throw anything overboard.**
- **Have secure bins or garbage bags to store garbage onboard until you return to shore.**
- **Use crockery or re-useable plates and cutlery.**
- **Make the effort to retrieve lost or damaged fishing gear.**
- **If garbage does end up in the water, take the time to retrieve it.**
- **Don't abandon crab pots, as floats and lines can entangle wildlife and foul boat propellers.**

Paint scrapings

Harmful chemicals and compounds found in paint scrapings and wood preservatives are found to have long-term effects on numerous plant and animal species. By preventing paint scrapings from entering the water and mopping up any paint spills, you are doing your bit to help protect our waterways for the future.

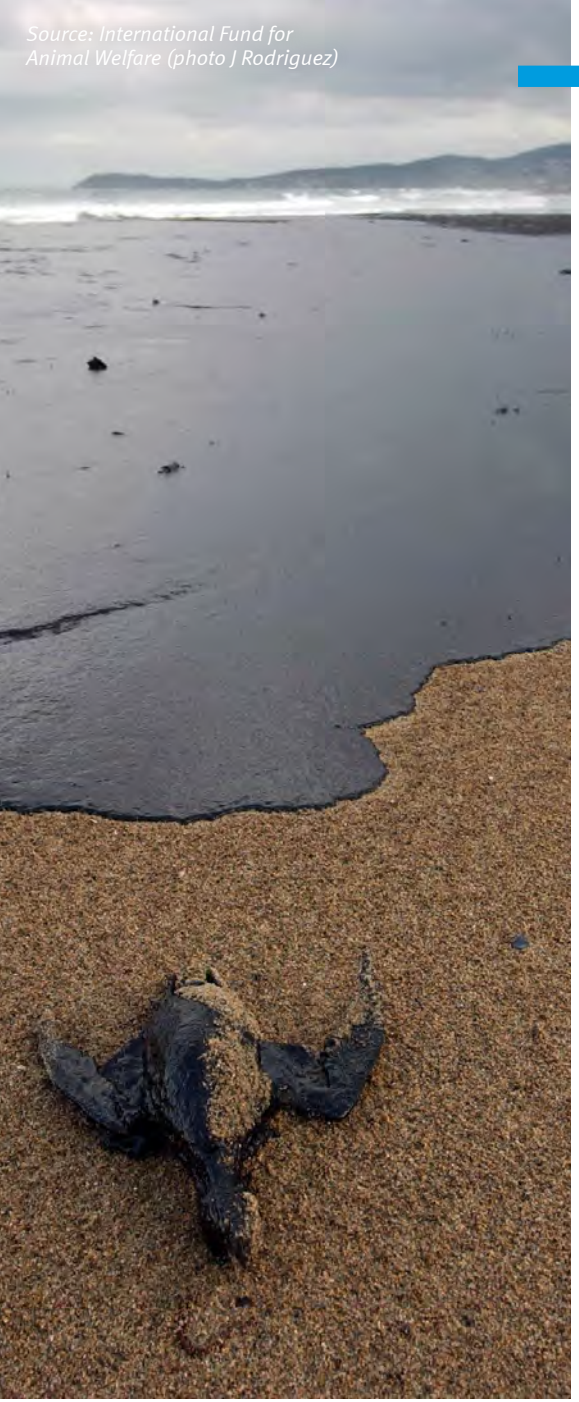
Pollution is an offence

Whether your boat is large or small, it is an offence to discharge garbage into Queensland coastal waters.

Maximum penalties:

- 3500 penalty units for an individual.
- 17500 penalty units for a corporation.

Source: NIWA (photo M Godfrey)



Source: International Fund for Animal Welfare (photo J Rodriguez)

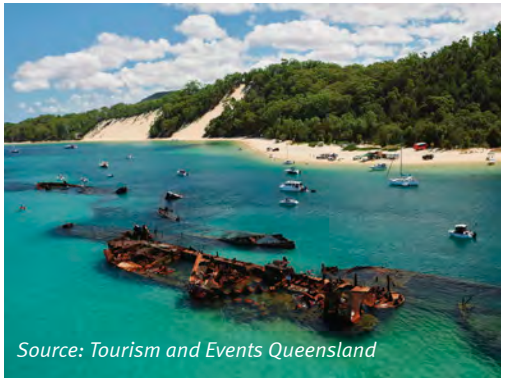
Oil and chemicals

Most oil and chemical pollution results from activities such as refueling, boat maintenance and bilge discharges. Petrol, hydraulic and gear box oil, and chemicals such as degreasers and paints contain a range of toxins harmful to both marine animals and humans.

Once these toxins enter our waterways, they have the potential to retard or prevent the reproductive development of many marine animals, which can have a flow-on effect on the whole ecosystem.

Contaminated fish stocks and filter feeders such as oysters and mussels can also pass on harmful chemicals to humans, if consumed.

If you accidentally spill oil or chemicals into the water, or see a spill, do your bit for the marine environment and contact your local Harbour Master, Marina Manager or Port Authority, so the spill can be contained and cleaned up as soon as possible.



Source: Tourism and Events Queensland

Boat operators need to help reduce oil and chemicals entering our waterways.

- Do not overfill your tank.
- Watch the breathers for signs of 'blow-back' or overflow.
- Ensure your bilges are clean before discharging them.
- Use phosphate-free biodegradable detergents.
- Carry absorbent material onboard to clean up any accidental spills.
- Repair oil and fuel leaks when first noticed.

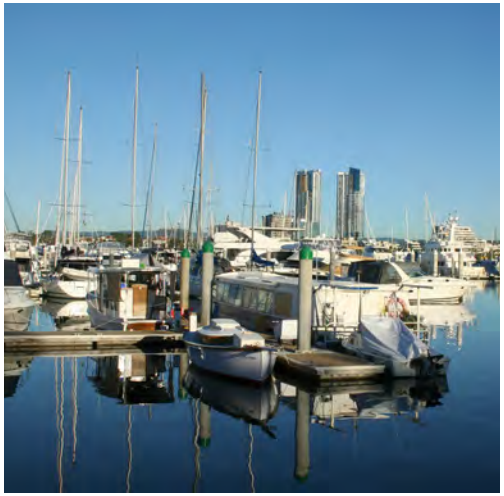
Sewage

The discharge of sewage into the marine environment poses serious health and environmental issues.

Pathogens such as viruses, parasites and bacteria found in sewage can potentially be passed on to other waterway users while swimming, surfing or diving, or by consuming contaminated shellfish such as mussels and oysters.

Given the right conditions, excess nutrients entering the water from sewage discharges can also lead to algal blooms (see image right). As blooms die off and decompose, they release toxins and deplete the oxygen in the surrounding water.

To reduce the impact associated with ship-sourced sewage, Maritime Safety Queensland imposes restrictions on the locations where different types of sewage can be discharged. Sewage is categorised as either treated or untreated.



Untreated sewage

Untreated sewage is sewage that **has not** passed through an onboard treatment system. Untreated sewage must pass through a macerator before being discharged, in order to assist with dispersion and improve visual amenity for all waterways users.

Declared ships* must have a sewage holding device if operating in areas where sewage discharge is not permitted.

Untreated sewage is **prohibited** from being discharged in the following areas:

- **Prohibited discharge waters**
  - Canals, marinas, boat harbours, the Noosa River and designated areas of state marine parks.
- **Smooth waters** (includes rivers, creeks and designated smooth waters)
- **All other ships** with 1–15 people onboard within 1852m† of reefs, aquaculture fisheries resources or the mean low water mark of the mainland.
- **Open waters**
  - Within 926m‡ of a wharf or jetty other than a jetty that is a marina
  - Within 1852m of aquaculture fisheries resources.

For ships with 7–15 people onboard, as above plus: within 1852m of a reef or the mean low water mark of an island or the mainland.

For ships with 16 or more persons onboard, no discharge of untreated sewage is permitted in Queensland coastal waters.

* Declared ships have a fixed toilet, and are:
- domestic commercial vessels with a certificate of operation issued, or taken to be issued, under the Marine Safety (Domestic Commercial Vessel) National Law Act 2012 stating it is a class 1B, 1C, 1D, 1E, 4C, 4D or 4E ship; or
- other Queensland regulated ships regulated under the Transport Operations (Marine Safety) Act 1994 and Regulation 2016 designed to carry more than 12 passengers.

† 1852m = 1 nautical mile

‡ 926m = 1/2 nautical mile

Treated sewage

Treated sewage is sewage that **has** passed through an onboard treatment system and is graded as either A, B or C depending on the level of treatment it has received. Treated sewage can be discharged in Queensland coastal waters subject to the following restrictions:

- **Grade A treated sewage (highest treatment)**
  - No restrictions other than Prohibited Discharge Waters such as canals, marinas, boat harbours, the Noosa River and designated areas of state marine parks.
- **Grade B treated sewage (medium treatment)**
  - Nil discharge in Prohibited Discharge Waters such as canals, marinas, boat harbours, the Noosa River and designated areas of state marine parks.
  - Nil discharge in Hervey Bay waters, northern Moreton Bay waters, open waters and smooth waters within 700m of:
    - a person in the water
    - aquaculture fisheries resources
    - reef.
- **Grade C treated sewage (lowest treatment)**
  - Nil discharge in Prohibited Discharge Waters such as canals, marinas, boat harbours, the Noosa River and designated areas of state marine parks.
  - Nil discharge in Hervey Bay waters, northern Moreton Bay waters, open waters and smooth waters within 926m of:
    - a person in the water
    - aquaculture fisheries resources
    - a reef.

Macerated sewage is not classed as 'treated sewage'.

Treatment systems

To ensure your treatment system is operating correctly, the system should be tested at the legally required intervals.

These test results, along with the system's service records, must be kept onboard your ship at all times.

Failing to have your treatment system tested or keep system documentation onboard your vessel at all times is an offence.

Maximum penalty: 350 penalty units per offence.

Macerators

All vessels that have a fixed toilet and operate in Queensland coastal waters must have macerators fitted. Owners must also ensure that sewage cannot bypass the macerator before being discharged.

For further information on sewage requirements for commercial and recreational vessels, discharge maps and locations of pump-out facilities, visit: **www.msq.qld.gov.au/home/environment/sewage**

Help protect the marine environment and report marine pollution to Maritime Safety Queensland as follows:

Southport	(07) 3305 1700	Airlie Beach	(07) 4956 3489
Brisbane	(07) 3305 1700	Townsville	1300 721 263
Mooloolaba	(07) 3305 1700	Cairns	1300 551 889
Hervey Bay	(07) 4971 5200	Weipa	1300 551 889
Bundaberg	(07) 4971 5200	Karumba	1300 551 889
Gladstone	(07) 4971 5200	Thursday Island	1300 551 889
Mackay	(07) 4956 3489		

It's in everybody's interest to protect our waterways from marine pollution.

For more information visit the Maritime Safety Queensland website
www.msq.qld.gov.au

01579