

What is NOWPAP?

The Northwest Pacific Action Plan (NOWPAP) was adopted in 1994 as a part of UNEP Regional Seas Programme. The People's Republic of China, Japan, the Republic of Korea and the Russian Federation are members of NOWPAP

This brochure was prepared by NOWPAP CEARAC in cooperation with NOWPAP Regional Coordinating Unit and other Regional Activity Centres: DINRAC, MERRAC and POMRAC. The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) has funded the production of the brochure.

More detailed information is introduced in "Regional report on measures and best practices for prevention of marine litter input from land-based sources in the NOWPAP region" (NOWPAP CEARAC 2013).

Best practices for prevention of marine litter input from land-based sources in the **NOWPAP** region



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What is marine litter?

Marine litter has been defined as any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment. Marine litter can be found on the beaches and shores, on the water surface, in the water column and on the sea bed around the world.



Marine litter in the NOWPAP region

Approximately 500,000 of marine litter items, totaling about 36 tons, were collected in the NOWPAP monitoring areas in the last 3 years (2008–2010). Among them, 73% were plastic, including 16.5% polystyrene (NOWPAP 2011). Plastic and polystyrene are used widely in daily life.



Sources of Marine litter

Most of marine litter is generated from land-based activities. Therefore, it is important to prevent marine litter input from land-based sources through rivers and from the coasts.



Measures and best practices

There are various measures being taken by the member states of NOWPAP, some of which may be applied in other countries and areas. Therefore, sharing information on measures and best practices can help strengthen actions taken against marine litter.

Establishment of a cooperation network among relevant agencies and organizations

A network among central and local governments as well as NGOs/NPOs to collaborate in collecting and disposing of marine litter, and implementing public awareness programs, should be established or strengthened.

Action! Development and enhancement of cooperation among stakeholders

- ✓ Expanding understanding of the current situation by conducting monitoring with the participation of stakeholders
- ✓ Establishing a system for information sharing among related governmental agencies, NGOs/NPOs, citizen groups and other entities

Good Practice 1: River basin management

In Korea, to prevent marine litter input via rivers, a drainage basin management approach was introduced emphasizing cooperation and collaboration among upstream and downstream stakeholders.

River basin management in Korean five major rivers



Good Practice 2: Integrated information system

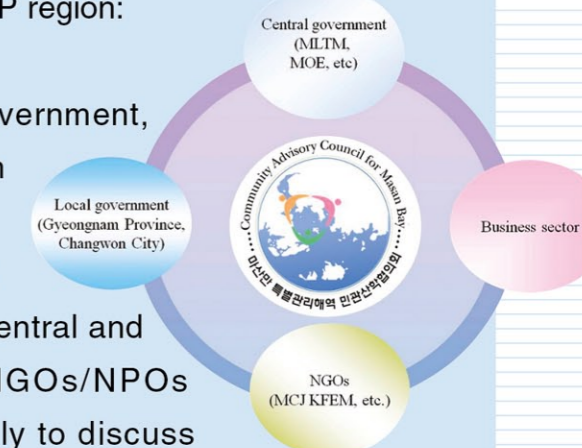
To provide information on marine litter in Korea, the Marine Litter Integrated Information System (<http://info.malic.or.kr>) was established in 2012.



Good Practice 3: Cooperative network of relevant organizations

To work cooperatively with relevant organizations against marine litter, following cooperative networks were developed in the NOWPAP region:

- ✓ Clean Masan Bay Project (Korea)
Cooperative framework by central and local government, businesses, universities and NGOs for clean Masan Bay
- ✓ Marine Litter Summit (organized by JEAN, Japan)
Marine Litter Summit, where officials from the central and local government participate along with NGOs/NPOs representatives and scientists, is held annually to discuss various marine litter issues.



Implementation of effective clean-up measures

Efficiently and effectively collecting litter is necessary to prevent it from entering the sea.

Action! Promotion of effective measures for the prevention, collection and disposal of marine litter

- ✓ Implementing/expanding cost-effective measures for preventing litter generation on land and outflow to the sea
- ✓ Sharing the costs for litter collection and disposal through a sustainable mechanism

Good Practice 4: Controlling marine litter from land-based sources

In China, Dalian Municipal Government implements following measures for controlling marine litter input from land-based sources:

- ✓ Strengthening waste discharge outlet management
- ✓ Recycling waste at port
- ✓ Implementing environmental protection and coastal clean-up activities

Good Practice 5: Trash booms and cost-sharing system

- ✓ In Korea, trash booms are used in estuary areas for cost-effective litter collection.
- ✓ As funding for disposal is an essential matter, the costs-sharing system among central government and local governments was introduced for marine litter collection and disposal.



Trash boom installed in estuary area in Korea

Good Practice 6: Waste processing complexes

In Russia, waste processing complexes for separation of collected wastes and recycling have begun operations.



A waste separation facility in Vladivostok

Enhancing public awareness

To help reducing the amount of marine litter, it is necessary for consumers and producers to understand the problem and change the consumption and production patterns.

Action! Promotion of effective public awareness programs

- ✓ Implementing activities to increase public awareness of marine litter issues.
- ✓ Raising awareness by media involvement and by educating students.

Good Practice 7: Marine Litter Art

By collecting materials (marine litter) to be used in art, people are making an innovative way of promoting awareness of the marine litter problem. In Japan, the marine litter art exhibitions have started since 2007, and sessions for school children are held.



Creating marine litter art by children



Marine litter art

Good Practice 8: Environmental photo contest

In Korea, as a part of Clean Masan Bay Project, environmental photo contest for students is organized to enhance the environmental awareness of citizens. Local media have been featuring such events to attract public attention.

Good Practice 9: Ecological programs and projects by private sector

In Russia, Coca-Cola, VostokStroyService, and PrimVodoKanal companies started programs on ecological education for preventing marine litter input from land-based sources.



Cleanup event in Aniva Gulf, Sakhalin, Russia

Good Practice 10: Beach cleanups and international cooperation

✓ Beach cleanup is the most fundamental approach for increasing public awareness on marine litter problem. International Coastal Cleanup (ICC) is organized by Ocean Conservancy annually. In the NOWPAP member states, national ICC campaigns are led by the following coordinators:

China: Shanghai Rendu Enterprise Consulting Co., Ltd.

Japan: Japan Environmental Action Network (JEAN) and NPO Okinawa O.C.E.A.N.

Korea: Our Sea of East Asia Network (OSEAN)

Russia: Sea Protection Institute, Maritime State University

✓ NOWPAP ICC campaigns have been also organized annually since 2006 for raising public awareness in the member states.



NOWPAP ICC campaigns in Yamagata, Japan and Vladivostok, Russia

✓ The environment subcommittee of the Association of North East Asia Regional Governments has started marine litter monitoring activities since 2000 in order to protect the marine environment. The subcommittee has contributed to promoting public awareness and environmental education programs.

Call for action by general public

One of the most effective ways to deal with marine litter problems is involvement of larger number of people. Every citizen should take simple actions minimizing generation of waste in daily life, which will help to reduce the amount of marine litter in the seas and oceans around the world.

✓ Avoiding waste generation from daily life

Most of land-based marine litter is generated from our daily life. Therefore, every person should take responsible actions:

- ✓ Avoid using disposable materials produced from plastic and foamed polystyrene;
- ✓ Use returnable beverage glass bottles and metal cans and recycle them;
- ✓ Say 'no thank you' at stores for unnecessary packaging; and
- ✓ Implement separated collection of garbage for recycling.

In some NOWPAP member states, plastic shopping bags have not been provided for free anymore. They are major part of marine litter and are frequently found at beaches. Therefore, in order to make more eco-friendly way of living, we should not accept free shopping bags from grocery shops and use our own reusable shopping bags.



✓ Participating in cleanup events

As people living far from the ocean may not be aware of the current situation with marine litter, preparing education programs for them is necessary, including participation in beach cleanups. Many NGOs/NPOs hold the beach cleanups regularly, so participating in these events is strongly recommended to understand marine litter problems.