# Current situation with marine litter

Q1: What is the amount of plastic litter in the world's oceans?

A1: In 1997, the US Academy of Sciences estimated that
there are 13,000 pieces of plastic litter floating
on every square kilometer of ocean surface.

Q2: What litter is most commonly found on the beach?
A2: Major items are plastic and styrofoam.

Q3: What are the recent topics related to marine litter in the NOWPAP region?

A3: Recently, medical waste has been found on the beach in the NOWPAP region.

Q4: Where does marine litter come from?

A4: Marine litter comes from sea-based and land-based sources.

Land-based sources of marine litter are (I)municipal landfills located on the coast, (2)riverine transport of waste from landfills, (3)discharges of untreated municipal sewage and storm water, (4)industrial facilities and (5) tourism

Sea-based sources of marine litter are (1)merchant shipping, ferries and cruise liners, (2)fishing vessels, (3) military fleets and research vessels, (4)offshore oil and gas platforms and (5)aquaculture installations.

O5: What kind of damage is associated with marine litter?

A5: There are many kinds of damage.

 Damage to wildlife by entanglement, ingestion and habitat destruction.

2. Obstacle to safe maritime transportation

Damage to fishery resources, including ghost fishing and garbage mixed with fish catches.

4. Damage to factory water intakes.

Reduction in the number of tourists who visit beaches due to deterioration of the marine environment.

Cost for collection, treatment and disposal of marine litter.

7. Injuries on the beach.







Courtesy of Toyama Prefectural



The Northwest Pacific Action Plan (NOWPAP) was adopted in 1994 as a part of the UNEP Regional Seas Programme. The People's Republic of China, Japan, the Republic of Korea and the Russian Federation are currently members of NOWPAP. Each member hosts one of the four Regional Activity Centres (RACs), which are responsible for individual NOWPAP activities in coordination with the Regional Coordination Unit (RCU).

### About NOWPAP MALITA

As a new project, Marine Litter Activity (MALITA) was approved by the 10th NOWPAP Intergovernmental Meeting in November 2005. The main objective of MALITA is the development of a NOWPAP Regional Action Plan on Marine Litter, Activities of MALITA include collecting and reviewing data on marine litter, organizing meetings to share information and to build a common understanding on the marine litter problem, developing a long-term monitoring programme, conducting educational campaigns to raise public awareness, and preparing guidelines on waste management for different sectors such as shipping, fisheries and tourism.



### NOWPAP CEARAC

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# What can we do about marine litter



# What is marine litter?

Marine litter can be defined as any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment.

# Where can marine litter be found?

There is a lot of marine litter either visibly found on the beaches and shores, on the water surface, or invisibly in the water column and on the sea bed around the world.





Toyama Prefectural Fisheries Research Institute)

# What are the characteristics of marine litter?

Marine litter consists mostly of materials which take long time to degrade, such as plastic, styrofoam, metals and glass.



For example, the biodegradation time of a plastic bottle is about 450 years.

Styrofoam is difficult to collect because it might be broken into small pieces.





of Styrofoam on beaches. (courtesy of Dr. Kanchiro, Tokyo University of Marine Science and Technology)

Since marine litter travels over long distances with ocean currents and winds, it can be found not only near its source, but also in remote places far away from its source.

# The future of the NOWPAP region





The NOWPAP region consists of semi-enclosed sea areas. So, if we continue discharging litter into the sea, our seas will be filled with marine litter. The marine litter will be washed ashore on remote islands and coastal areas in the NOWPAP region by ocean currents and wind. Marine litter from the NOWPAP region will be also transported to places far away from its source.



NOWPAP region

# What can we do to reduce marine litter?



# 1.Try to reduce the generation of solid waste

- Think about altering your daily life and consumption habits to avoid generating waste.
- · Avoid using disposable materials.
- · Practice the 3 Rs.
- (Reduce, Reuse and Recycle)



# Do you know the 3 Rs?

The principle of reducing waste, reusing and recycling resources and products is often called the "3 Rs."

- Reducing means choosing to use things with care to reduce the amount of waste generated.
- Reusing involves the repeated use of items or parts of items which still have usable aspects.
- · Recycling means the use of waste itself as a resource.

Waste minimization can be achieved in an efficient way by focusing primarily on the first of the 3 Rs, "reduce," followed by "reuse" and then "recycle."

# Have you ever done any of these things?

- · Dropping cigarette butts on the beach or street gully
- $\dot{}$  Using fireworks on the beach and not taking what has been left over with you.
- · Throwing out tangled fishing lines into the sea.
- · Losing bags of bait and fishing gear when you are fishing.
- · Throwing out garbage on the beach or in the park.
- · Stuffing your garbage into overflowing garbage cans.

