平成 22 年 1 月 26 日

各　　位

財団法人 環日本海環境協力センター
特殊モニタリング・沿岸環境評価
地域活動センター(CEARAC)所長
山本　秀正

「CEARAC ニュースレター第 6 号」の送付について

日頃から、(財)環日本海環境協力センター(NPEC)の活動に対してご理解とご協力をいただき、ありがとうございます。

当財団は、国連環境計画(UNEP)が提唱し、日本、中国、韓国及びロシアの 4 か国で推進している北西太平洋地域海行動計画(NOWPAP)の特殊モニタリング・沿岸環境評価地域活動センター(CEARAC)に指定されており、現在、CEARAC の下に設置されたワーキンググループ 3（HAB(有害藻類の異常繁殖)）及びワーキンググループ 4（リモートセンシング）並びに MALITA（NOWPAP 海洋ごみ活動）の諸活動に取り組んでおります。

このたび、「CEARAC ニュースレター第 6 号」を作成しましたので送付いたします。執務の参考にご活用いただければ幸いに存じます。

なお、追加配布を希望される場合は、事務担当までご連絡願います。

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UNEP

Newsletter from NOWPAP CEARAC

Northwest Pacific Action Plan
Special Monitoring & Coastal Environmental Assessment
Regional Activity Centre

Contents

No. 6
December 2009

CEARAC – Now and Future

Greetings from the Director of CEARAC, Hidemasa Yamamoto

CEARAC has published the newsletter annually since 2004 in order to disseminate useful information on the marine environment related issues in the Northwest Pacific Region, and CEARAC activities. Here, we are announcing the publication of the 6th issue and it would be our great pleasure if this newsletter can help all the people who are concerned about the marine environment feel familiar with current CEARAC activities and CEARAC itself.

Activities in the past

Since its establishment in 2002, CEARAC has implemented various activities under Working Group 3 (Harmful Algal Blooms), WG4 (Remote Sensing), as well as activities on marine litter led by NOWPAP RCU, in close cooperation with other RACs and other regional/international organizations. Through these activities, CEARAC has developed several materials and web contents such as Integrated Report on HABs and RS, Websites on HABs and RS, Booklet of Countermeasures against HABs, *Cochlodinium* pamphlets, Eutrophication Monitoring Guidelines. In addition, WG4 also organized the training course on Remote Sensing Data Analysis.

Regarding marine litter, CEARAC developed several materials such as Guidelines for Monitoring Marine Litter on Beaches and Shorelines and organized 2 workshops.

Focusing on the current biennium 2008-2009, the major outcomes of WG3 are implementation of HAB Case Studies and construction of HAB Integrated Website for wider dissemination of information. WG4 developed the educational materials for utilization of RS data and organized the 2nd training course. CEARAC also has a joint activity of WG3/4 and developed the procedures for assessment of eutrophication status (the Common Procedures). For promoting marine litter-related activity, CEARAC made a pamphlet to introduce NOWPAP marine litter monitoring on beaches implemented in each member state.

As one of cooperation and coordination means with other RACs and other regional/international organizations, CEARAC has actively participated in more meetings and workshops for collecting and exchanging information in this biennium, The main focus of our activities is, of course, the marine environmental conservation in the NOWPAP region; however, with the idea of perceiving the issue from a broader point of view, exchanging opinions with NOWPAP partners and other regional seas were very productive for CEARAC. In line with this idea, CEARAC participated in the 11th Global Meeting of the Regional Seas Conventions and Action Plans (October 2009, Bangkok) and the East Asian Seas Congress 2009 (November 2009, Manila). Participation in the EAS Congress is one of the good opportunities to disseminate CEARAC activities to the world through an individual booth and to learn the current programmes and projects of other regional and/or international organization.

Work plan for 2010-2011

Reviewing the outcomes of the past activities and the next step to we should take on, CEARAC plans to continue implementing WG3 and WG4 activities with updating the Integrated Reports on HAB and RS, organizing the 3rd training course of RS data analysis, and in special, conducting the assessment of eutrophication status in the NOWPAP member states with the Common Procedures in the next biennium 2010-2011. The eutrophication assessment will be one of the collaborative activities of all the NOWPAP member states (China, Japan, Korea and Russia), and we expect essential information for proper management of the marine and coastal environment in the region will be provided by

implementing this assessment in the 4 countries with the same procedures at the same time.

In addition, along with a new activity which the Northwest Pacific Region Environmental Cooperation Center (NPEC), the host organization of CEARAC, implemented in 2009, we will initiate a new activity on marine biodiversity in the next biennium: developing the new marine assessment method focusing on marine biodiversity. Before taking up this activity in full-scale, NPEC organized the First Workshop on Marine Biodiversity in the NOWPAP Region in Toyama in September 2009.

Activities on marine litter (RAP MALI) will be also continued its implementation in the next biennium.

CEARAC continues doing our best on promoting development of the marine and coastal environment assessment methods and conservation of the marine environment of the NOWPAP region in cooperation and coordination with other RACs and NOWPAP RCU, and we ask for your support to our activities to protect our mother nature.

The East Asian Seas Congress 2009

Greetings from Sangjin LEE, NOWPAP Scientific Affairs Officer

Sangjin Lee, Scientific Affairs Officer, Northwest Pacific Action Plan (NOWPAP) of UNEP

First of all, it's my great pleasure to have a chance to contribute a few words to the CEARAC newsletter. It's been almost 6 months since I was recruited by UNEP as a NOWPAP Scientific Affairs Officer. Before joining NOWPAP, I had worked at Korea Coast Guard as a branch director and research center manager, responsible for oil spill preparedness and marine pollution related project management since 2004.

When I reported on duty, I was surprised by recognizing 2 things: significance of marine environmental issues in the NOWPAP region and the number of activities being implemented.

As you may be aware of, Northwest Pacific region comprises four of the world's great economic and maritime powers, the People's Republic of China, Japan, the Republic of Korea and the Russian Federation. Needless to say, this region sustains high-intensity fisheries and high aquaculture productivity, and economic development. From an environmental standpoint, this region is the semi-enclosed sea area with a high risk of marine pollution due to many factors including land based sources, ballast waters, algal blooms, oil spill accidents and so on. This is why the implementation of NOWPAP activities aiming to conserve vulnerable marine environment is so important.

I was also pleasantly surprised by finding out so many activities of RACs being implemented: harmful algal blooms and ocean remote sensing by CEARAC, updates for data and information on contaminants and nutrients, and coastal and marine reserves by DINRAC, oil and HNS spill preparedness and response by MERRAC, and finally, integrated coastal and river basin management, river and direct inputs and atmospheric deposition of contaminants by POMRAC. Those activities have been implemented successfully, along with marine litter-related activities, including a series of workshops and International Coastal Cleanup (ICC) campaigns.

Considering my time at NOWPAP RCU from this perspective, I feel a sense of responsibility for not only to develop and promote new projects, but also to accelerate other activities being implemented by NOWPAP. As a scientific affairs officer, I will try my best by contributing to successful implementation of NOWPAP activities through coordination of each RAC projects. Within a few years I hope to find NOWPAP bringing significant achievements in the field of marine environment conservation.

I'd like to thank CEARAC staff for their devotion and commitment to their efforts.

2009 Tunza International Children and Youth Conference

Step Forward — CEARAC Activities

Meeting and Workshop

7th CEARAC FPM & 1st Workshop on Marine Biodiversity in the Northwest Pacific Region (September 2009)

The Seventh CEARAC Focal Points Meeting was held on 14 - 15 September 2009 in Toyama, Japan. About 20 experts and authorities including the members of FPM, representatives of NOWPAP RCU and RACs, and others participated in the meeting.

At first, the implementation and expenditure of CEARAC activities for the 2008-2009 biennium was reported and approved.

Following this report, the draft workplan and budget of CEARAC activities for the 2010-2011 biennium were explained, which include updating the Integrated Reports on HABs and RS published in 2005, conducting assessment of the eutrophication status in the NOWPAP member states, organizing the third NOWPAP Training Course on Remote Sensing Data Analysis and developing the new marine assessment method focusing on marine biodiversity.

During the meeting, further cooperation between CEARAC and other RACs and relevant regional/international organizations and projects were emphasized by the participants. CEARAC will take every opportunity to develop more communications and information sharing means with others.

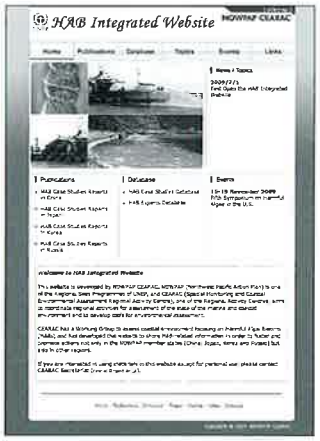
Also, the First Workshop on Marine Biodiversity in the Northwest Pacific Region was held on 16 September by Northwest Pacific Region Environmental Cooperation Center (NPEC), the host organization of CEARAC, back-to-back with the 7th FPM.

In the workshop, a keynote speaker by HELCOM (Helsinki Commission), which is the pioneering organization to assess the situation of marine biodiversity, introduced the activities and experiences of the organization and the situation of the international database on marine biodiversity. At each session, current situation of activities and database on marine biodiversity in the NOWPAP member states were introduced. The information shared at the workshop was very useful for starting a new activity on marine biodiversity by CEARAC and NOWPAP.

NOWPAP Working Group 3 (HAB Activities)

In November 2009, CEARAC starts operation of HAB (Harmful Algal Bloom) Integrated Website (http://www.cearac-project.org/HAB_Integrated_Website/). This website was developed to provide useful information on HAB in the NOWPAP region in order to enhance study and countermeasures against HAB in our region.

This website is constructed by 5 contents, "Publication", "Database", "Topices", "Events" and "Links".



Publication site;

You can check the reports and booklet published in the past CEARAC's activities in this site.

"HAB Integrated Report" is published to describe problems related to HAB in the NOWPAP region and to identify necessary future activities by CEARAC based on the National Reports made by experts.

"Booklet of Countermeasures against HABs in the NOWPAP region" introduces the countermeasures methods which are conducted in situ and on-going studies in

member states in order to contribute to establishing policies and measures against HAB among stakeholders and related agencies.
"HAB Case Studies Reports" are made to establish the most effective and laborsaving ways for sharing information among the NOWPAP member states about HAB occurrence, oceanographic and meteorological condition and nutrients in selected sea areas. All reports are downloadable through this website.

Database site;
You can search and get information using these databases.
"HAB Reference Database" is established to provide useful information and reference materials for researchers, government officials and public who interested in HABs in the NOWPAP region.
"HAB Expert Database" provides the information on HAB experts whose researches and studies are related to CEARAC activities.
"HAB Case Studies Database" provides the information on red tide events, toxin-producing plankton bloom events and water quality in selected sea area in the NOWPAP region using common format sheet based on the HAB Case Studies conducted in member states.

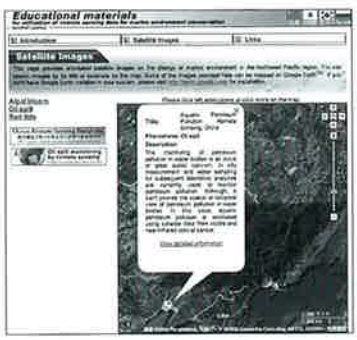
Topices site;
CEARAC focuses on following three topics; Cochlodinium, Satellite Remote Sensing and Eutrophication.
Cochlodinium polykrikoides is one of the most concerned species in the NOWPAP region. CEARAC developed "Cochlodinium Homepage" and made "Cochlodinium pamphlet" to provide basic information of this species for stakeholders.
In recent years, satellite remote sensing image is used for HAB monitoring and studies, remote sensing is very useful tool for HAB. CEARAC has Working Group on Remote Sensing and the group provide useful information and data. Such information is provided through this website.
CEARAC plans to assess the eutrophication status in selected sea area in the NOWPAP region using the procedures for assessment of the eutrophication status in the NOWPAP region developed by CEARAC in 2009. We will provide the assessment results and other useful information on eutrophication through this website in near future.

Event and Link site;
In these sites, the event information of CEARAC and other HAB-related international organizations and link information is provided.

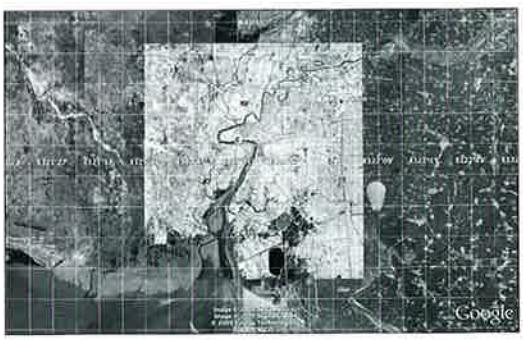
CEARAC expects this website is used by many scientists and stakeholders not only in the NOWPAP region but also in the other region. We would like to provide useful information from this website, so if you have any requests and comments, please let us (cearac@npec.or.jp) know.

NOWPAP Working Group 4 (RS Activities)

In November 2009, CEARAC has opened of website of educational materials for utilization of remote sensing data for marine environment conservation (http://www.cearac-project.org/wg4/em/). This website was developed for students, young researchers and coastal mangers in the Northwest Pacific Region to help learn remote sensing of marine environment. The website provides useful information to monitor change of marine environment, which explain detailed descriptions of various phenomena such as Harmful Algal Bloom, oil spills and red tides observed by satellite from space. Each satellite image can be searched by its phenomena or location on the map, and it comes with very detailed description including the name of satellite sensor used and source of those satellite data. Some of those satellite images provided on this website can be mapped on Google Earth™, so that the user can easily understand the spatial scale of the satellite images and learn basic geographical information of the neighboring area. CEARAC is planning to add more materials in the 2010-2011 biennium, and provide up-to-date information the NOWPAP region.



Searching satellite images on map



Mapping satellite images on Google Earth

Joint Activity between NOWPAP WG3 and WG4

NOWPAP CEARAC has developed the "Procedures for the assessment of eutrophication status including evaluation of land based sources of nutrients for the NOWPAP region (Common Procedures)" for the 2008-2009 biennium. Objective of this activity is to develop useful procedures for the assessment of eutrophication status (nutrient enrichment, HAB occurrence, and other direct and indirect effects from nutrient enrichment) by utilizing remote sensing techniques that can be shared among the NOWPAP members.
As a part of the development process, draft procedures was prepared by Northwest

Pacific Region Environmental Cooperation Center based on lessons learned from a pilot study conducted in Toyama Bay. The draft procedures were reviewed and refined by experts of NOWPAP and then complied into the common procedures.

Now, application of the Common Procedures in NOWPAP sea area is being planned. So far, potential areas were selected from each NOWPAP member state; Yangtze River Estuary and adjacent area (China), Northwest Kyushu sea area (Japan), Jinhae Bay (Korea) and Peter the Great Bay (Russia). The obtained assessment results in each selected sea area will be compiled as an integrated report on assessment of eutrophication status for the NOWPAP region by 2011, hoping that it will provide essential information for proper management of the marine and coastal environment in the NOWPAP region.

CEARAC Activities on Marine Litter

In the 2008-2009 biennium, CEARAC implemented following activities based on the NOWPAP Regional Action Plan on Marine Litter (RAP MALI).

(1) Compilation and harmonization of marine litter monitoring data on beaches and submission of collected data to DINRAC and Development of public awareness materials

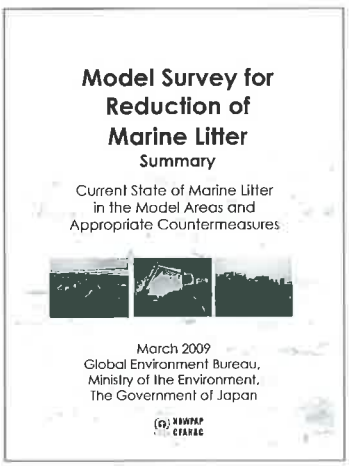
Based on RAP MALI, the member states implement monitoring surveys of marine litter on beaches and shorelines. The results of their monitorings were submitted to CEARAC by National coordinators. CEARAC compiled and harmonized these results and submit them to DINRAC in order to upload the data to NOWPAP marine litter website. CEARAC also summarized the submitted data and made a pamphlet to introduce the current situation of marine litter in the NOWPAP region.

(2) Interpretation of results of marine litter monitorings on beaches

Northwest Pacific Environmental Cooperation Center (NPEC) conducted marine litter monitoring from 1996 in the NOWPAP member states in common method. CEARAC analyzed the yearly trend, distribution and composition of marine litter in the NOWPAP region, and provided the information to improve the current situation, to solve marine litter issues and to formulate measures against marine through CEARAC marine litter website (http://www.cearac-project.org/MALITA/index.htm).

(3) Development of technical materials and introduction of best practices on solid waste management, including removal of marine litter on beaches

The Ministry of Environment, Japan conducted the Model survey for reduction of marine litter in order to understand the current situation and to consider the countermeasures against generation of marine litter and the effective treating and cleaning method, and made the summary report in March 2009. CEARAC made booklet based on the summary report in November 2009.



Voice from the Partners

Marine Biodiversity Conservation by the Convention on Biological Diversity

Jihyun Lee, Environmental Affairs Officer, Secretariat of the Convention on Biological Diversity/UNEP

Convention on Biological Diversity

The Convention on Biological Diversity (CBD)

Launched at the Earth Summit in Rio de Janeiro in 1992, the Convention on Biological Diversity (CBD) is an international treaty for the conservation and sustainable use of biodiversity and the equitable sharing of the benefits from the utilization of genetic resources. With 192 members, the CBD has near-universal participation among countries committed to preserving life on Earth. The CBD seeks to address all threats to biodiversity and ecosystem services, including threats from climate change, through scientific assessments, the development of tools, incentives and processes, the transfer of

technologies and good practices and the full and active involvement of relevant stakeholders including indigenous and local communities, youth, non-governmental organizations, women and the business community. The headquarters of the Secretariat of the Convention, under the leadership of Dr. Ahmed Djoghlaf, Executive Secretary to the Convention, is located in Montreal. Further information on the Convention can be found at https://www.cbd.int/convention/.

2010 Biodiversity Target

To achieve a more effective and coherent implementation of the three objectives of the Convention on Biological Diversity, Parties to the Convention committed themselves to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national levels as a contribution to poverty alleviation and to the benefit of all life on Earth. This target was also endorsed by the World Summit on Sustainable Development and became a part of the Millennium Development Goals. The progress made at global, regional and national levels in achieving this target will be reviewed, with the consideration of post-2010 targets, at the forthcoming 10th meeting of the Conference of the Parties to the Convention (COP 10) to be held in Nagoya, Aichi Prefecture, Japan, from 18 to 29 October 2010. Further information can be found at https://www.cbd.int/cop10/

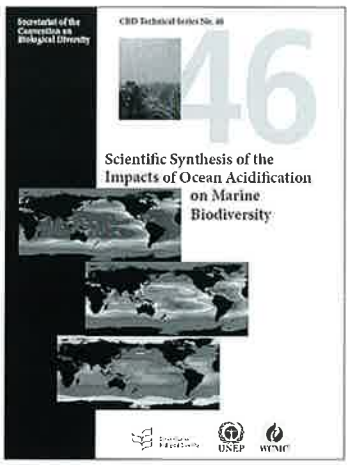
Jakarta Mandates and the Programme of Work on Marine and Coastal Biological Diversity

Marine and coastal biological diversity was an early priority for the Conference of Parties (COP) to the Convention on Biological Diversity (CBD). At the second meeting of the COP in 1995, the Ministerial Statement on the Implementation of the Convention on Biological Diversity referred to the new global consensus on the importance of marine and coastal biological diversity as the "**Jakarta Mandate on Marine and Coastal Biological Diversity**". The Ministerial Statement reaffirmed the critical need for the COP to address the conservation and sustainable use of marine and coastal biological diversity, and urged Parties to initiate immediate action to implement COP decisions on this issue. In its seventh meeting in 2004, COP adopted decision VII/5 on marine and coastal biological diversity. Annex 1 to decision VII/5 contains the elaborated programme of work on marine and coastal biological diversity, with the following key programme elements: (i) Implementation of integrated marine and coastal area management; (ii) Marine and coastal living resources, including coral reefs and deep sea biodiversity; (iii) Marine and coastal protected areas; (iv) Mariculture; and (v) Invasive alien species. The programme of work was designed to facilitate and promote country efforts toward the conservation and sustainable use of marine and coastal biodiversity. For example, Parties to the CBD recognized that integrated marine and coastal area management (IMCAM) provides an overarching management framework for addressing cross-sectoral issues related to marine and coastal biodiversity conservation. IMCAM enhances the application of ecosystem approach, the establishment of marine protected areas, and planning of proper coastal land and watershed use, which were identified as useful approaches and tools to address threats to sustainable ocean development in the Plan of Implementation of the 2002 World Summit on Sustainable Development (WSSD). In-depth review of the progress made in the implementation of this programme of work will be undertaken also at the forth coming Nagoya COP 10 meeting, mentioned above. Further information on the programme of work can be found at https://www.cbd.int/marine/resources.shtml.

Global Status of Marine and Coastal Biodiversity

Most of the global marine and environmental assessments that have been conducted during the last few years have found serious declines in marine living resources, losses of coastal habitats, elevated pollution levels, poor water quality in many areas, and overall deterioration of the marine environment exacerbated by the effects of climate change. Coastal communities and local economies are adversely impacted by such trends as poverty, land use changes, overfishing, nutrient loading, sewage, and coastal developments, which put the capacity of the marine environment beyond its sustainable limit.

In general, pressures on coastal and marine biodiversity are increasing. 50% of the world's population will live along the coasts by 2015, putting unsustainable pressures on coastal resources. These human pressures will combine with the impacts of climate change, which will become more severe in the future. For example, sea water temperature increases will cause more frequent and severe coral bleaching events. Rising CO_2 concentrations in the atmosphere will result in sea water becoming more acidic, reducing the biocalcification of tropical and cold-water coral reefs, as well as other shell-forming organisms, such as calcareous phytoplankton, impacting the entire marine food chain. The recent CBD publication (CBD Technical Series 46, available at www.cbd.int/doc/publications/cbd-ts-46-en.pdf) showed that increasing ocean acidification will mean that by 2100 some 70 % of cold water corals, a key refuge and feeding ground for commercial fish species, will be exposed to corrosive waters. It also showed that ocean acidification is irreversible on timescales of at least tens of thousands of years, and substantial damage to ocean ecosystems can only be avoided by urgent and rapid reductions in global emissions of CO_2. In addition, climate change may affect ocean circulation, including potentially reducing the intensity and frequency of large scale water exchange mechanisms, impact both nutrient and larval transport and increase the risk of pollution and dead zones.



2010 International Year of Biodiversity

CBD Secretariat is coordinating the global celebration of the 2010 International Year of Biodiversity (IYB), together with Parties, CBD partners and other global

communities. The international celebration of IYB will be culminated by a gathering of Heads of States on 20 September 2010 at UN Headquarter, which will give countries valuable opportunities to bring the challenges of marine biodiversity conservation to the attention of high-level policy makers. CBD Secretariat invites NOWPAP-CEARAC and its partners to join hands together in turning the tide of significant biodiversity loss with the enhanced global commitments through the celebration of 2010 IYB. Further information on IYB celebration is available at https://www.cbd.int/2010/welcome/.

2010 International Year of Biodiversity

HELCOM shares its long experience in the protection of a regional sea, the Baltic Sea

Maria Laamanen, Professional Secretary of HELCOM

The Helsinki Commission (HELCOM) has worked since 1974 to protect the marine environment of the Baltic Sea from all sources of pollution. Governments of all coastal countries of the Baltic Sea are signatories to the Convention on the Protection of the Marine Environment of the Baltic Sea Area and they all participate in the work of HELCOM.

The Baltic Sea suffers from excessive growth of algae and plants caused by loading of nitrogen and phosphorus from external sources, such as municipalities and agriculture in the catchment area. Industrial activities together with dense population in the catchment have resulted in pollution with hazardous substances. Eutrophication, effects of hazardous substances, impacts from intensive fisheries and maritime shipping have also resulted in changes to the biodiversity of the Baltic Sea.

In November 2007, ministers for the environment and high-level representatives of the HELCOM parties adopted an ambitious action plan, the HELCOM Baltic Sea Action Plan (HELCOM BSAP), to radically reduce pollution to the Baltic Sea and reverse its degradation by 2021. The HELCOM BSAP is a first ever attempt by a regional sea convention to incorporate the ecosystem-based approach into the protection of the marine environment.

With the Baltic Sea Action Plan, the Baltic Sea countries adopted a full management cycle for eutrophication (Figures 1 and 2). Central to this management strategy are *ecological objectives* that describe a Baltic Sea unaffected by eutrophication. To operationalize the eutrophication objectives, Baltic Sea scientists have developed specific eutrophication indicators that include quantitative sub-regional *targets* which are based on *reference values* and *acceptable deviations* from these reference values.

With the help of harmonized regional monitoring, the Baltic Sea countries are able to produce indicator-based assessments. These assessments also supply the latest available information to support policy-making, including recommendations on whether further protective measures are needed. The integrated thematic assessment of eutrophication was published in 2009. It indicated that the eutrophication status of all but 13 areas out of 189 was not acceptable even though the external loads of nutrients to the Baltic Sea have had a decreasing trend since the beginning of the 1990s.

Based on the eutrophication *targets* and using *models* that incorporate data on pollution loads, hydrology, chemistry and biological parameters, it has been possible to define *maximum allowable nutrient inputs* to each sub-basin and provisional *country-wise annual reduction targets* for nitrogen and phosphorus. These figures were adopted by the Baltic Sea countries and the EC, together with a framework of cost-effective *actions and measures* to reduce nutrient inputs to the Baltic Sea

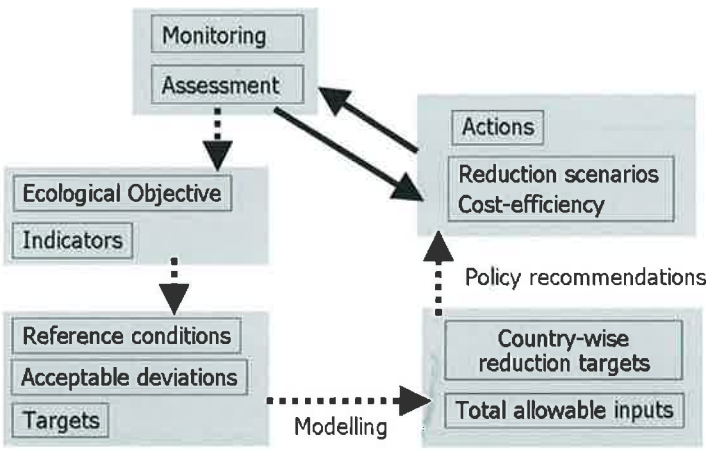


Figure 1. Eutrophication management cycle of the Baltic Sea Action Plan.

Figure 2. Finland's archipelago is a popular area for boating although blooms of cyanobacteria, a sign of eutrophication, are common during summer (photo HELCOM).

through e.g. better wastewater treatment around the region, banning phosphorus in detergents and implementing measures to reduce nutrient losses from agriculture.
HELCOM cooperates with other regional seas' cooperation bodies and was represented in the First Workshop on Marine Biodiversity in the Northwest Pacific Region held in Toyama, Japan on 16 September 2009 to share the experiences gained during over 30 years of cooperation on marine environment protection in the Baltic Sea region.

Recent Progress of Japanese Marine Litter Policy

Hiroshi TSUJIHARA, Deputy Director, Global Environmental Issues Division, Global Environment Bureau, Ministry of the Environment JAPAN(Acting CEARAC Focal Point of Japan)

It is my pleasure to inform you of recent progress of Japanese marine environmental policy. Today, I would like to introduce recent progress of measures against marine litter issues.
During this decade (2000-2009), marine litter has been a major issue in marine policy in Japan. It is difficult for people and local governments to deal with a huge amount of marine litter on Japanese coastline. Especially, following two problems are critical.
First, the responsibility of the relevant body is unclear to keep coasts clean. Second, there is little financial resource in the local and central governments to collect, transport and dispose marine litter. These situations make it difficult to manage marine litter, especially in the countryside.
To change these situations, "the Law for the Promotion of Marine Litter Disposal" was enacted in this July. The important characteristics of the law are as follow.
First, the law clarifies the responsibility of Coast Administrator to keep coasts clean. Based on the law, Coast Administrators (usually, municipal governments such as prefectural governments) shall manage marine litter on their coasts in collaboration with other local governments, for example cities and towns, and private sectors.
Second, based on the law, the national government provides financial supports to municipal governments. The Japanese government provides prefectural governments about 6 billion Japanese Yen (approx. 60 million US Dollars) for their activities of three years from FY 2009 to FY 2011, so as to make municipal governments' measures against marine litter promoted. With this finical support, prefectural governments will advance their activities such as (1)formulating a regional plan through discussion with local stakeholders, (2)collecting and disposing marine litter on their coasts and (3)improving measures to prevent marine litter through social awareness rising.
Third, the government shall take appropriate measures through diplomatic channel when the regional living environment is damaged seriously by marine litter from overseas.
As described above, the law is expected to improve the current situation of marine litter in Japan through encouraging various activities.
However, marine litter issues are not solved by each country alone. We, NOWPAP member states, have to cooperate with each other and act in our own countries through measures based on RAP MALI.

Announcement

The CEARAC Newsletter is published every year and distributed free of charge. For additional copies, or if you would like to be placed on our mailing list, please contact CEARAC at the following address:webmaster@cearac.nowpap.org
All the information about this newsletter and more can be downloaded from CEARAC Website.

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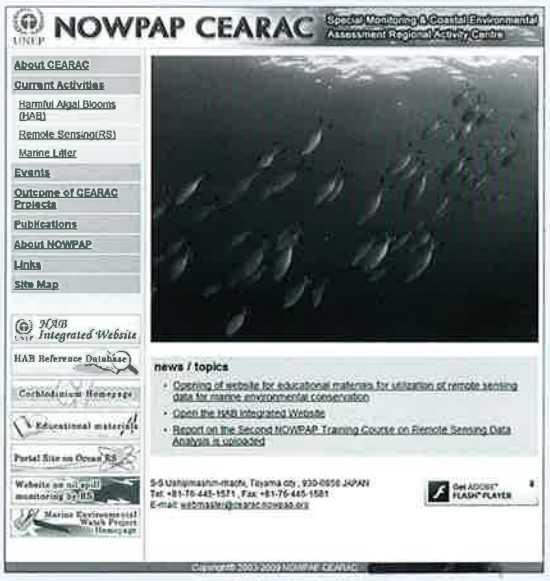

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