

**Factsheet: Marine pollution** 

## Marine debris

- More than 8 million tonnes of plastic enter the oceans each year, equal to dumping a garbage truck of plastic every minute. As much as 80 per cent of all litter in our oceans is made of plastic.
- As many as 51 trillion microplastic particles 500 times more than the stars in our galaxy litter our oceans and seas, seriously threatening marine wildlife.
- Marine debris is harming more than 800 species. 40 per cent of marine mammals and 44 per cent of seabird species are affected by marine debris ingestion.
- According to some estimates, at the rate we are dumping items such as plastic bottles, bags and cups after a single use, by 2050 oceans will carry more plastic mass than fish, and an estimated 99 per cent of seabirds will have ingested plastic.
- Plastic waste kills up to 1 million sea birds, 100,000 sea mammals, marine turtles and countless fish each year. Plastic remains in our ecosystem for years, harming thousands of sea creatures every day.
- Abandoned, lost or otherwise discarded fishing gear in the oceans makes up around 10 percent (640 000 tonnes) of all marine litter. This gear continues to catch fish through so called "ghost fishing", and also traps turtles, seabirds and marine mammals.

## Land-based activities

- 80 per cent of all pollution in seas and oceans comes from land-based activities.
- Nitrogen loads to oceans roughly tripled from pre-industrial times due to fertilizer, manure and wastewater. The global economic damage of nitrogen pollution is estimated at \$200–800 billion per year.
- In many parts of the world, (urban) sewage flows untreated, or under-treated, into the ocean.
- Pollution and eutrophication (excessive nutrients in water) are also caused by run off from the land, which cause dense plant growth and the death of animal life. The five large marine ecosystems most at risk from coastal eutrophication are: Bay of Bengal, East China Sea, Gulf of Mexico, North Brazil Shelf and South China Sea.
- Increased nutrient loading from human activities, combined with the impacts of climate change and
  other environmental change has resulted in an increase in the frequency, magnitude, and duration of
  harmful algal blooms worldwide. These algal blooms can contaminate seafood with toxins, and
  impact ecosystem structure and function, recreational activities, fisheries, tourism and coastal property
  values.
- Nutrient over-enrichment from agricultural, municipal and industrial sources contributes to the socalled "dead zones"—hypoxic regions that exhibit oxygen levels that are too low to support many aquatic organisms including commercially desirable species. The extent and duration of "dead zones" is also increasing worldwide.

## Oil spills

• Oil tankers transport some 2,900 million tonnes of crude oil and oil products every year around the world by sea. In addition to large tanker incidents, small oil spills happens every day, due to drilling incidents or leaking motors, and cause the death of birds, marine mammals, algae, fish and shellfish. Oil spills remain a concern, though actual spills have decreased steadily for several decades.