

NOWPAP POMRAC



**Northwest Pacific Action Plan
Pollution Monitoring Regional Activity Center**

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Report of the 5th NOWPAP POMRAC Focal Points Meeting

Vladivostok, Russia

8-9 October 2007

REPORT OF THE 5th NOWPAP POMRAC FOCAL POINTS MEETING (Vladivostok, Russia, 8-9 October 2007)

Background leading to this meeting

1. The Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) and three Resolutions were adopted at the First Intergovernmental Meeting (Seoul, Republic of Korea, 14 September 1994: UNEP(OCA)/NOWPAP/IG.1/5). Resolution 1 identified five areas of priority for implementation of the Action Plan, one of which was NOWPAP/3: Establishment of a collaborative, regional monitoring programme.

2. Following the decision of the 3rd NOWPAP Intergovernmental Meeting, the responsibility for NOWPAP/3 (Regional Monitoring Programme) was jointly shared by the Special Monitoring and Coastal Environmental Assessment Regional Activity Center (CEARAC) and the Pollution Monitoring Regional Activity Center (POMRAC).

3. Following the results of discussions at the 10th Intergovernmental Meeting of NOWPAP (Toyama, Japan, 24-26 November 2005), the responsibilities and activities of POMRAC in 2006-2007 should focus on the following items:

- Regional Overviews on AD and RDI;
- State of Marine Environment Report (with other RACs);
- Integrated Coastal and River Basin Management;
- Land Based Sources of Pollution (with other RACs).

4. The 4th NOWPAP POMRAC Focal Points Meeting (Qingdao, China, 25-26 April 2006) decided to implement several activities related to Integrated Coastal and River Basin Management in NOWPAP Region in 2006-2007 (UNEP/NOWPAP/POMRAC/FPM 4/12 Annex 10) namely:

- to create the Working Group for Integrated Coastal and River Basin Management (ICARM WG),
- to organize the 1st Meeting of ICARM WG,
- to prepare National Reports and Regional Overview on ICARM.

5. The 1st Meeting of NOWPAP POMRAC Working Group on Integrated Coastal and River Basin Management (Toyama, Japan, 10-11 July 2007) decided that the main objectives of the ICARM WG will be as follows:

- To collect and compile existing ICARM methodologies being used by NOWPAP member states;
- To prioritize issues related to ICARM activities in NOWPAP member states (including transboundary ones).
- To assist member states in applying efficient ICARM methodologies, including coastal and river basin planning (landscape, urban and marine spatial) and risk management, by disseminating tools and good practices, organizing training courses, etc.

6. This meeting discussed and suggested Terms of Reference for NOWPAP ICARM WG, the structure of National Reports for NOWPAP ICARM WG, and ICARM reference database. The Meeting also discussed draft Workplan and Budget for Integrated Coastal and River Basin Management Activities of POMRAC.

7. Focal Points and experts of the NOWPAP Members, namely, China, Japan, Republic of Korea and Russia participated in the 5th NOWPAP POMRAC Focal Points Meeting.

Representatives of NOWPAP RCU as well as representatives of NOWPAP RACs also participated in the meeting. The full list of participants is attached to the present Report as Annex 1.

Agenda Item 1. Opening of the Meeting

8. The 5th NOWPAP POMRAC Focal Points Meeting has been opened at 10:00 am in the Vladivostok Hotel, Vladivostok, Russia, on 8 October 2007 by Dr. Anatoly KACHUR, Director of POMRAC. Welcoming remarks by Dr. Alexander TKALIN, NOWPAP Coordinator followed.

Agenda Item 2. Organization of the Meeting

9. According to the agreed procedure of electing officers on a rotational basis, the meeting unanimously elected Dr. Vladimir SHULKIN, Russia as the Chairperson, and Dr. Shogo MURAKAMI, Japan as the Rapporteur for the 5th NOWPAP POMRAC Focal Points Meeting.

Agenda Item 3. Adoption of the Agenda

10. The Secretariat introduced to the meeting participants the List of documents (Annex 2), the Provisional Agenda (Annex 3), the Annotated Provisional Agenda and Timetable (Annex 4) for the Meeting. The Meeting has considered and adopted all the documents.

Agenda Item 4. Overview of the progress made in the intersessional period after the Fourth NOWPAP POMRAC Focal Points Meeting

11. Mr. Norio BABA, NOWPAP RCU reported to the meeting the progress of the NOWPAP implementation during the intersessional period (Annex 5). No questions or comments have been made.

12. Dr. KACHUR reported on the implementation of POMRAC activities and expenditures of POMRAC budget for the 2006-2007 biennium (Annex 6).

13. The Meeting held a general discussion and has adopted the report.

Agenda Item 5. Review and adoption of the Terms of Reference for NOWPAP POMRAC Working Group on Integrated Coastal and River Basin Management (ICARM)

14. Dr. Svetlana KOZHENKOVA, POMRAC Secretariat has presented the Terms of Reference for NOWPAP POMRAC Working Group on Integrated Coastal and River Basin Management (Annex 7).

15. The Meeting has discussed and adopted the document with minor modifications suggested by Prof. Ruibin WANG, Dr. Hee-Gu CHOI, and others.

Agenda Item 6. Review and adoption of the structure and contents of Regional Overview for NOWPAP ICARM Working Group

16. Dr. KACHUR has presented the draft structure and contents of Regional Overview on Integrated Coastal and River Basin Management in the NOWPAP Region (Annex 8). After discussion and re-wording, the Meeting agreed on the structure, contents and procedures for preparation of the Regional Overview.

Agenda Item 7. Discussion of intersessional activities of POMRAC

17. Dr. KACHUR has reported on the intersessional activities of POMRAC. The Meeting held a general discussion, including seeking external funds. Mr. BABA indicated that there are various

Japanese funds supporting activities related to marine environment.

18. Dr. KOZHENKOVA has made a presentation on the progress on establishment of two reference databases (AD, RDI) for POMRAC Working Groups (Appendix I). She has also presented the DINRAC activity on creation of the AD and RDI reference databases (this information was prepared by Ms. Tong AN, Senior Consultant of DINRAC) (Appendix II). It was noted that DINRAC and other RACs accumulated good experience in creating databases.

Agenda Item 8. Review of NOWPAP WG 1 / WG 2 / WG ICARM Workplans for 2008-2009

19. Dr. KACHUR has presented the future plans for NOWPAP WG 1 / WG 2 / WG ICARM in 2008-2009.

20. Dr. TKALIN has clarified that WG workplans is the internal issue of POMRAC, but more important is to consider the total POMRAC workplan and budget in order to submit them to the next IGM in Xiamen, P.R. China.

Agenda Item 9. Review of POMRAC workplan and budget for 2008-2009

21. Dr. KACHUR has introduced to the meeting the draft Workplan and Budget for POMRAC in the 2008-2009 biennium (Annex 9). The Meeting has reviewed and agreed on submitting the Workplan and Budget to the 12th IGM of NOWPAP with some modifications. The Meeting agreed that after approval by the 12th NOWPAP IGM, POMRAC workplan and budget might be further discussed by the 6th FPM, if necessary.

Agenda Item 10. Arrangement date and venue of the Sixth NOWPAP POMRAC Focal Points Meeting

22. The meeting discussed the holding date of the Sixth NOWPAP POMRAC FPM and main topics to be covered there. The 6th FPM is proposed to take place in Sokcho, RoK in April-May 2008.

Agenda Item 11. Other matters

23. Mr. Shogo MURAKAMI has made a presentation on development of ICARM in Japan that includes information on present approaches, recent laws on marine environment and pollution, implementation of environmental quality standards, etc. (Appendix III).

24. Dr. Vasily MISHUKOV, Pacific Oceanological Institute, Russia has distributed his presentation about oil spill simulation.

Agenda Item 12. Adoption of the report of the meeting

25. The Meeting reviewed and adopted the report of the Meeting prepared by the Rapporteur and the Secretariat.

Agenda Item 13. Closure of the Meeting

26. The Chairperson declared the Meeting closed at 17:30 on Tuesday, 9 October 2007.



Participants of the 5th NOWPAP POMRAC Focal Points Meeting
(Vladivostok, Russia, 8-9 October 2007)

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Annex 1
List of participants
of the 5th NOWPAP POMRAC Focal Points Meeting

Annex 1

List of participants of the 5th NOWPAP POMRAC Focal Points Meeting

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Annex 2

List of documents for the 5th NOWPAP POMRAC Focal Points Meeting

Annex 2

List of documents for the 5th NOWPAP POMRAC Focal Points Meeting

LIST OF DOCUMENTS

Provisional Agenda	UNEP/NOWPAP/POMRAC/FPM 5/1
Annotated Provisional Agenda	UNEP/NOWPAP/POMRAC/FPM 5/2
Timetable	UNEP/NOWPAP/POMRAC/FPM 5/3
Report of the Regional Coordinating Unit (RCU) on the implementation of the Northwest Pacific Action Plan (NOWPAP)	UNEP/NOWPAP/POMRAC/FPM 5/4
Report on the activities of NOWPAP Pollution Monitoring Regional Activity Center (POMRAC) in 2006/2007	UNEP/NOWPAP/POMRAC/FPM 5/5
Terms of reference for NOWPAP POMRAC Working Group on Integrated Coastal and River Basin Management (ICARM)	UNEP/NOWPAP/POMRAC/FPM 5/6
Draft Structure of Regional Overview on Integrated Coastal and River Basin Management in NOWPAP Region	UNEP/NOWPAP/POMRAC/FPM 5/7
Draft Workplan and Budget for POMRAC for 2008/9 Biennium	UNEP/NOWPAP/POMRAC/FPM 5/8
Provisional list of participants	UNEP/NOWPAP/POMRAC/FPM 5/Inf. 1
Annex 1. ACTION PLAN for the protection, management and development of the marine and coastal environment of the Northwest Pacific Region	NOWPAP Publication № 1 UNEP, 1997
Annex 2. Report of the Eleventh Intergovernmental Meeting of the Northwest Pacific Action Plan Moscow, Russian Federation. 20-21 December 2006	UNEP/NOWPAP IG. 11/8
Annex 3 Report of the 1 st Meeting of NOWPAP POMRAC Working Group on Integrated Coastal and River Basin Management (ICARM) Toyama, Japan 10-11 July 2007	UNEP/NOWPAP/POMRAC/ICARM WG 1/9
Report of the 4 th NOWPAP POMRAC Focal Points Meeting. Qindao, China. 25-26 April 2006.	UNEP/NOWPAP/POMRAC/FPM 4/12
Regional Overview on River and Direct Inputs of contaminants into the marine and coastal Environment in NOWPAP Region. 2006.	POMRAC Technical Report № 4

Annex 3
Provisional Agenda

Annex 3

Provisional Agenda

Day 1 (October 8, 2007)

1. Opening of the Meeting
2. Organization of the meeting
 - Election of the officers
 - Organization of work
3. Adoption of the Agenda
4. Overview of the progress made in the intersessional period after the Fourth NOWPAP POMRAC Focal Points Meeting
 - 4.1. Report of NOWPAP RCU Representative on the implementation of the Northwest Pacific Action Plan
 - 4.2. Report of the Director of POMRAC on the activities and the budget expenditures made during the intersessional period after the Fourth NOWPAP POMRAC Focal Points Meeting
5. Review and adoption of the Terms of the References for NOWPAP POMRAC Working Group on Integrated Coastal and River Basin Management (ICARM)
6. Review and adoption of the structure and content of Regional Overview for NOWPAP ICARM Working Group
7. Discussion of intersessional activities of POMRAC
 - 7.1. Marine Litter Activity (MALITA)
 - 7.2. Integrated Coastal and River Basin Management (ICARM)
 - 7.3. Establishment of reference databases for POMRAC Working Groups

Day 2 (October 9, 2007)

8. Review of NOWPAP WG 1 / WG 2 / WG ICARM Workplans for 2008-2009
9. Review of POMRAC workplan and budget for 2008-2009
10. Arrangement date and venue of the Sixth NOWPAP POMRAC Focal Points Meeting
11. Other matters
12. Adoption of the report of the meeting
13. Closure of the meeting

Annex 4
Timetable

- 15:20 – 16:00 7.1. Marine Litter Activity (MALITA)
16:00 – 16:30 7.2. Integrated Coastal and River Basin Management (ICARM)
16:30 – 17:00 7.3. Establishment of reference databases for POMRAC Working Groups

Day 2 (October 9, 2007)

**9:30 – 10:30 Agenda Item 8. Review of NOWPAP WG 1 / WG 2 / WG ICARM Workplans
for 2008-2009**

10:30 – 11:30 Agenda Item 9. Review of POMRAC workplan and budget for 2008-2009

11:30 – 11:45 (Coffee Break)

**11:45 – 12:00 Agenda Item 10. Arrangement date and venue of the Sixth NOWPAP
POMRAC Focal Points Meeting**

12:00 – 12:15 Agenda Item 11. Other matters

12:15 – 16:00 Lunch Break
Preparation of the meeting report by the Secretariat

16:00 – 17:30 Agenda Item 12. Adoption of the report of the meeting

17:30 Agenda Item 13. Closure of the Meeting

Annex 5

**REPORT OF THE REGIONAL COORDINATING UNIT (RCU)
ON THE IMPLEMENTATION
OF THE NORTHWEST PACIFIC ACTION PLAN (NOWPAP)**

Annex 5

Report of the Regional Coordinating Unit (RCU) on the implementation of the Northwest Pacific Action Plan (NOWPAP)

This report on the implementation of NOWPAP activities covers the period since the Eleventh IGM in December 2006. As details of the POMRAC activities will be presented by POMRAC Director, only information about three other RACs is given here. Other NOWPAP activities are also briefly described.

CEARAC - Special Monitoring and Coastal Environmental Assessment Regional Activity Centre

1. The following databases and homepages have been developed and maintained by the CEARAC:
 - HAB Reference Database: <http://www.cearac-project.org/wg3/hab-ref-db/>
 - Cochlodinium Homepage: <http://www.cearac-project.org/wg3/cochlo-entrance/>
 - Ocean Remote Sensing (RS) Portal Site:
<http://www.cearac-project.org/wg4/portalsite/>
 - Oil spill monitoring by RS: <http://cearac.poi.dvo.ru/en/>
 - Marine Environmental Watch Project:
<http://www.nowpap3.go.jp/jsw/eng/>
2. According to the discussion at the 11th Session of IOC/WESTPAC Coordinating Committee for NEAR-GOOS (Bangkok, Thailand, 18-19 January 2007), the link between NOWPAP CEARAC remote sensing database and NEAR-GOOS database was established. The First NEAR-GOOS - NOWPAP Training Course on RS Data Analysis has been also agreed and will be organized at Nagasaki University on 3-7 September 2007 (co-financed by IOC/WESTPAC).
3. In addition to the English edition, *Cochlodinium* pamphlet has been published in four languages (Chinese, Japanese, Korean and Russian).
4. CEARAC has collected the information on the countermeasures against HABs through the experts of NOWPAP member states. This information has been compiled by CEARAC in the form of a booklet "Countermeasures against HABs" (to be published in 2007).
5. Draft of "Eutrophication Monitoring Guidelines by Remote Sensing for the NOWPAP Region" has been completed by CEARAC. These Guidelines were published before the 12th NOWPAP IGM.
6. CEARAC published "Guidelines for Monitoring Marine Litter on the Beaches and Shorelines of the Northwest Pacific Region" in March 2007 as an important outcome of NOWPAP MALITA.
7. CEARAC held the 2nd NOWPAP Workshop on Marine Litter in Toyama on 28-29 March 2007, funded by the Ministry of the Environment, Japan. Digital files of the workshop materials were uploaded on the CEARAC website for dissemination.

DINRAC - Data and Information Network Regional Activity Centre

8. DINRAC has developed and maintained the following databases:
 - Database on NOWPAP Institutions:
<http://dinrac.nowpap.org/NowpapInstitution.php3>
 - Database on NOWPAP Experts:
<http://dinrac.nowpap.org/NowpapExpert.php3>
 - Database on NOWPAP Coastal and Marine Environmental GIS and RS Applications:
<http://dinrac.nowpap.org/NowpapGIS.php3>
 - Database on Marine Litter:
http://dinrac.nowpap.org/MALITA_WhatIs.htm
 - Coastal and Marine Nature Reserves:
<http://dinrac.nowpap.org/NowpapNatureReserve.php3>
9. Reference Databases on Atmospheric Deposition (AD) & River and Direct Inputs (RDI) were established through cooperation between POMRAC and DINRAC:
 - Atmospheric Deposition (AD):
<http://dinrac.nowpap.org/NowpapReferenceAD.php3>
 - River and Direct Inputs (RDI):
<http://dinrac.nowpap.org/NowpapReferenceRDI.php3>
10. The Regional Internet Communication System between DINRAC and the NOWPAP members is under testing and will be completed at the end of 2007 (with subsequent work on improvements and further additions). With this system operational, DINRAC is expected to play a role of information clearinghouse for NOWPAP (in close collaboration with other RACs).
11. The following reports were published by DINRAC:
 - National Reports and Regional Report on Coastal and Marine Biodiversity Data and Information in the NOWPAP Region.
 - National Reports and Regional Report on Marine Nature Reserves in the NOWPAP Region.
 - Regional Overview of Legal Aspects of the Protection and Management of the Marine and Coastal Environment in NOWPAP Region (updated overview on NOWPAP/2 project, originally prepared in 2000).

MERRAC - Marine Environmental Emergency Preparedness and Response Regional Activity Centre

12. MERRAC organized the Tenth MERRAC Focal Points Meeting in conjunction with the Second Competent National Authorities (CNA) Meeting for NOWPAP Regional Oil Spill Contingency Plan in May 2007. NOWPAP ALPHA table top exercise was carried out at the CNA meeting. The Meeting agreed to organize a NOWPAP BRAVO exercise (communication exercise) during the intersessional period after the 10th MERRAC FPM.
13. The 2nd Joint NOWPAP Oil Spill Exercise will be conducted in Qingdao, China, in April 2008, based upon the decision of the 10th MERRAC Focal Points Meeting. The Exercise

will be organized by the People's Republic of China.

14. MERRAC Specific Projects on the oil spill prediction model, minimum level of preparedness and response, and HNS National Reports have been carried out by experts nominated by the NOWPAP members. The draft reports were submitted to MERRAC and reviewed at the 10th MERRARC Focal Points Meeting (FPM), 15-18 May 2007, Daejeon, Korea.
15. MERRAC has been preparing the regional report on marine litter (based upon the national reports from the NOWPAP members) in addition to the following activities related to marine litter:
 - monitoring guidelines for marine litter on seabed;
 - sectoral guidelines for management of marine litter;
 - programme for improvement of port reception facilities and services for garbage collections from the shipping and fishing industries;
 - waste management policies and systems.
16. MERRAC has maintained the following databases via the MERRAC website:
 - List of oil spill response equipment, institutions and experts in the field of marine pollution preparedness and response;
 - List of oil spill accidents over 10 tons.
17. MERRAC webpage has been significantly updated in March 2007.

NOWPAP RACs Evaluation

18. Following resolution 1.7 of the Eleventh Intergovernmental Meeting of NOWPAP, independent international consultant has been hired to carry out the evaluation of the performance of NOWPAP RACs. Based on the questionnaire survey results among the NOWPAP National Focal Points, RAC Directors, related organizations and experts as well as personal interviews of RAC directors, draft of NOWPAP RACs evaluation report was compiled and circulated among member states for comments. The final report will be presented at the 12th Intergovernmental Meeting (IGM) of NOWPAP on 23-25 October 2007.

Building partnerships

19. Following resolution 1.6 of the Eleventh Intergovernmental Meeting of NOWPAP, RCU and RACs staff have continued actively developing partnerships with many relevant organizations, programmes and projects in the region. Close relations were established with the following partners (in alphabetical order):
 - East Asian Seas Regional Coordinating Unit (EAS/RCU);
 - North East Asian Regional – Global Ocean Observing System (NEAR-GOOS);
 - GEF/UNDP/IMO Regional Programme on Partnerships in Environmental Management for the Seas of East Asia (PEMSEA);
 - North Pacific Marine Science Organization (PICES);
 - UNESCO/IOC Sub-Commission for the Western Pacific (WESTPAC);

- UNDP/GEF Project on the Yellow Sea Large Marine Ecosystem (YSLME).
20. NOWPAP Regional Coordinating Unit signed the Letter of Cooperation (LOC) with the Project Management Office of the UNDP/GEF Yellow Sea Large Marine Ecosystem (YSLME) project on 24 May 2007 in Beijing. The LOC will serve as the basis for the two sides to conduct cooperative activities. In June 2007, the YSLME project representative has participated (along with COBSEA and PEMSEA representatives) in the NOWPAP International Coastal Cleanup (ICC) campaign in Rizhao, China. In September 2007, these three NOWPAP partners will participate in the NOWPAP ICC campaign in Busan, Korea.
 21. NOWPAP RCU has been also working on development of the similar LOC with PEMSEA.
 22. NEAR-GOOS was approached in order to develop cooperative relationships with NOWPAP. The NEAR-GOOS Coordinating Committee accepted the following suggestions from NOWPAP RCU: a) on enriching the NEAR-GOOS data in order to support the NOWPAP activities; b) on linking NOWPAP CEARAC remote sensing database to NEAR-GOOS databases; and c) on co-organizing a remote sensing data analysis training course. Follow-up actions will be taken in the future to further facilitate the cooperation.

Raising public awareness

23. According to NOWPAP Public Awareness Strategy, the following actions were taken by NOWPAP RCU and RACs:
 - NOWPAP homepage and RAC homepages have been maintained and constantly updated. News and information have been posted on the NOWPAP homepage in five languages (English, Chinese, Japanese, Korean and Russian) since August 2006.
 - Information about NOWPAP was posted at the partners' websites and introduced in their electronic newsletters (e.g., COBSEA, PEMSEA, UNEP ROAP, YSLME). In total, NOWPAP was introduced more than 150 times through website links and news briefings worldwide (among those, only 30 in the NOWPAP member countries). Most importantly, NOWPAP has been introduced by the following international and regional organizations: GPA, ROAP and Regional Seas (of UNEP), IOC and IODE (of UNESCO), GESAMP, NEASPEC, PEMSEA, PICES, TEMM, WESTPAC and YSLME. This has definitely increased NOWPAP visibility in the Asia-Pacific region and worldwide.
 - Several brochures, leaflets, posters about NOWPAP activities were prepared and widely distributed. In addition to English, local languages were used when appropriate.
 - While attending a few global and regional meetings (e.g., 2006 East Asian Seas Congress, 34th GESAMP Session) and local events, RACs and RCU staff contributed to increasing NOWPAP visibility and attracting public attention to marine environment conservation by introducing the NOWPAP activities. Several specific events were organized by RCU and RACs (workshops, beach cleanups, lectures, sharing books and other materials with local libraries and museums, etc.).
 - During the events organized and attended by RACs and RCU staff, contacts with media were maintained. RACs and RCU staff also contributed articles to magazines, newspapers and newsletters.

- NOWPAP promotion materials (pens, bags, calendars, magnets, bumper stickers) were produced and widely distributed in order to raise public awareness about marine environmental issues and NOWPAP activities.

Resource mobilization and financial support from members

24. According to the NOWPAP Resource Mobilization Strategy, several external sources were approached by the NOWPAP RCU and relevant information has been introduced to the RAC directors and Marine Litter Focal Points. NOWPAP RCU assisted Marine Litter Focal Point of Russia and his colleagues to apply for the Grant for Environmental Research Projects of the Sumitomo Foundation (results are expected in late October 2007).
25. On NOWPAP RCU request, UNEP Regional Seas Programme provided USD 13,000 as a consultant fee for NOWPAP RACs evaluation (completed in August 2007) and USD 20,000 to organize a workshop on NOWPAP Regional Action Plan on Marine Litter (RAP MALI) in November 2007.
26. Several important NOWPAP activities listed below were financially supported by the member states:
 - The 2nd NOWPAP Workshop on Marine Litter in Toyama, Japan, 28-29 March 2007 (supported by the Ministry of the Environment, Japan).
 - NOWPAP Marine Litter Prevention and Control Workshop and International Coastal Cleanup in Rizhao, China, 27-28 June 2007 (supported by the State Environmental Protection Administration, Rizhao City and Environmental Protection Bureau of Shandong Province). The Ministry of Foreign Affairs of Japan supported the international travel of 20 participants from the member states, international organizations and the RCU.
 - The First NEAR-GOOS - NOWPAP Training Course on RS Data Analysis in Nagasaki, Japan, 3-7 September 2007 (USD 20,000 provided by IOC/WESTPAC).
 - 2007 NOWPAP International Coastal Cleanup Campaign in Busan, Korea, 28-29 September 2007 (supported by the Ministry of Maritime Affairs and Fisheries, Korea).

NOWPAP/2 project (legal issues)

27. According to resolution of the 10th NOWPAP IGM, the “Regional Overview of Legal Aspects of the Protection and Management of the Marine and Coastal Environment of the Northwest Pacific Region” (prepared originally in 2000 as an outcome of NOWPAP/2 project) has been updated and published before the 12th NOWPAP IGM.

Marine Litter Activity (MALITA)

28. NOWPAP MALITA was supported by all member states and has been implemented successfully. The details of MALITA implementation are provided in a separate Annex (report prepared for the coming 12th NOWPAP IGM).
29. As one of the outcomes of MALITA, draft Regional Action Plan on Marine Litter (RAP MALI) has been developed and will be presented at the 12th NOWPAP IGM. A RAP MALI meeting is planned in November 2007 with the financial support from UNEP Regional Seas Programme.

NOWPAP GEF project proposal

30. The support/endorsement letters from all NOWPAP member states had been received by the end of April 2007. Re-submission of NOWPAP project proposal to the GEF pipeline (using new GEF criteria and formats) had been planned for June-July 2007, but was postponed by the GEF Secretariat until November 2007. Further modifications of the project proposal might be necessary depending on new GEF International Waters Focal Area Strategy (being finalized as of August 2007).
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Annex 6

**Report on the activities
of NOWPAP Pollution Monitoring Regional Activity Center
(POMRAC) in 2006/2007**

Annex 6

Report on the activities of NOWPAP Pollution Monitoring Regional Activity Center (POMRAC) in 2006/2007

Background

Pollution Monitoring Regional Activity Center of UNEP Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) was formed by NOWPAP Fourth Intergovernmental Meeting (Beijing, China, April 6-7, 1999) on the basis of the Pacific Geographical Institute of the Far Eastern Branch of Russian Academy of Sciences (Vladivostok, Russia).

In its work POMRAC is guided by UNEP Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region, the Resolutions of NOWPAP First Intergovernmental Meeting (Seoul, Korea, 14 September, 1994), the Resolutions of NOWPAP Third Intergovernmental Meeting (Vladivostok, Russia, 9 April, 1998), NOWPAP Fourth Intergovernmental Meeting (Beijing, China, 6-7 April, 1999) and NOWPAP Seventh Intergovernmental Meeting (Vladivostok, Russia, 20-22 March, 2002).

POMRAC work on the territory of Russia is guided by the Constitution of the Russian Federation, laws and other norms of Russian legislation, UNEP management directives. The Russian national NOWPAP body is the Ministry of Natural Resources with Centre for International Projects acting as its executive body.

The overall goal of POMRAC is the coordination of activity and establishment of cooperation in regional monitoring of marine and coastal environment of the Northwest Pacific Region (NOWPAP/3) under the program NOWPAP UNEP.

Following the results of discussions at the First NOWPAP/3 Coordinating Committee Meeting (Beijing, 21-22 May 2001), the 7th Intergovernmental Meeting (Vladivostok, 20-22 March 2002) shared the responsibilities and activities between CEARAC and POMRAC as presented in document UNEP/NOWPAP IG.7/8. POMRAC is fully responsible for two working groups: WG 1 - Atmospheric Deposition of contaminants into the marine and coastal environment; and WG 2 – River and Direct Inputs of contaminants into the marine and coastal environment.

Following the results of discussions at the 10th Intergovernmental Meeting of NOWPAP (Toyama, Japan, 24-26 November 2005), the responsibilities and activities of POMRAC in 2006-2007 should focus on the following items:

- **Regional Overviews on AD and RDI;**
- **State of Marine Environment Report (with other RACs);**
- **Integrated Coastal Area and River Basin Management;**
- **MALITA activity (with other RACs).**

The 10th Intergovernmental Meeting approved the budget of \$155,500 for 2006/2007 for POMRAC activities (including \$5,500 for MALITA activity).

Outline of POMRAC

The managerial functions of POMRAC are executed by POMRAC Directorate on the basis of Pacific Geographical Institute of the Far Eastern Branch of the Russian Academy of Sciences and the Center for International Projects. Day-to-day technical-organizational work is to be done by the assigned researchers and technicians from Pacific Geographical Institute of the Far Eastern Branch of the Russian Academy of Sciences.

Staff

Four staffers of PGI have been engaged in the work related to POMRAC activities.

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Main Responsibilities

In accordance with the decision of NOWPAP Eighth Intergovernmental Meeting, with the budget approved at this meeting and with the main lines of POMRAC work the following activities were scheduled for 2006 – 2007:

1. Holding the 4th and 5th POMRAC Focal Points Meetings;
2. Preparation of Regional Overviews (Regional Overview on Atmospheric Deposition of contaminants into the marine and coastal environment in NOWPAP Region and Regional Overview on River and Direct Inputs of contaminants into the marine and coastal environment in NOWPAP Region);
3. Preparation of the State of Marine Environment Report for NOWPAP Region;
4. Development the Reference Databases for WG1 and WG2;
5. Activities related to MALITA program;
6. Activities related to Integrated Coastal Area and River Basin Management (ICARM) which includes land-based sources of pollution;
7. Support of POMRAC website.

Main Activities:

A. The Fourth NOWPAP POMRAC Focal Points Meeting was held during 25-26 April 2006 in Qingdao, China.

The major objectives of this meeting were as follows:

- Overview of the progress made in the intersessional period after the Third NOWPAP POMRAC Focal Points Meeting
- Report of NOWPAP RCU Representative on the implementation of the Northwest Pacific Action Plan
- Review and adoption of the Regional Overview on Atmospheric Deposition of contaminants into the marine and coastal environment in NOWPAP Region
- Review and adoption of the Regional Overview on River and Direct Inputs of contaminants into the marine and coastal environment in NOWPAP Region
- Discussion of the Terms of the References for POMRAC FPM
- Discussion of the Terms of the References for NOWPAP Working Group 1 (Atmospheric Deposition) and Working Group 2 (River and Direct Inputs)
- Discussion of new intersessional activities of POMRAC
 1. Marine Litter Activity (MALITA)
 2. Report of the State of Marine Environment in the NOWPAP region
 3. Integrated Coastal Area and River Basin Management (ICARM)

The 4th FPM adopted the budget and Workplan of POMRAC for 2006/7 on base of recommendation of the 10th NOWPAP Intergovernmental Meeting.

The participants of the 4th FPM were the nominated Focal Points of four NOWPAP Members, invited experts from NOWPAP Members, representatives of RCU NOWPAP, of the China National Environmental Monitoring Center, of the Qingdao Environmental Protection Bureau, of the Qingdao Environmental Monitoring Center, the director of CEARAC and representatives of DINRAC and CEARAC.

The report of the 4th Focal Points Meeting of POMRAC was published and distributed among all NOWPAP members by POMRAC. This report is on website of POMRAC NOWPAP.

Total budget: US\$ 27,324.

B. The Fifth NOWPAP POMRAC Focal Points Meeting will be held during 08-09 October 2007 in Vladivostok, Russia.

The major objectives of this meeting will be as follows:

- Overview of the progress made in the intercessional period after the Fourth NOWPAP POMRAC Focal Points Meeting,
- Report of NOWPAP RCU Representative on the implementation of the Northwest Pacific Action Plan
- Discussion and adoption of the budget expenditures and Workplan of POMRAC for 2006/7.
- Discussion of the Terms of Reference for POMRAC ICARM WG.
- Discussion of WG1, WG2 and WG ICARM activities for 2008-2009.
- Workplan and Budget of POMRAC for 2008/2009.

C. Preparation of POMRAC Regional Overviews

1. The 3rd POMRAC FPM (13-14 October, 2005, Vladivostok, Russia) has discussed and agreed the National Reports with comments made at the 2nd WG's Meetings (10-11 October, 2005, Vladivostok, Russia).
2. After receiving comments from WGs and POMRAC FPs (31 October 2005), the reports were amended by the consultants and submitted to the POMRAC and National Focal Points of NOWPAP countries for adoption and publication (November - December 2005).
3. When finalized, the National Reports were printed as POMRAC technical report #1 (Atmospheric Deposition of contaminants into the marine and coastal environment) and POMRAC technical report # 2 (River and Direct Inputs of contaminants into the marine and coastal environment).
4. The 3rd FPM has agreed on the structure, content, scope and sources of information of the Regional Overviews for WG1 and WG2.
5. Experienced consultants from the region were hired by POMRAC to compile Regional Overviews, using, among others, the National Reports (December 2005 – April 2006).
6. When finalized after 4th FPM, the Regional Overviews were printed as POMRAC technical reports: The Regional Overview on Atmospheric Deposition of contaminants into the marine and coastal environment in NOWPAP Region (as technical report #3, August 2007) and Regional Overview on River and Direct Inputs of contaminants into the marine and coastal environment in NOWPAP Region (as technical report #4, August 2006).

Budget and total expenses for preparation of Regional Overviews: US\$ 13,000 (10,000 for international consultants and 3,000 for printing).

D. Preparation of the State of Marine Environment Report (SOMER)

In the middle of 2005 POMRAC has suggested to compile the Review of State of Marine Environment of NOWPAP Region on the bases on national reports and regional overviews on present status of the environment in NOWPAP Region, prepared by CEARAC, MERRAC and POMRAC. The National Reports of the NOWPAP member countries prepared in the 1990-2000 years, and also materials of other programmes were used in this Review.

The draft of Content of the "State of Marine Environment Report in the NOWPAP Region" was adopted during the 3rd POMRAC FPM (13-14 October, 2005, Vladivostok, Russia). The 10th IGM (Toyama, 24-26 November, 2005) has approved the new directions for the NOWPAP RACs including new activities of POMRAC such as State of Marine Environment Report in the NOWPAP Region (SOMER).

SOMER was published in September 2007 as POMRAC technical report # 5.

Budget: US\$ 11,000 (7,000 for international consultant and RACs, 4,000 for printing).

E. Development of reference databases for WG1 and WG2

The 3rd POMRAC FPM discussed and adopted the establishment of the Reference Databases for WG 1 and WG 2. The 10th IGM (Toyama, 24-26 November, 2005) has approved this activity.

The drafts of structure of the reference databases for WG1 and WG2 were provided by the POMRAC and DINRAC. References for 1995-2005 years were received from national experts of NOWPAP countries before 30 October 2006 and sent to DINRAC for preparation of the Databases.

In January 2007 DINRAC finished the establishment of AD and RDI Reference Databases.

The databases are now available in the Web:

<http://dinrac.nowpap.org/NowpapReferenceAD.php3>, and

<http://dinrac.nowpap.org/NowpapReferenceRDI.php3>

AD Reference Database contains 439 references and RDI Reference Database contains 586 references from 4 member states.

POMRAC Secretariat informed POMRAC Focal Points and Experts about 2 Reference Databases by e-mails. Links to these Databases were also input on POMRAC Website <http://www.pomrac.dvo.ru/>

Budget: US\$ 4,000. POMRAC expenses are US\$ 4000.

F. Activities related to Integrated Coastal Area and River Basin Management (ICARM)

In accordance with decisions of the 10th IGM, POMRAC must focus on activities related to Integrated Coastal Area and River Basin Management which include land-based sources of pollution. All activities related to Integrated Coastal Area and River Basin Management should be implemented in close collaboration with all NOWPAP RACs.

The 4th NOWPAP POMRAC Focal Points Meeting (Qingdao, China, 25-26 April 2006) decided to implement several activities related to Integrated Coastal Area and River Basin

Management in NOWPAP Region in 2006/7 (UNEP/NOWPAP/POMRAC/FPM 4/12 Annex 10) namely:

- to create the Working Group for Integrated Coastal Area and River Basin Management (ICARM WG),
- to organize the 1st Meeting of ICARM WG,
- to prepare National Reports and Regional Overview on ICARM.

The 1st Meeting of NOWPAP POMRAC Working Group for Integrated Coastal and River Basin Management (1st Meeting of WG ICARM) was held during 10-11 July, 2007 in Toyama, Japan. CEARAC has rendered considerable assistance in conduction of the meeting.

The major objectives of this meeting were as follows:

- Background information on Integrated Coastal Area and River Basin Management (ICARM) in the Northwest Pacific Region
- Overview of existing activities, problems and future plans regarding to Integrated Coastal Area and River Basin Management in NOWPAP Member States (Reports of National Experts of China, Japan, Republic of Korea and Russian Federation).
- The Guidance for NOWPAP POMRAC ICARM Working Group
- The Terms of Reference for NOWPAP POMRAC ICARM Working Group
- Review of the structure and content of National Reports of NOWPAP POMRAC ICARM Working Group
- The Reference Database on ICARM
- The workplan for 2007/8 and long term strategy for NOWPAP POMRAC ICARM Working Group

The 1st Meeting of WG ICARM decided that the main objectives of the Working Group for Integrated Coastal Area and River Basin Management will be as follows:

- To collect and compile existing ICARM methodologies being used by NOWPAP member states;
- To prioritize issues related to ICARM activities in NOWPAP member states (including transboundary ones).
- To assist member states in applying efficient ICARM methodologies, including coastal area and river basin planning (landscape, urban and marine spatial) and risk management, by disseminating tools and good practices, organizing training courses, etc.

The participants of the 1st Meeting of WG ICARM were POMRAC Focal Points of four NOWPAP Members, invited experts from NOWPAP Members, representatives of RCU NOWPAP, International Consultant, representatives of NOWPAP RCU Toyama office and CEARAC.

Budget: Total - US\$ 23,535

US\$ 23,535 for the 1st Meeting of WG ICARM.

The 1st Meeting of WG ICARM proposed to give US\$ 28,000 for preparation and publication of the National Reports and Regional Overview (5,000 from budget 2008/09) and US\$ 2,000 for development of reference database for ICARM WG (from budget 2008/09).

G. Activities related to MALITA program

Marine Litter activity might be linked with general waste management practices on land and with 3R (reduce, reuse, recycle) initiative.

POMRAC was planning to implement several activities which were designated to POMRAC in MALITA:

5-1	Collection and review of existing information and data relevant to sea-based ML in each of the NOWPAP members	January 2006	MERRAC POMRAC DINRAC	In-kind
5-2	Collection and review of existing information and data relevant to land-based ML in each of the NOWPAP members	January 2006	CEARAC POMRAC DINRAC	In-kind
10	Organize that NOWPAP members join the International Coastal Cleanup 2006 and 2007 Campaign (if feasible)	August 2006	RCU CEARAC DINRAC MERRAC POMRAC	1,000 1,000
13	Formulation and implementation of awareness and education campaigns:	March 2007	RCU	---
13-2	- for shipping companies, ship officers and crews of recreational, commercial and fishing vessels	March 2007	MERRAC POMRAC	1,500 1,500
15-1	Preparation of brochures in the four NOWPAP languages for the purpose of promoting public awareness on the reduction of ML	August 2007	CEARAC DINRAC MERRAC POMRAC	1,000 1,000 1,000 1,000
16-1	Shipping, fisheries, boating, diving and cruise lines	September 2007	MERRAC POMRAC	3,000 2,000

During 2006/07 POMRAC implemented the following activities:

- Review of existing information and data relevant to sea-based ML and land-based ML in Russian area of NOWPAP Region was presented as POMRAC presentation on the MALITA workshop in Toyama (April, 2006).
- Participation in organizing of the test ICC in Vladivostok, October 2007.
- Preparation of MALITA brochures in Russian, 2006/2007.

Budget: US\$ 5,500. Expenses are US\$ 5,500

H. Support of POMRAC website

During 2006/07, POMRAC regularly updated information on its website. All the documents prepared for POMRAC Meetings, all technical reports, reports of all POMRAC Meetings were timely hosted on the website.

Planned budget: US\$ 2,000. POMRAC expenses are US\$ 1000.

Other activities

1. Participation in meetings and conferences.

Representatives of POMRAC participated in FPMs of other regional NOWPAP centers: CEARAC; DINRAC and Marine Letter Workshop in Toyama 2007, ICC in Japan 2006 (Sakata) and ICC in China 2007 (Rizhao).

Director of POMRAC participated in the First Yellow Sea Regional Science Conference “Ecosystem Carrying Capacity of the Yellow Sea: Scientific Approaches for Marine Environment Management” UNDP/GEF PROJECT ENTITLED “REDUCING ENVIRONMENTAL STRESS IN THE YELLOW SEA LARGE MARINE ECOSYSTEM” with report “Major trends of activity for river basin and coastal area management within UNEP Northwest Pacific Action Plan for nature protection (NOWPAP)” (August 2007, Hangzhou, China).

2. Participation in Evaluation of the Performance of NOWPAP Regional Activity Centres

The 10th and 11th IGMs held in Toyama (Japan) in 2005 and Moscow in 2006, respectively, decided to carry out an evaluation of the RACs’ performance during the two biennia 2002-03 and 2004-05.

POMRAC Focal Points and Director of POMRAC presented materials on questionnaires, prepared by the evaluator Mr. Lucien Chabason. Director of POMRAC met with the evaluator on 24-25 May 2007 in Beijing, where informed Mr. Chabason about results of POMRAC activities, existing problems and plans for future.

Table 1

Workplan and Budget for POMRAC in 2006/2007
(as it was adopted by the 4th POMRAC FPM, 25-26 April 2006, Qingdao, China)

Activity	Actions and planned date	Responsibility	Remarks	Budget US\$
4 th POMRAC FPM (2 days)	April 2006	POMRAC with assistance of NOWPAP RCU, UNEP	POMRAC, Vladivostok, China	28,000
Preparation of the Regional Assessment/Overview WG 1	February 2006 – April 2006	POMRAC with assistance of UNEP and RCU	through regional consultant	5,000
Preparation of the Regional Assessment/Overview WG 2	February 2006 – April 2006	POMRAC with assistance of UNEP and RCU	through regional consultant	5,000
Preparation of the State of marine Environment	Throughout 2006	POMRAC through regional consultant(s) from NOWPAP Member States, RACs, RCU	through regional consultant(s)	8,000
Publication of Regional Assessment/Overviews (WG1,WG2)	2006	POMRAC		3,000
1st Meeting of WG ICAM	1st quarter of 2007	POMRAC with assistance of NOWPAP RCU, UNEP	POMRAC, Vladivostok, Russia or other city in one of the countries of NOWPAP region	17,000
'Back to Back' 3 rd Meeting of WG 1, WG 2 (2 days)	April 2007	POMRAC with assistance of NOWPAP RCU, UNEP	POMRAC, Vladivostok, Russia or other city in one of the countries of NOWPAP region	22,000
Preparation of the National Reports WG ICAM	2 nd quarter of 2007	National Experts from each NOWPAP Member States	\$3,000 for experts	12,000
Preparation of the Regional Assessment/Overview (WG ICARM)	June 2006 – September 2007	POMRAC with assistance of UNEP and RCU	through regional consultant	3,000
Publication of National and Regional Assessment/Overviews (WG ICARM)	December 2007	POMRAC		3,000
5 th POMRAC FPM (2 days)	October 2007	POMRAC with assistance of NOWPAP RCU, UNEP	POMRAC, Vladivostok, Russia	27,000
Publication of the State of Marine Environment Report	March - April 2007	POMRAC		3,000

Development of a database of references for WG1 and WG2 (with DINRAC)	Throughout 2006/7	POMRAC through national consultants from NOWPAP Member States		4,000
Marine Litter (with other RACs)	Throughout 2006/2007	POMRAC with assistance of NOWPAP RCU, UNEP, IOC UNESCO		5,500
Website	Throughout 2006/7	POMRAC		2,000
Cooperation, coordination of POMRAC activities and communication maintenance)	Throughout 2006/7	POMRAC in cooperation with RCU, UNEP, RACs, UNESCO/IOC and relevant regional organizations		8,000
<u>Total</u>				155,500

Table 1

Draft Expenditure of POMRAC for 2006/2007

	2006 (USD)	2007 (USD)	Total (USD)
10 PROJECT PERSONNEL COMPONENT			
<u>1100 Professional staff</u>			
1101 POMRAC Director	0	0	0
<u>1200 Consultants</u>			
1201 Development of Regional Overviews on Atmospheric Deposition and River and Direct Input of Contaminants in the NOWPAP region, finalization of National reports	13,000	0	13,000
1202 State of Marine Environment Report	2,500	2,500	5,000
1203 Development of reference databases for WG1 and WG2	3,000	1,000	4,000
1204 National reports on ICARM	0	20,000	20,000
1205 Regional overview on ICARM	0	2,500	2,500
1206 Marine Litter Activity (MALITA) in the NOWPAP region	0	3,500	3,500
1299 Sub total	18,500	29,500	48,000
<u>1600 Travel</u>			
1601 Travel on official business	4,624	8,230.23	12,854.23
1602 Travel on MALITA	0	1,000	1,000
1699 Sub total:	4,624	9,230.23	13,854.23
1999 Component total:	23,124	38,730.23	61,854.23
20 SUB-CONTRACTS COMPONENT			
2999 Component total:	0	0	0
30 TRAINING COMPONENT			
<u>3300 Meetings/conferences</u>			
3301 Focal Points Meeting back to back WG's meetings	27,324	27,000	54,324
3302 ICARM Working Group Meeting	0	23,535	23,535
3303 Working Groups 1-2 Meeting	0	0	0
3399 Sub total:	27,324	50,535	77,859
3999 Component total	27,324	50,535	77,859
40 EQUIPMENT COMPONENT			
4999 Component total	0	0	0
50 MISCELLANEOUS COMPONENT			
<u>5200 Reporting cost</u>			
5201 Publications	5,798	5,000	10,798
5202 Website	0	1000	1,000
5203 For MALITA	500	500	1,000
5299 Sub total:	6,298	6,500	12,798
<u>5300 Sundry</u>			
5301 Communications	988.77	1,500	2,488.77
5304 Other	0	0	0
5399 Sub total:	988.77	1,500	2,488.77
5999 Component total	7,286.77	8,000	15,286.77
99 GRAND TOTAL	57,734.77	97,265.23	155,500

Annex 7

**TERMS OF REFERENCE
FOR NOWPAP POMRAC WORKING GROUP ON
INTEGRATED COASTAL AND RIVER BASIN MANAGEMENT
(ICARM)**

Annex 7

TERMS OF REFERENCE FOR NOWPAP POMRAC WORKING GROUP ON INTEGRATED COASTAL AND RIVER BASIN MANAGEMENT (ICARM)

Background

In 1994, when the *Action Plan for the protection, management and development of the marine and coastal environment of the Northwest Pacific region* was adopted, it was acknowledging that the overall goal of the Northwest Pacific Action Plan is “The wise use, development and management of the coastal and marine environment so as to obtain the utmost long-term benefits for the human populations of the region, while protecting human health, ecological integrity and the region’s sustainability for future generations” (NOWPAP publication № 1, UNEP 1997).

The strategy for wise management of the Northwest Pacific coastal and marine environment should consist of 5 main elements:

- monitoring and assessment of the environmental condition
- creation of an efficient and effective information base
- integrated coastal area planning
- integrated coastal area management
- establishment of a collaborative and cooperative framework

The 10th Intergovernmental Meeting of NOWPAP (Toyama, Japan, 24-26 November 2005), have decided that POMRAC should focus on activities related to Integrated Coastal and River Basin Management which includes land-based sources of pollution. All activities related to Integrated Coastal and River Basin Management will be implemented in close collaboration with all NOWPAP RACs (document UNEP/NOWPAP IG.10/5/rev.1).

The 4th NOWPAP POMRAC Focal Points Meeting (Qingdao, China, 25-26 April 2006) decided to implement several activities in 2006/7 (UNEP/NOWPAP/POMRAC/FPM 4/12 Annex 10) namely:

- to create the Working Group for Integrated Coastal and River Basin Management (ICARM WG),
- to organize the 1st Meeting of ICARM WG,
- to prepare National Reports and Regional Overview on ICARM.

Goal and Objectives

The main goal of the NOWPAP Working Group for Integrated Coastal and River Basin Management (NOWPAP ICARM WG) is to contribute to developing strategy for integrated coastal and river basin management in NOWPAP region.

The main objectives of ICARM WG are:

- (a) Exchange information to ensure practical implementation of activities related to the Integrated Coastal and River Basin Management in the NOWPAP region.
- (b) Promote regional cooperation in the NOWPAP region related to the Integrated Coastal and River Basin Management.

Functions

The functions of ICARM WG are to:

- Identify and suggest the cooperative actions in the NOWPAP region related to the Integrated Coastal and River Basin Management.
- Promote information exchange and technical cooperation, including education, training and technology transfer in the fields related to the Integrated Coastal and River Basin Management.
- Review ongoing regional and national activities and advise POMRAC on necessary follow-up actions related to the Integrated Coastal and River Basin Management.
- Advise POMRAC on necessary activities related to the goals and objectives of NOWPAP in the field of Integrated Coastal and River Basin Management.

Participation

Each NOWPAP Member will nominate its representatives to ICARM WG. The Working Group will be composed of two experts from each NOWPAP Member.

Other relevant international or/and regional or/and national organizations dealing with Integrated Coastal and River Basin Management in the NOWPAP region may be invited to participate in the work of ICARM WG as observers or consultants.

Activities

To achieve the main objectives of the Working Group for Integrated Coastal and River Basin Management, the following activities will be carried out (e.g. through preparation of national and regional reports):

- Collect and compile existing ICARM methodologies being used by NOWPAP member states;
- Prioritize issues related to ICARM activities in NOWPAP member states (including transboundary ones).
- Assist member states in applying efficient ICARM methodologies, including coastal and river basin planning (landscape, urban and marine spatial) and risk management, by disseminating tools and good practices, organizing training courses, etc.

Procedures

Meetings of the Working Group for ICARM will be held as requested by the POMRAC Focal Points Meeting. The POMRAC Focal Points Meeting will discuss the needs and timing of the meeting.

The Working Group for ICARM will adopt, as appropriate the rules of procedures of the UNEP Governing Council.

The Chairperson for each meeting will be elected by the Working Group for ICARM on a rotational basis. The Chairperson will continue to serve as the chairperson of ICARM WG during the intersessional period, until a new chair is elected in the following meeting.

The Working Group for ICARM will try to achieve decisions by consensus. Lack of consensus will be reported to the next POMRAC Focal Points Meeting.

The Working Group for ICARM will advise, when necessary, to the POMRAC Focal Points Meeting on amendments to the present Terms of Reference for ICARM WG.

The Working Group for ICARM will consider and adopt a report at each of their session. The reports will be circulated to all participants in the meeting. The director of POMRAC will present the reports to the POMRAC Focal Points Meeting.

POMRAC will act as the secretariat for ICARM WG.

Budget and Expenses

The ICARM WG activities will be supported by the NOWPAP Trust Fund through POMRAC budget. Other external funds should also be sought in accordance with the development of POMRAC activities.

Language

The working language of the ICARM WG will be English. The host country of each of the meeting sessions may interpret English into the language of the host country.

Annex 8

**STRUCTURE OF REGIONAL OVERVIEW
ON INTEGRATED COASTAL AND RIVER BASIN MANAGEMENT
IN NOWPAP REGION**

Annex 8

STRUCTURE OF REGIONAL OVERVIEW ON INTEGRATED COASTAL AND RIVER BASIN MANAGEMENT IN NOWPAP REGION

Executive Summary

Introduction

Brief introduction of Integrated Coastal and River Basin Management in the NOWPAP Region. Importance of ICARM procedures for the Region and necessary ICARM strategy in the NOWPAP Region.

Geographical scope of NOWPAP area (geographical coverage of the overview, major rivers, coasts, mountains, cities, climate, physical geography, etc.).

Institutional arrangements for developing this overview (who prepared this overview).

Part I. Comparative analysis of present social, environmental and economic situation in NOWPAP Member States (e.g., 2005), revealing conditioning reasons and factors including the historical review for the last 5 or 10 years (population, distribution of communities, anthropogenic activities which cause inputs of contaminants to river basins and coastal zones). Brief information on natural resources and environmental impacts from different sectors of economy (e.g., industry, agriculture, aquaculture, transport, tourism).

Part II. Experience of ICARM planning and implementation in NOWPAP Region

Analysis of situation in NOWPAP countries (mostly on the territory related to NOWPAP region), identification of existing ICARM issues. Examples of existing schemes of land-use management (or functional zoning) in coastal areas and river basins.

National priorities and alternatives of problem solving.

Singling out international (transboundary) issues, priorities and alternatives of problem solving.

Part III. Overviews of national and international policies and laws related to ICARM

Conclusions (including proposals for future national and regional ICARM-related activities and priorities in NOWPAP region, if any)

References (publications, websites and other information sources)

***Procedure for the compilation and preparation of the Regional Overview
on Integrated Coastal and River Basin Management
in NOWPAP Region***

The procedure may include the following stages:

1. The Regional Overview will be compiled on the basis of "Structure and Contents of Regional Overview" agreed upon by the 5th NOWPAP POMRAC Focal Points Meeting. Different sources, and first of all National Reports of ICARM WG, may be used for compilation of the Regional Overview.
2. The Regional Overview will be prepared by consultant from any NOWPAP Member Countries. Financial support for the preparation of the Regional Overview will be provided by POMRAC, according to guidance of POMRAC FPs.
3. After signing MOU between POMRAC Secretariat and consultant, draft of ICARM Regional Overview should be prepared during 3 months and submitted to POMRAC Secretariat by e-mail.
4. POMRAC Secretariat will send Draft Regional Overview to the ICARM WG experts by e-mail. After receiving comments from the experts within 14 days, the Draft will be amended by the consultant within 14 days. The second amended Draft will be distributed to the POMRAC Focal Points and ICARM WG experts to collect their comments within 14 days.
5. The next POMRAC FPM will discuss the progress of preparation of the Regional Overview. When finalized, the Regional Overview will be published as a POMRAC technical report.

Annex 9

Workplan and Budget for POMRAC

for 2008/9 Biennium

Annex 9

Workplan and Budget for POMRAC

for 2008/9 Biennium

1. Introduction

The Tenth Intergovernmental Meeting of the Northwest Pacific Action Plan in Toyama, Japan, 24-26 November 2005 has approved plan of future actions as NOWPAP EVOLUTION: New Directions for the NOWPAP RACs and RCU.

Regarding POMRAC, that IGM confirmed the following trend for 2006 and next years: «The Pollution Monitoring Regional Activity Center (POMRAC) in Vladivostok, Russia, currently has two Working Groups (WG1 on Atmospheric Input of Contaminants and WG2 on River and Direct Inputs of Contaminants). In 2005-2006, the experts of these working groups will prepare National Reports and then the Regional Overviews on these two issues. These documents might contribute to the State of Marine Environment Report in the NOWPAP Region which would be prepared in 2006-2007. Then, POMRAC might consider focusing on activities related to Integrated Coastal and River Basin Management which includes land-based sources of pollution. All activities related to land-based sources of pollution will be implemented in close collaboration with all NOWPAP RACs and with the UNEP/GPA».

Thus, POMRAC must start practical implementation of the next elements of NOWPAP: **integrated coastal area planning** and **integrated coastal area management**.

These activities will be implemented in close collaboration with all NOWPAP RACs and with the UNEP/GPA and under direct leadership of RCU.

Considering the abovementioned, the most significant intermediate result of NOWPAP activity for management of the coastal and marine environment should become the development of strategic plan of Integrated Coastal Area and River Basin Management (ICARM) in NOWPAP region.

2. Main activities of POMRAC in 2008/9 biennium

1. to organize the 6th and 7th Focal Points Meetings;
2. to organize 'Back to Back' Meeting of WG 1, WG 2 and ICARM Group;
3. to implement follow-up activities for WG1 and WG2 such as Regional Overview on atmospheric deposition models and Overview of land-based sources of pollution in NOWPAP region;
4. to prepare and publish the National Reports and Regional Overview (ICARM WG);
5. to develop the reference database for ICARM WG and update the reference databases for WG1 and WG2 (together with DINRAC);
6. to implement activities related to ICARM in accordance with TOR for ICARM WG (including LBS).

3. The proposed activities for POMRAC are summarized in the following table:

Workplan and Budget for POMRAC in 2008/2009

Activity	Actions and planned date	Responsibility	Remarks	Budget US\$
6 th FPM	April 2008	POMRAC with assistance of NOWPAP RCU, UNEP	POMRAC, Vladivostok, Russia, or other City in NOWPAP Region	27,000
Harmonization of ICARM National Reports	January 2008 – February 2008	POMRAC through national experts from NOWPAP Member States	\$ 1,000 for each national expert	4,000
Preparation of the Regional Overview on ICARM	2008	POMRAC through an international consultant	\$5,000 for consultant	5,000
Follow-up activities for WG1 and WG2 such as Regional Overview on atmospheric deposition models and Overview of land-based sources of pollution in NOWPAP region	2008 – 2009	POMRAC	through national experts and regional consultant	15,000
Activities related to ICARM in accordance with TOR for ICARM WG (including LBS)	Throughout 2009	POMRAC with assistance of NOWPAP RCU, RACs, UNEP, IOC UNESCO	through national experts and regional consultant	25,000
'Back to Back' Meeting of WG 1, WG 2 and ICARM Group	April 2008	POMRAC with assistance of RCU and UNEP	POMRAC, Vladivostok, Russia or other City in NOWPAP Region	25,000
Printing of POMRAC technical reports	2008-2009	POMRAC		6,000
7 th FPM	September-October 2009	POMRAC with assistance of NOWPAP RCU, UNEP	POMRAC, Vladivostok, Russia or other City in NOWPAP Region	27,000
Development of reference database for ICARM WG (with assistance of DINRAC)	Throughout 2008-2009	POMRAC through national experts from NOWPAP Member States	500 US\$ for each consultant from NOWPAP member countries (4 consultants)	2,000
Update of reference database for WG1 and WG2 (with assistance of	Throughout 2008-2009	POMRAC through national experts from NOWPAP Member States	250 US\$ for each consultant from NOWPAP member countries (8	2,000

DINRAC)			consultants)	
Website	Throughout 2008-2009	POMRAC		3,000
Cooperation, coordination of POMRAC activities and communication maintenance	Throughout 2008-2009	POMRAC in cooperation with RCU, UNEP, RACs, UNESCO/IOC and relevant regional organizations		9,000
<u>Total</u>				150,000

Appendix I

**Establishment of Reference Databases: result of collaboration
between POMRAC and DINRAC**

S.I. KOZHENKOVA

Establishment of Reference Databases:

result of collaboration between POMRAC and DINRAC

Svetlana KOZHENKOVA

During last 5 years POMRAC was assigned with the responsibility to implement the activities related to Working Group (WG) 1 - Atmospheric Deposition and WG 2 - River and Direct Inputs.

The **main objectives of WG 1 and WG 2** are as follows:

- i. Exchange information to ensure practical implementation of activities related to the monitoring of atmospheric deposition / river and direct inputs in NOWPAP Region.
- ii. Promote, coordinate and harmonize regional cooperation in NOWPAP Region related to the monitoring of atmospheric deposition / river and direct inputs of contaminants into the marine and coastal environment.

2 Reference Databases:

1. Reference Database on **Atmospheric Deposition of Contaminants into the Marine and Coastal Environment in NOWPAP Region (AD Reference Database)**
2. Reference Database on **River and Direct Inputs of Contaminants into the Marine and Coastal Environment in NOWPAP Region (RDI Reference Database)**



Dr. Mitsuo Uematsu, Expert of WG 1,
made his presentation

During the 2nd Meeting of NOWPAP WG 1 and the 2nd Meeting of NOWPAP WG 2, which were held on **10-11th of October 2005 in Vladivostok, Russia**, the Experts of both these Working Groups decided to establish two Reference Databases to **improve information exchange** related to the monitoring of the environment in NOWPAP region.

These Databases **contain data on articles, scientific reports and databases concerning the results of current state surveys of** (correspondingly)

- air pollution in NOWPAP region, methods of air quality monitoring and environmental management;
- rivers, river basins and estuarine zones in NOWPAP region, methods of monitoring and nature management.

2nd Meeting of NOWPAP WG 2



The close cooperation with DINRAC was also recommended for proper implementation of this work.



Joint session of WG1 and WG2 Meetings
(10-11 October 2005)

The following recommendations on compilation of the Reference Databases have been done:

For **AD Reference Database**, the recommendations were as follows
(UNEP/NOWPAP/POMRAC/WG1 2/7, Annex 6):

1. AD Reference Database filling will be conducted by National Experts nominated by POMRAC Focal Points. Financial support for AD Reference Database filling will be provided by POMRAC, under guidance of POMRAC FPs.

2. National Experts will provide data for AD Reference Database (not less than 100 references) considering the following recommendations:

- **Each reference should be categorized into the following items:**

- a) National Monitoring Systems and Methods of monitoring
- b) Air pollution in NOWPAP Region
- c) Atmospheric deposition of contaminants

- **Each reference should contain the following fields:**

- a) Author(s)
- b) Name of publication
- c) Journal/monograph
- d) Year of publishing
- e) Language of the publication

For **RDI Reference Database** the recommendations were as follows
(UNEP/NOWPAP/POMRAC/WG2 2/7, Annex 6):

1. RDI Reference Database filling will be conducted by National Experts nominated by POMRAC Focal Points. Financial support for RDI Reference Database filling will be provided by POMRAC, according to guidance of POMRAC FPs.

2. National Experts will provide data for RDI Reference Database (not less than 100 references) considering following recommendations:

- **Each reference should be categorized into the following items:**

- a) National Monitoring Systems and Methods of monitoring
- b) Contamination of estuarine and coastal zones
- c) River inputs of contaminants
- d) Direct inputs of contaminants

- **Each reference should contain the following:**

- a) Author(s)
- b) Name of publication
- c) Journal/monograph
- d) Year of publishing
- e) Language of the publication
- f) e-mail or postal address of author (s) or website (*if possible*)
- g) Location of study area
- h) Key words

The 4th POMRAC Focal Points Meeting was held on April 25-26, 2006 in Qingdao, China.

POMRAC approved the budget for **Development of Reference Databases for WG1 and WG2 during 2006-2007** to the sum of US\$ 4000:



Participants of the Meeting

- budget for **Development of AD Reference Database** makes up - **US\$ 2000**, each National Expert of the four countries to be remunerated with US\$ 500.

- budget for **Development of RDI Reference Database** - **US\$ 2000**, each National Expert of the four countries to be remunerated with US\$ 500.

On the **5th NOWPAP DINRAC Focal Points Meeting** (10-11 May 2006, Shenzhen, China) Dr. Svetlana Kozhenkova made a presentation on the proposal for Establishment of AD and RDI Reference Databases through collaboration of DINRAC and POMRAC (UNEP/NOWPAP/DINRAC/FPM 5/18).

The Meeting agreed to this proposal.



In June 2006 the Memorandum of Understanding (MOU) between DINRAC and POMRAC was signed.

In June-July 2006 were also signed eight MOUs on preparation of Lists of References for AD and RDI Reference Databases between POMRAC and Experts.

The Experts sent Lists of References before **October 30, 2006** to POMRAC Secretariat.

POMRAC Secretariat sent the lists to DINRAC on **November 2, 2006**.

In January 2007 DINRAC finished the establishment of AD and RDI Reference Databases.

The databases are now available at the Web:
<http://dinrac.nowpap.org/NowpapReferenceAD.php3>, and
<http://dinrac.nowpap.org/NowpapReferenceRDI.php3>

AD Reference Database contains 439 references and RDI Reference Database contains 586 references from 4 member states.

POMRAC Secretariat informed POMRAC Focal Points and Experts about 2 Reference Databases by e-mails. We also input links to these Databases on POMRAC Website <http://www.pomrac.dvo.ru/>.

During the 1st Meeting of NOWPAP ICARM Working Group (Toyama, July 2007)
the Experts of the Working Group decided

to establish Reference Databases for ICARM



**The close cooperation
with DINRAC was also
recommended for
proper implementation
of this work.**



Thank you!

Appendix II

Access to AD & RDI Reference Databases

T. AN

Access to AD & RDI Reference Databases

The Fifth NOWPAP POMRAC Focal Points Meeting
Vladivostok, Russia, 8-9 October 2007

NOWPAP DINRAC

NOWPAP DINRAC

Homepage of NOWPAP DINRAC

UNEP NOWPAP DINRAC

Nowpap Nature Reserve
Nowpap Institution
Nowpap Expert
Nowpap GIS
Nowpap Reference AD (439, 4 countries)
Nowpap Reference RDI (586, 4 countries)

NOth West Pacific Action Plan
Data and Information Network Regional Activity Center

China Japan Korea Russia

NOWPAP Databases

[NOWPAP Databases](#): access to the
databases resulted from NOWPAP
activities (7 pages, 6 databases)

- NowpapNatureReserve
- NowpapInstitution
- NowpapExpert
- NowpapGIS
- [NowpapReferenceAD](#) (439, 4 countries)
- [NowpapReferenceRDI](#) (586,4 countries)

AD Reference Database

Access to AD Reference Database:

-> <http://dinrac.nowpap.org/NowpapReferenceAD.php3>


Search by:

- Country (select from the list)
- Category (select from the list)
- Author
- Title


Note: country and category managed by coding

AD Reference Database

Display Format:

 Country: **Country**
Category: **Category**
author *title*. journal. monograph. year (language)

Example:

 Country: **Russia**
Category: **Air pollution in NOWPAP Region**
Kondratyev I.I., Svinukhov V.G., Svinukhov G.V., Fokin M.V.,
CVherpak N.A. *Meteorological, geochemical and medical
aspects of the environmental pollution of Spassk-Dalny city,
Primorsky Krai. Vladivostok.* Vladivostok, Published by the
Far-Eastern State University. 182p. 1994 (In Russian)

AD Reference Database

Example for Search and Display:

1 **Country -> Russia**
Category -> National monitoring systems & methodologies
Search result: 44 records [NowpapReferenceAD-Ru-N.htm](#)

2 **Country -> Russia**
Category -> National monitoring systems & methodologies
Author -> Arzhanova
Search result: 2 records [NowpapReferenceAD-Ru-N-Arzhanova.htm](#)

3 **Country -> Russia**
Category -> National monitoring systems & methodologies
Title -> climate
Search result: 1 record [NowpapReferenceAD-Ru-N-Climat.htm](#)

RDI Reference Database

Access to RDI Reference Database:

-> <http://dinrac.nowpap.org/NowpapReferenceRDI.php3>


Search by:

Country (select from the list)
Category (select from the list)
Author
Title
Keywords


Note: country and category managed by coding

RDI Reference Database

Display Format:

 Country: **Country**
Category: **Category**
author, *title*. Journal. monograph. Year (language), Email,
location, keywords

Example:

 Country: **Russia**
Category: **National monitoring systems & methodologies**
Anikiev V.V., Dudarev O.V., Kolesov G.M. *Contemporary
geo-ecological situation in the Sea of Japan: Vladivostok-
Niigata cross section case area.* Geochemistry International.
V.39. No.3. P.281-295. 2001 (In English), In English, Sea of
Japan: Vladivostok-Niigata cross section case area,
ecological risk, pollution impact, environmental impact,
chemical weapon components, hydrocarbons, sea water

RDI Reference Database

Example for Search and Display:

- 1 **Country -> Russia**
Category -> National monitoring systems & methodologies
Search result: 26 records [NowpapReferenceRDI-Ru-N.htm](#)

- 2 **Country -> Russia**
Category -> National monitoring systems & methodologies
Author -> Kochergin I.E
Search result: 2 records [NowpapReferenceRDI-Ru-N-Kochergin.htm](#)

- 3 **Country -> Russia**
Category -> National monitoring systems & methodologies
Keywords -> sea water
Search result: 9 records [NowpapReferenceRDI-Ru-Seawater.htm](#)

Thanks!

NOWPAP-DIN/RAC

Appendix III

Towards developing ICARM in Japan

Sh. MURAKAMI

Towards developing ICARM in Japan

— Integrated Coastal Area and River Basin Management —

National Institute for Environmental Studies
Asian Environmental Research Group

MURAKAMI, Shogo

Recent approach to ICARM in Japan

1. **Consistent governance from national to local**
Cabinet Meeting Decision, June 1, 2007
Establishment of National strategy
-Becoming a leading environmental nation in the 21 century-
2. **Basic Marine Law**
First law that emphasized necessity of
“Integrated management of coastal area and river basin ”
Combination of administrations related to ICARM implementation.
3. **Development of “Ecosystem-based management”**
Council for Science and Technology Policy, Cabinet Office
Prototype of integrated management based on ecological services
Target area : river basin to Isle Bay
phase : 2006-2010

Basic structure of ICARM

1. **Multi-level of governance**
National-Regional-Local
2. **Ecosystem-based management**
restriction of energy and resources
compensate by ecological functions
3. **Flexibility according to features of each country**
according to geography, climate and culture etc.
according to temporal and spatial scales of problems

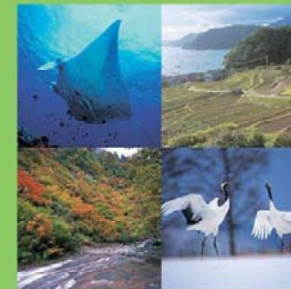
How have Japan dealt with ICARM ?

Road to integrated management based upon ecosystem approach
Gradual change of water environment management system

BECOMING A LEADING ENVIRONMENTAL NATION IN THE 21ST CENTURY:

21世紀 環境立国戦略

平成19年6月1日 閣議決定



Tokyo, June 1, 2007
Cabinet Meeting Decision
GOVERNMENT OF
JAPAN

JAPAN'S STRATEGY FOR A SUSTAINABLE SOCIETY

環境省

BECOMING A LEADING ENVIRONMENTAL NATION IN THE 21ST CENTURY:
Directions in the Development of Measures to Bring about an “Environment Nation, Japan”

Wisdom and tradition of living in harmony with nature		Promoting environmental protection in conjunction with economic development and revitalization of local economies		Japan sharing the concept with Asia and the world
---	--	---	--	---

Creating a “Japanese Model “ for a Sustainable Society”
 <8 strategies to be implemented as Priorities>

Strategy 2: Conservation of Biodiversity for the Sustainable Use of Nature's Blessings for the Current Generation and Generations to come
Strategy 4: International Cooperation Utilizing the Experience and Knowledge Derived from Having Overcome Pollution
Strategy 6: Creation of Vibrant Local Communities that Utilize the Blessings of Nature
Strategy 8: Creating a System to Support a “Leading Environmental Nation”

Strategy 6: Creation of Vibrant Local Communities that Utilize the Blessings of Nature

<p>Development and revitalization of rural villages with active people and sound nature</p>	<p>Create beautiful cities that give consideration to the environment</p>
<p>Create rich waterfront areas</p>	<p>Create beautiful forests to preserve national land as rich in greenery</p>

Strategy 2: Conservation of Biodiversity for the Sustainable Use of Nature's Blessings for the Current Generation and Generations to come

Wisdom and tradition of living in harmony with nature

Satoyama Initiative

「美しい日本の自然キャンペーン」

美しい自然: 日本を代表する国立公園の大自然の風景から里地里山が織りなす日本人の原風景まで
 自然体験の推進・積極的な情報発信・受け入れ態勢の整備・アジア諸国に対する技術支援等

「美しい日本の自然」の再発見/アジア・海外への発信

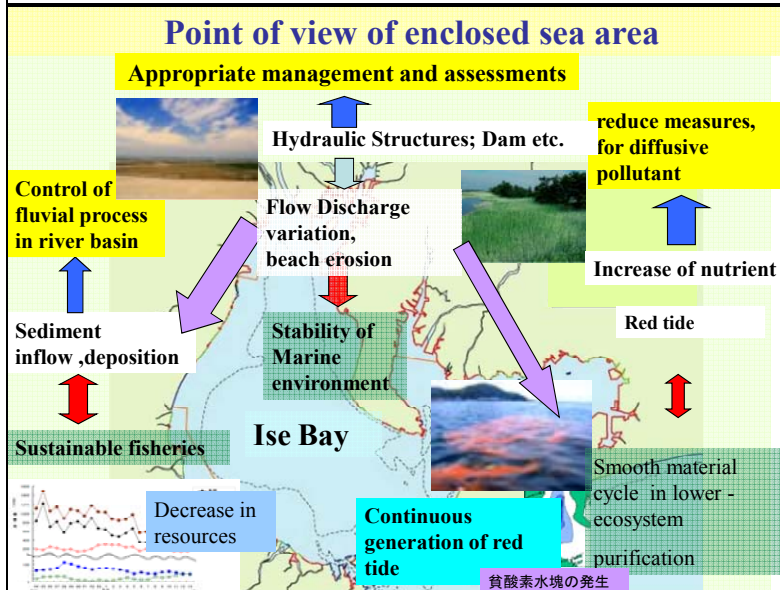
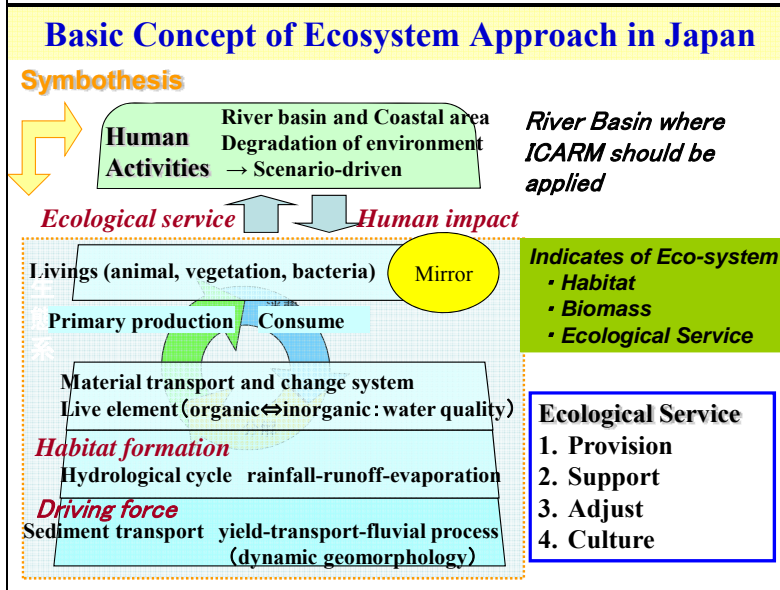
Administrations related to water environment through river basin to sea

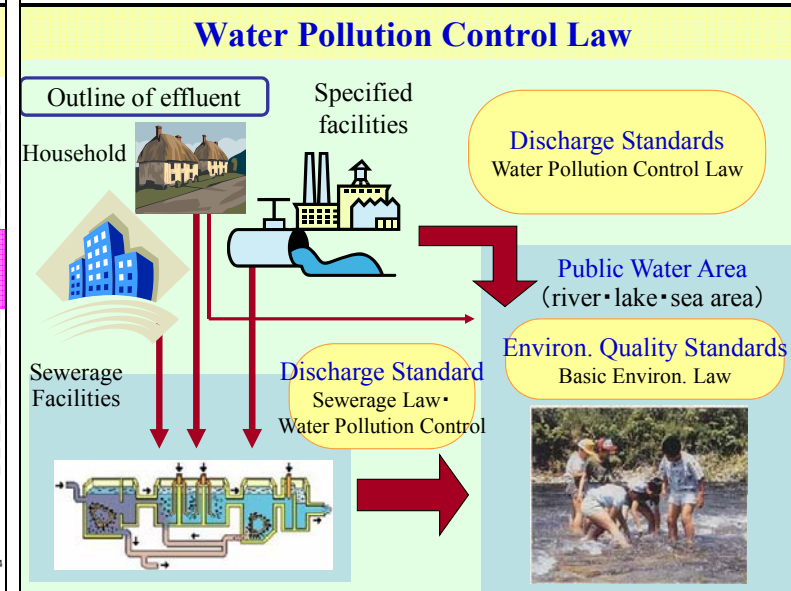
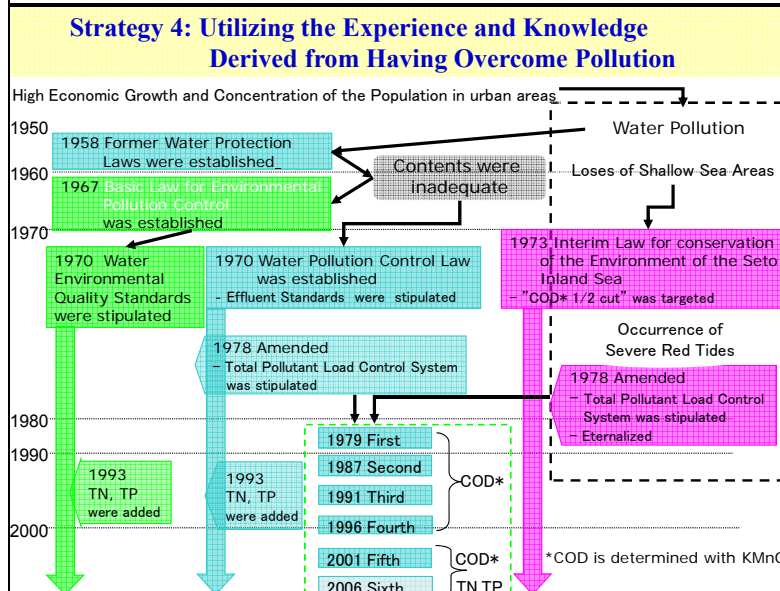
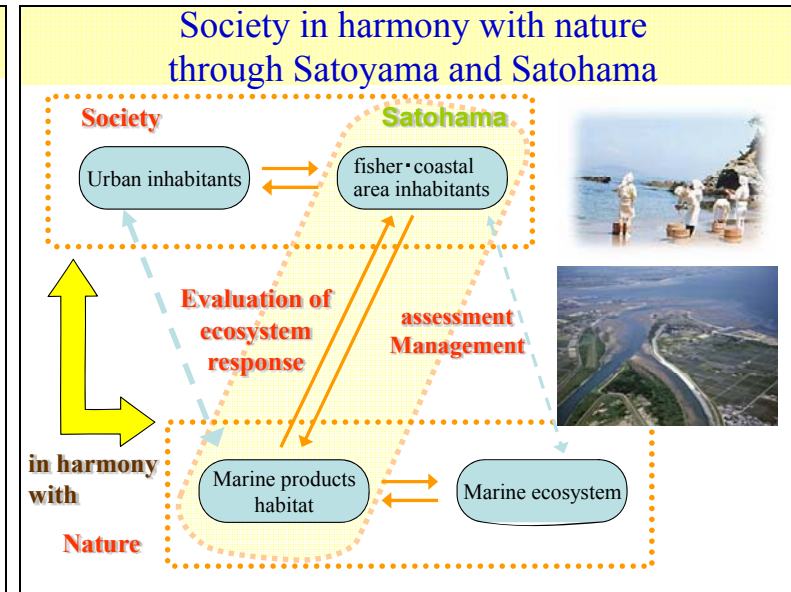
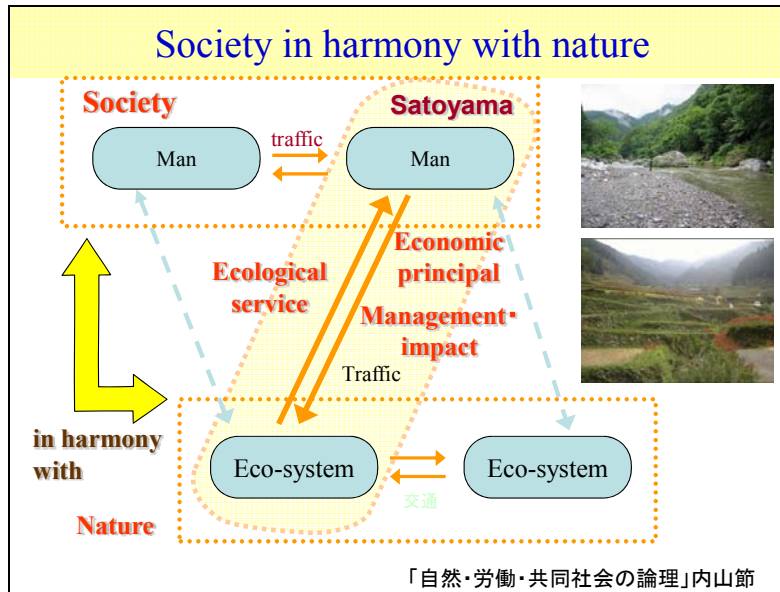
<p>Ministry of Land, Infrastructure and Transport</p> <ul style="list-style-type: none"> • River (flood control, water resources) • Public Sewerage system • Dam control • Beach erosion • Coastal conservation, etc. 	<p>Ministry of Agriculture, Forestry and Fisheries</p> <ul style="list-style-type: none"> • Agricultural Community • Effluent Treatment Programs • Eco-friendly agriculture • Excreta management • Agriculture zone in coastal area
<p>Ministry of Health, Labour and Welfare</p> <ul style="list-style-type: none"> • water supply 	<p>Ministry of Environment</p> <ul style="list-style-type: none"> • EQS • Biological diversity • Total pollutant control • Household septic tank

• Ministry of Education, Culture, Sports, Science and Technology
 • Ministry of Foreign Affairs, etc.

River Law and Seacoast Law	
1956	Seacoast Law (seashore and coast line protection)
1964	River Law : amended (flood control , water resources)
1993	Basic Environmental Law <i>- High economic growth -</i>
1997	River Law : amended (flood control, water resources use, river environment) <i>- Improvement of quality of life -</i>
1997	Environmental Impact Assessment Law
1999	Seacoast Law : amended (protection, use, environment)
2001	Fisheries Basic Law <i>- Multiple sense of values -</i>

Basic Marine Law (2007)
emphasized necessity of ICARM encourage combination of administrations related to ICARM implementation
Conservation of marine environment
<ul style="list-style-type: none"> • conservation of habitat • marine ecosystem diversity • reduction of land-based pollutant loads • conservation of natural landscape • conservation
Integrated management of coastal area
<ul style="list-style-type: none"> • blessings of the marine resources in coastal area and environment • Protection seashore line • arrangement and conservation of coastal area environment • appropriate use of marine ecosystem





Total Pollution Load Control System

Pioneering work of water quality in coastal area and river basin = Prototype: ICARM in Japan

1. Purpose

Improvement of water environment of large enclosed sea and coastal areas where population and industry concentrated.

Integrated and indented measure for water quality control is implemented on the basis of

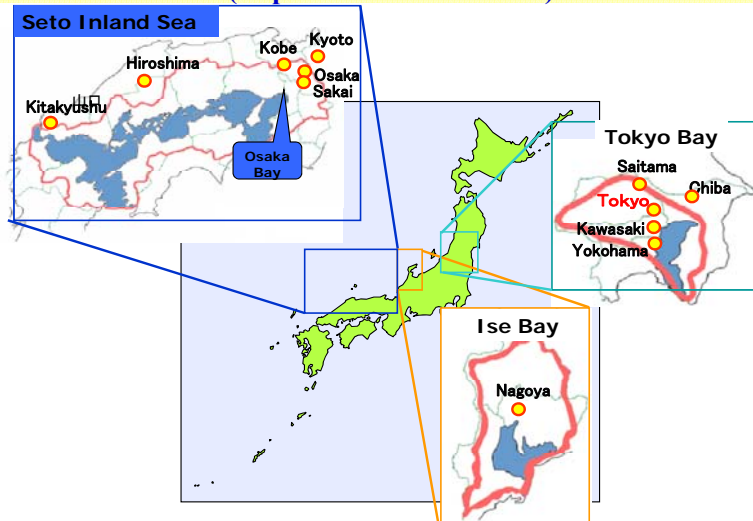
- ① quantitative reduction targets of pollutant loads
- ② targets year etc.

2. Target water area

Tokyo Bay, Ise Bay, Setouti Island Sea

3. Specified region

Specified Bodies of Water and Regions (20 prefectures are related)



The measures for reducing pollutant load

Measures for reducing pollutant load from Household

- 1. Installation of sewerage and improvement of household septic tank systems
- 2. Advances in household wastewater treatment

Measures for reducing pollutant load from Industry

Measures for reducing pollutant load from Non-point Sources

- 1. Appropriate Fertilizing in Agriculture
- 2. Appropriate Managing of Excreta of Livestock
- 3. Appropriate Feeding in Aquaculture

Improvement of purification function

- 1. Conservation and restoration of shallow water
- 2. Improvement of sediment discharge and quality

Environmental Quality Standards for Living Environment

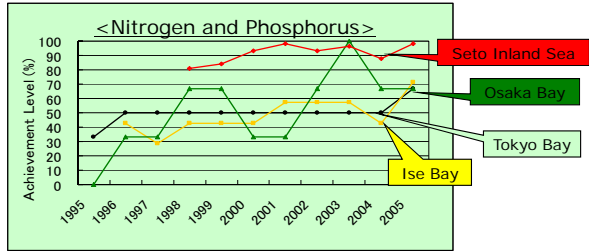
(10 items)

items	rivers(AA~E category)	lakes(AA~C category)	coastal waters(A~C category)
BOD	≤ 1~10mg/L	-	-
COD *	-	≤ 1~8mg/L	≤ 2~8mg/L
pH	6.0~8.5	6.0~8.5	7.0~8.3
SS	≤ 25~100mg/L, etc	≤ 1~15mg/L, etc	-
DO	2~7.5mg/L ≤	2~7.5mg/L ≤	2~7.5mg/L ≤
total coliform	≤ 50~5,000MPN/100ml	≤ 50~1,000MPN/100ml	≤ 1,000MPN/100ml
N-hexane Extracts (oil, etc.)	-	-	not detectable
total nitrogen	-	≤ 0.1~1mg/L	≤ 0.2~1mg/L
total phosphorus	-	≤ 0.005~0.1mg/L	≤ 0.02~0.09mg/L
total zinc	≤ 0.03mg/L	≤ 0.03mg/L	≤ 0.01~0.02mg/L

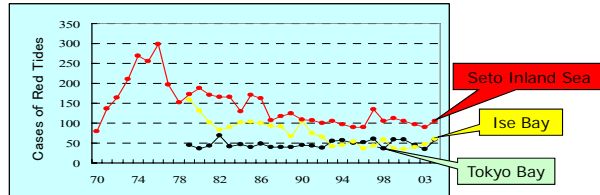
*COD is determined with KMnO₄

Effective measures for water environment of enclosed sea

1. Increase of the achievement level of Environmental Quality Standards



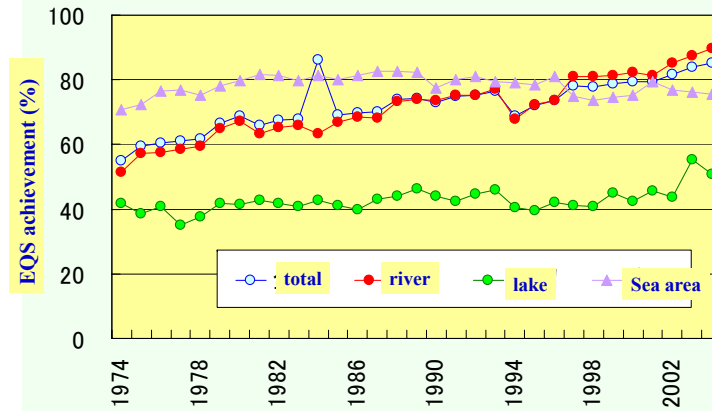
2. Decrease of the occurrence of Red Tide



Attainment of EQS according to category in sea areas (2004)

category	No. of area		No. of attained area		attainment(%)	
	2005	2004	2005	2004	2005	2004
A	261	262	154	156	59.0	59.5
B	211	211	176	172	83.4	81.5
C	119	119	119	119	100.0	100.0
total	591	592	449	447	76.0	75.5

Achievement of EQS (COD) for living Environment (2004)



Questionnaire survey about Environmental Quality Standards

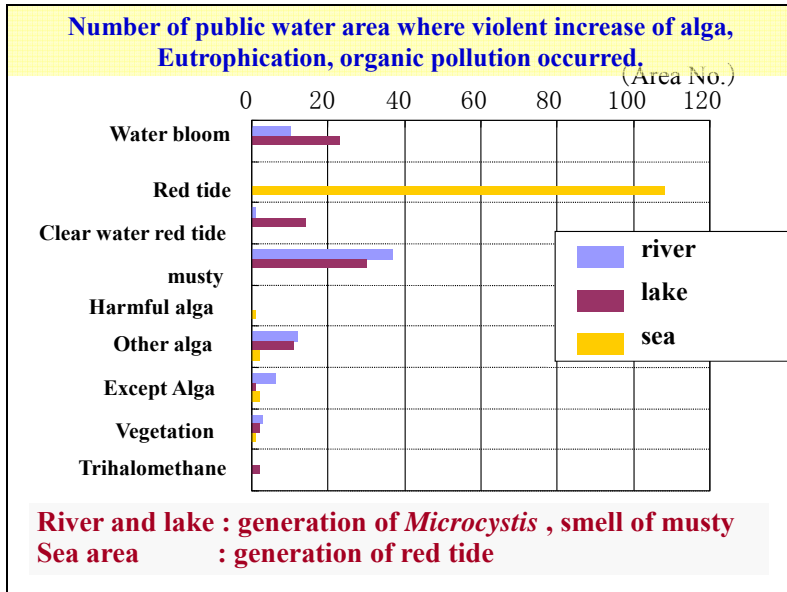
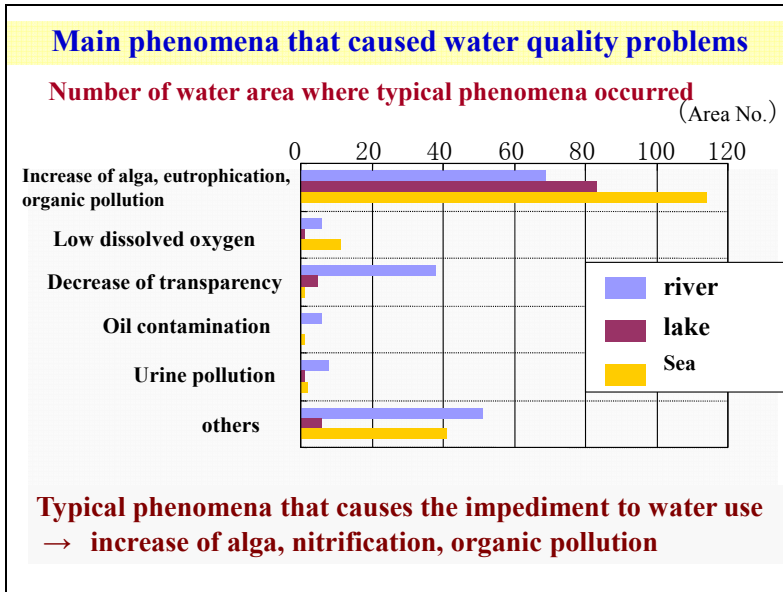
Purpose : Measures for pollutant load in future and new management system

Respondent :

- Officers in charge of water environment
 - 47 prefectures
 - 99 cities to which water pollution control law is applied

Main purpose:

1. Present situation of achievement of “EQS”
2. Relationship among achievement of EQS, impediment to water use and possible causes

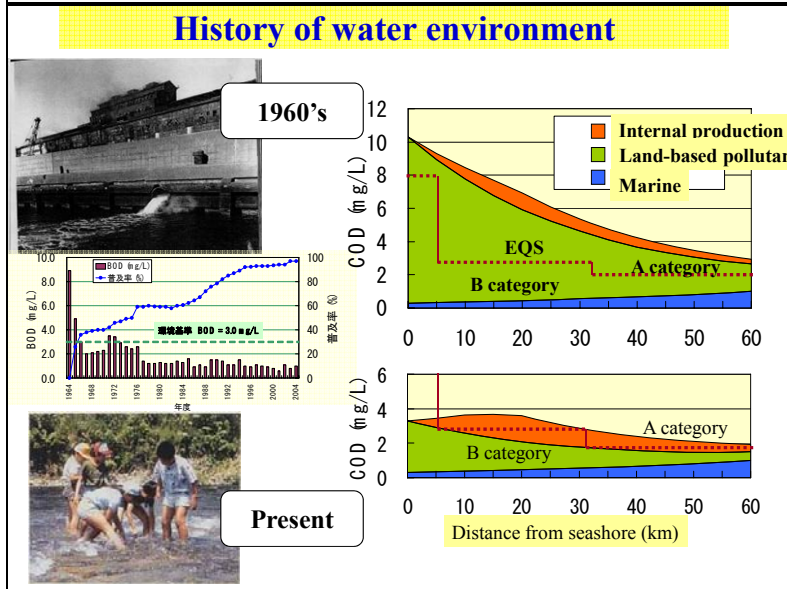


Results of Questionnaire survey

Coastal area
 public water area impediment to water use :94 areas
 37 areas of 94 : achieved EQS

River
 public water area impediment to water use :130 areas
 30 areas of 130 : achieved EQS

→ Control of Nitrogen and Phosphors
 Control of diffusive pollutant load
 → Introduction of type of “total pollution control system”



<p>Amendment of laws related to water environment</p> <p>Expansion of concept “total pollution load control”</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p style="text-align: center;">Amendment of Lake law, 2005</p> <ul style="list-style-type: none"> ● Measures of effluent (non-point source, household effluent) ● Re-consideration of regulation for specified facilities ● Set-up of new conservation zone around lake (increase of purification, ecological services) </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p style="text-align: center;">Amendment of Sewerage Law, 2005</p> <ul style="list-style-type: none"> ● Advanced Wastewater Treatment ● Guideline of reducing pollutant load ● Replacement of Advanced Wastewater Treatment </div>	<p style="text-align: center;">Summary</p> <p>Japan has prepared for starting ICARM.</p> <ol style="list-style-type: none"> 1. Establishment of National Strategy 2. Establishment of Marine Basic Law 3. Practical ICARM concept : leadership by CSTP, Cabinet office <p>Experience derived from Having Overcome Pollution</p> <p>Pioneering work of ICARM in Japan.</p> <ol style="list-style-type: none"> 1. Total pollution control load system: prototype of ICARM in Japan 2. Measures to reduce total amount load <ul style="list-style-type: none"> •from Industry, Household, Non-point sources •improvement of natural purification function 3. Administrative achievement : effective <p>Specification of problems and measures</p> <ol style="list-style-type: none"> 1. Extension of Total pollution control 2. Amendment of Lake Law and Sewerage Law, 2005 <p style="text-align: center;">Water environment management has changed steadily. What is innovative management in next generation ?</p>
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**Thank you very much
for your kind attention !**

**Pollution Monitoring Regional Activity Center of UNEP Action Plan for the Protection,
Management and Development of the Marine and Coastal Environment of the Northwest
Pacific Region (NOWPAP POMRAC)**

**Региональный Центр по мониторингу загрязнения окружающей среды Плана
действий ЮНЕП по охране, управлению и развитию морской и прибрежной среды
в Северо-Западной Пацифике,
действующий на базе Тихоокеанского института географии ДВО РАН**

Report of the 5th NOWPAP POMRAC Focal Points Meeting

Vladivostok, Russia

8-9 October 2007

Материалы Пятого Международного Сопевщания
национальных координаторов и экспертов
NOWPAP POMRAC

8-9 октября 2007 г., Владивосток, Россия

(На англ. яз.)

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