



WHALES

SHIPPING FACT SHEET

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Why are whales important?

Whales are top predators in the marine environment and many of them are keystone species, meaning that they play an essential role in their ecosystems. For example, whales provide important ecosystem services that maintain the health and stability of the marine environment and also contribute to fighting climate change (especially large whales). Whales recycle nutrients in the ocean while feeding at depth and defecating at the surface. This benefits both the entire food web and phytoplankton growth — tiny organisms that generate at least 50 percent of all oxygen in our atmosphere and capture an estimated 40 per cent of all carbon dioxide produced.

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How does shipping impact whales?

Shipping in areas frequented by whales can lead to high-risk areas with conflicts. In Canada, some of these areas include the Salish Sea and the estuary and Gulf of St. Lawrence. The Canadian Arctic — once largely inaccessible to ship traffic — is opening with the rapid loss of summer sea ice and this is expected to have increasing impacts on whales. Impacts include strikes, noise and harmful discharges:

- **Vessel strikes are a recognized cause of mortality for whales** worldwide and pose a risk to many species found in Canadian waters. All vessel types can collide with a whale, but larger vessels travelling at higher speeds have a higher likelihood of mortality or other severe impacts.
- **Vessel noise can alter whales' daily activities**, including foraging, surfacing, resting, predator avoidance, communicating, socializing, mating and nurturing calves, among others. They can ultimately lead to fewer offspring and a higher mortality rate.
- **Harmful materials may be dumped** into the water (and air) by vessels intentionally as part of daily operations, or accidentally, degrading the critical habitat of whales.

How does Canada protect whales?

Fisheries and Oceans Canada has a mandate to develop recovery strategies and action plans for whales listed under Canada's Species at Risk Act. Canada also sets guidelines for planning and managing marine protected areas that can offer protection to marine mammals. Canada has increased protection for some of its most at-risk whales, including new speed reduction measures and areas to be avoided. It also supports research, innovation and monitoring.

What needs to be done?

- Apply sustained planning and management policies, tools and measures to reduce threats from shipping for all whales.
- Identify all potential high-risk areas in Canada and develop guidelines for planning and managing shipping impacts on whales. Where feasible, favour measures that reduce shipping activities that overlap with important whale habitats.
- Develop policies and regulations to manage underwater noise and encourage industry to implement best practices through technological innovation or quieter operation (e.g., slow steaming).

Why address this now?

Despite the ecological, social and cultural importance of whales to Canada, many species are in decline because of human activities, including shipping. As shipping activity increases throughout Canada, the impacts of shipping on whales will likely only intensify.