

# Environmental Threats of Vessel Traffic in the Arctic Region

As more ships operate in the Arctic region, there is greater risk of vessel-related impacts to the marine environment.



## Oil Spills

Oil spills are the most significant vessel-related threat to the Arctic marine environment. Spills, particularly of heavy fuel oil, can injure or kill birds, fish, and marine mammals and can cause ecosystem impacts that last decades.

## Emissions

Combustion exhaust from vessels introduces air pollutants that contribute to global warming and negatively impact human and environmental health.

## Invasive Species

Vessels can introduce invasive species via ballast water and hull fouling. Aquatic invasive species can have significant adverse impacts to commercial fisheries, human health, and to the marine ecosystem.

## Discharges of sewage and graywater

Vessels—particularly large passenger vessels—may discharge large amounts of raw sewage and graywater (i.e., drainage from showers, laundry, kitchen sinks, etc.) into the ocean. These pollutants can spread bacteria and viruses and can introduce nutrients that disturb the marine food web.

## Ship strikes of marine mammals and noise

Vessels can hit slow-moving marine mammals, causing injury or death. Vessel traffic also introduces significant noise to the marine environment, which can hinder breeding, feeding and migration, disrupt communication and cause other negative impacts.

To learn more about the environmental threats posed by Arctic vessel traffic and potential solutions, see *Navigating the North: An Assessment of the Environmental Risks of Arctic Vessel Traffic* at [www.oceanconservancy.org/arcticvesseltraffic](http://www.oceanconservancy.org/arcticvesseltraffic)

