## **United Nations Environment Programme**

Northwest Pacific Action Plan Distr.: RESTRICTED

**NOWPAP** 

UNEP/NOWPAP/POMRAC/ FPM 18/4

12 November 2021

Original: English

Northwest Pacific Action Plan Pollution Monitoring Regional Activity Center

The Eighteenth NOWPAP POMRAC Focal Points Meeting Vladivostok, Russia, 7-8 December 2021 On-line meeting

Report on the activities

of NOWPAP Pollution Monitoring Regional Activity Center (POMRAC) in 2020-2021



environment programme

### 1. Introduction

Pollution Monitoring Regional Activity Center (POMRAC) of UNEP Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) was established according to the decision of the 4<sup>th</sup> NOWPAP Intergovernmental Meeting (Beijing, China, 6-7 April 1999) on the basis of the Pacific Geographical Institute of the Far Eastern Branch of the Russian Academy of Sciences (Vladivostok, Russia).

The overall goal of POMRAC is the coordination of activities and establishment of regional cooperation in monitoring of marine and coastal environment of the Northwest Pacific region within the UNEP NOWPAP framework. Following the results of discussions at the First NOWPAP/3 Coordinating Committee Meeting (Beijing, 21-22 May 2001), the 7<sup>th</sup> NOWPAP Intergovernmental Meeting (Vladivostok, 20-22 March 2002) made a decision on sharing 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 to the marine and coastal environment".

In 2007 it was decided also that POMRAC might later 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 were expected to be implemented in close collaboration with all NOWPAP RACs and with the UNEP/GPA.

The 23th Intergovernmental Meeting approved the budget of US\$ 185,000 for 2020-2021 biennium for POMRAC activities (POMRAC transferred USD 72,000 to NOWPAP RCU to cover costs of national experts and international consultants and additional activities implementation).

### 2. Organization and staff

The POMRAC Secretariat is hosted by Pacific Geographical Institute of the Far Eastern Branch of the Russian Academy of Sciences (PGI FEB RAS). Day-to-day work is being done by 3 assigned researchers and technicians from the Pacific Geographical Institute working as volunteers:

Dr. Anatolii Kachur	Director (kachur@tigdvo.ru)
Mr. Nikolay Kozlovskii	Staff Member (geo@tigdvo.ru)
Dr. Svetlana Kozhenkova	Staff Member (svetlana@tigdvo.ru)
Ms. Anna Popova	Staff Member (anna410@tigdvo.ru)

Address: 7 Radio Street, Vladivostok 690041, Russian Federation. Phone: +7-423-2313071; Fax: +7-423-2312833/312159.

### 3. Report of POMRAC activities carried out after the 17th POMRAC FPM (2020-2021)

### Main activities in 2020-2021

In accordance with decisions of the 23<sup>nd</sup> NOWPAP IGM with the budget approved at this meeting, and with the main lines of POMRAC activities on fields of WG 1, WG 2 and WG ICARM as well as with the directions of the Draft NOWPAP MTS 2018-2023, the following activities were scheduled for the 2020-2021 biennium:

**Activity 1** "Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2" with a joint regional POMRAC-CEARAC Workshop (Priority area of MTS a and b). It is joint Activity for WG1, WG2 and ICARM WG with cooperation with RACs, RCU and relevant organizations (OSPAR, PEMSEA, PICES, WESTPAC, YSLME and others):

**Activity 2** - Activity for WG2 "Microplastics abundance in river runoff of the NOWPAP region with a case study research in the Russian rivers and coastal waters under river influence". (Priority area of MTS b)

**Activity 3** - The integrated assessment of environmental problems, status and trends related to existing and changing natural and socio-economical conditions in the NOWPAP region with Workshop in the second half 2020 for the final discussion and approval of SOMER-3 contents and structure (Priority area of MTS a) - Joint Activity for WG1, WG2 and ICARM WG with cooperation with RACs: the preparation of SOMER-3.

**Activity 4** – Organization of the Regional Workshop "Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2)" (in cooperation with RCU, RACs and other relevant organizations);

**Activity 5** – Preparation and organization of the Regional Workshop in 2021 for the final discussion and approval of SOMER-3 contents and structure (in cooperation with RCU, RACs and other relevant organizations);

Activity 6 - to organize the 17th and 18th Focal Points Meetings;

Activity 7 - Update, maintenance and enrichment of POMRAC Website

**Activity 8** Cooperation, Communication of NOWPAP POMRAC activities, with other RACs, RCU, UN ENVIRONMENT, and other relevant organizations, projects and programmes.

The total budget for the abovementioned POMRAC activities for the 2020-2021 biennium had been discussed at the 16<sup>th</sup> POMRAC FPM along with agreed workplan, and has been approved by 23<sup>rd</sup> IGM in sum of 185,000 USD (Table 1).

## Table 1. Budget 2020-2021 from Trust fund of NOWPAP

Budget US					
Results/Outputs	Total Cost				
Activity 1 • Development of NOWPAP EcoQO targets aligned (where possible)	with SDG				
indicators, phase 2)";					
Preparation national inputs for RO	16,000				
Compilation of National Inputs and preparation of draft regional synthesis report	5,000				
Finalizing and printing of the National Development of NOWPAP EcoQO targets	2,000				
aligned (where possible) with SDG indicators, phase 2)";					
Report of the regional workshop "• Development of NOWPAP EcoQO targets	18,000				
aligned (where possible) with SDG indicators, phase 2)";"					
Sub-total					
Activity 2 - The preparation of SOMER-3 (phase 1)- The integrated assessment of er	nvironmental				
problems, status and trends related to existing and changing natural and socio	-economical				
conditions in the NOWPAP region					
Workshop on SOMER-3 structure	18,000				
Preparation Draft of SOMER-3 (phase 1) - The integrated assessment of	30,000				
environmental problems, status and trends related to existing and changing natural and					
socio-economical conditions in the NOWPAP region					
Finalizing and printing of SOMER 3 in 2022 (phase 2)					
Sub-total					
Activity 3 - Prepare the Regional Overview 'Microplastics abundance in river runoff and coasta					
waters of the NOWPAP region' for the biennium of 2020-2021					
Preparation of and draft RO and finalization National Inputs on the river runoff of					
microplastics to the marine and coastal environment of the NOWPAP region					
Seasonal survey of microplastic runoff with river NOWPAP region RF include					
Amur/Heilong					
Finalization and publication of the regional Overview					

Sub-total	38,000				
Activity 4 - Strengthen regional capacity on pollution monitoring through knowledge and					
information sharing and capacity building					
to organize the 17th and 18th Focal Points Meeting	36,000				
Preparation of meeting reports					
Communication expenses					
Inputs to NOWPAP RAC activities and technical reports, contributions to national,					
regional and global meetings and processes					
Sub-total					
Activity 5 - Update, maintain and enrich POMRAC website					
New design of the website					
Maintenance and regular updates of the website					
Sub-total					
Total	185,000				

The financing of the payment for the national experts and consultants was decided to carry out through the direct contracts with UNEP HQ under RCU supervision. The reason is an impossibility of paying to the national experts and international consultants at the expense of POMRAC's account due to the features of Russian legislation. 72,000 USD has been allocated from the POMRAC budget for this purpose. Rest part of approved budget (113,000 USD) has been delivered to the POMRAC account in accordance with SSFA 2020/3044.

# 3.1. Activity 1 "Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2)"

The 22<sup>nd</sup> NOWPAP Intergovernmental Meeting (IGM) has approved the Programme of Work for 2018-2019 biennium, including the following POMRAC activity: "Development of regional EcoQO targets aligned (where possible) with SDG indicators, phase 1". During the implementation of EcoQOs activity in 2016-2017, national experts agreed that the following six NOWPAP EcoQO indicators could be applied in their countries:

- Nutrients concentration in the water column (possible SDG indicator 14.1.1)
- Nutrient ratios (silica, nitrogen and phosphorus)
- Chlorophyll a concentration in the water column (possible SDG indicator 14.1.1)

- Harmful algal blooms (HABs)
- Concentration of the contaminants in sediments, water and organisms
- Trends in the amount and composition of litter washed ashore (possible SDG indicator 14.1.1)

Final version of the Regional Synthesis Report Development of regional NOWPAP EcoQO targets aligned with SDG indicators. Phase 1 (Fig. 1) has been uploaded at the NOWPAP POMRAC website as technical report and was published and distributed.



Figure 1. Regional Report "Development of regional EcoQO targets aligned (where possible) with SDG indicators, phase 1"

The aim of this project was to test the agreed EcoQO targets within the designated areas and to consider if further adjustments in EcoQO targets are needed (including through possible alignment, to the extent possible, with the SDG-14 indicators). Implementation of this activity was expected to help NOWPAP to start reporting on progress of achieving the SDG-14.1: "By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution".

Tasks: For each EcoQO target the following steps were expected to be taken:

- Nominated experts from each NOWPAP member state decide on baseline values for their designated areas to be used for testing agreed EcoQO targets and share their decisions with experts from all other member states (via POMRAC).

- Nominated national experts test the four agreed EcoQO targets using monitoring data within their designated areas, checking if monitoring data in their designated areas are within the agreed targets or not and if agreed EcoQO targets are feasible and easily applicable in practice.

- While discussing the EcoQO targets agreed upon earlier, nominated national experts might take into account recent developments of proxy/core SDG-14 indicators as well as recent developments in HELCOM, MAP, OSPAR, YSLME-II project and the UNEP Working Groups on indicators, including eutrophication and floating plastic debris.

National experts have been nominated during Q2-Q3 2020 for the preparation of National Inputs, International consultant has been nominated as well. Structure of National inputs and Regional Synthesis were discussed and agreed by correspondence. Terms of References for the implementation of this activity have been prepared with expected submission of National inputs by the end of 2020 and Regional Synthesis by 31 April 2021. Unfortunately, due to delay of the contracting process in the UNEP HQ, experts have not received contracts until now (15 November 2021). In spite of that, nominated experts have submitted draft reports by 1 September 2021. All experts kindly responded to the comments made by POMRAC Secretariat and international consultant (also without contract). International consultant kindly agree to prepare draft of Regional Synthesis in advance. For the time being draft Regional Synthesis is under review process.

# 3.2. Activity 2 Development of Regional Report: 'Microplastics abundance in river runoff and coastal waters of the NOWPAP region'

Goal. All available data on microplastic contamination in rivers of the NOWPAP region, related assessment methodologies, national programs and future prospective should be summarized as national inputs for combining into the regional overview. Another goal of this project is to obtain information on the distribution of different kinds of microplastics in the rivers within Russian part of the NOWPAP region, and to trace possible impact of river runoff on microplastics quantity and composition in the coastal waters.

Tasks. The following steps were supposed to achieve the objectives of this activity:

1) To obtain data on the concentrations of microplastics in the rivers of the Russian part of the NOWPAP region including Amur/Heilong R.

2) To collect similar existing data from other NOWPAP countries for the estimation of the role

of river runoff in the microplastics transport.

2) To assess and analyze current methods of sampling microplastics in the seawater and fresh water and the sample treatment protocols applied in the NOWPAP countries, considering possible development of general guidelines/recommendations for microplastic monitoring in NOWPAP.

3) To compare existing data on microplastics quantity and composition in the coastal water within the NOWPAP region, including further collection of the background information on the quantity and composition of plastic particles in the coastal water of the Russian part of the NOWPAP region.

National experts have been nominated during Q3 2020, and expert from Japan Mr. Fujio Kojima has kindly agreed to prepare Regional Overview. Structure of National inputs and Regional overview were discussed and agreed by correspondence. Terms of References (ToRs) for the implementation of this activity have been prepared as well with timing of submission of draft National inputs by 31 March 2021 with finalization by 15 October 2021.

Due to delay with contracting process in the Nairobi UNEP HQ national reports received at POMRAC by 30 September 2021, although contracts with national experts have not yet been signed until now (15 November) and all works were carried out in advance. On October 20, national reports were sent to an international consultant Mr. Fujio Kojima for the preparation of draft Regional Overview.

The regular seasonal surveys in the Russian Far East is a basis for the current case study of riverine microplastic contamination. These surveys were organized to reveal microplastic particles in the rivers and coastal seawater of the study area, describe their quantities, type/size characteristics, distribution, and possible sources. The analysis of collected and processed samples of microplastic particles was carried out in Pacific Geographical Institute FEB RAS, NSCMB FEBRAS (National Science Center of Marine Biology) and Far Eastern Federal University.

Sampling in the rivers of Primorsky Krai was carried out in spring, summer and autumn months from 2016 to 2021 funded by NOWPAP. In the Amur River the samples were collected in 2019 under National Geographic Society grant (late winter, spring, summer and autumn) and in 2020 and 2021 sampling continued. Due to the coronavirus pandemic, the work of analytical laboratories has been limited, therefore, the samples taken are still being analyzed.

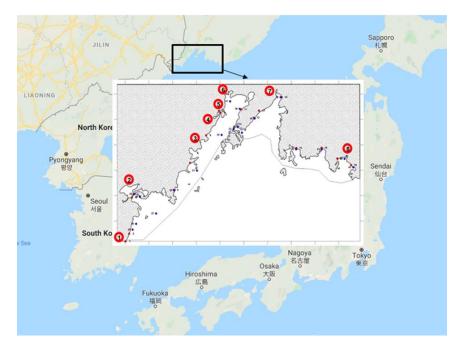


Fig. 2. Sampling sites in the Peter the Great Gulf. Red dots indicate sampling sites in the littoral water, blue dots correspond to samples from coastal water. Red circles with numbers correspond to the areas where selected rivers discharge. 1 – Tumen River, 2- Tsukanovka River, 3- Narva River, 4 – Barabashevka River, 5 – Amba River, 6 – Razdolnaya/Suifenhe River, 7 – Artemovka River, 8 – Partizanskaya River.

# 3.2. Activity 3 The preparation of Draft SOMER-3 The integrated assessment of environmental problems, status and trends related to existing and changing natural and socio-economical conditions in the NOWPAP region

Regular assessment of the environmental status and trends within the NOWPAP region was one of the key components in the original list of activities highlighted at the NOWPAP establishment in 1994.

According to the NOWPAP MTS for 2018-2023, one of the major goals of NOWPAP continues to be providing the NOWPAP Member States with integrated periodic assessments of the state of the marine and coastal environment (SOMER-3). General responsibility of POMRAC for the SOMER 3 preparation was reflected in the MTS. At the same time, comprehensive and holistic nature of SOMER-3 implies that all RACs have to be involved in this activity.

**Goal.** The integrated assessment of environmental problems, status and trends related to existing and changing natural and socio-economical conditions in the different countries of NOWPAP region.

### Main features of SOMER-3

**Integrative nature**. The broad range of ecological problems that should be reflected in SOMER-3 justifies the necessity to involve all RACs and other national and regional institutions in the development of this document. Overall activity will be implemented in close partnership between all RACs and RCU and involve inputs from various national, regional and global institutions as well as individual experts.

The compatibility with Ecological Quality Objectives (EcoQOs). Substantive part of SOMER-3 should be directly related to the five EcoQOs, elaborated during the preparation of SOMER 2, and should allow to check the efficiency of suggested EcoQOs indicators. It does not mean that other important and emerging environmental issues (like climate change, acidification, microplastic pollution) will be ignored in SOMER-3.

The aligning with SDGs. After adoption of sustainable development goals (SDGs) by the UN General Assembly in December 2015, NOWPAP activities related to the assessment of ecological quality for the northwest Pacific also have to be aligned with the SDG indicators as much as possible.

The reflecting of the visions of different NOWPAP countries on the ecological problems. SOMER-1 and SOMER-2 were "problems oriented" overviews of the regionally situation in all NOWPAP countries. At the same time in each NOWPAP countries there are own official approach to the environmental problems. POMRAC suggested to compile these national visions and present this study as a first part of SOMER-3. Main intention of this comparative analysis is to enhance the possibility of the practical use of NOWPAP outcomes and recommendations by the National authorities. The second part of SOMER-3 should reflect the regional NOWPAP visions on the major ecological problems of the region.

### Main tasks

Preparation of the draft structure of the SOMER-3 and discussion with RACs, and RCU by correspondence. First version of structure prepared by POMRAC Secretariat was presented at the 16<sup>th</sup> POMRAC FPM in 2019. Taking into account the possibility of different approaches to the SOMER-3 structure, it was suggested to have broad discussion by correspondence with RACs and RCU.

Organization of the on-line Workshop in the middle of 2020 for the final discussion and approval of SOMER-3 contents and structure. Approved structure and contents of SOMER-3 should be a major goal and outcome of this WS. Experts nomination should be based on the SOMER-3 structure approved at the workshop.

Preparation of draft chapters of SOMER-3 by the nominated experts and RACs. Discussion by correspondence and comments from RACs and RCU for all chapters should be important part of this stage of SOMER-3 preparation.

Compilation of SOMER-3 should be begun by the international consultant hired by POMRAC after finalization of the separate chapters, and according to the approved structure.

In fact, structure of SOMER-3 has been suggested by POMRAC Secretariat and discussed with POMRAC FPs by correspondence by the March 2020. On-line Workshop was held on April 8, 2021, to discuss the structure and implementation process of the SOMER-3. Meeting has agreed with POMRAC proposals in general but stressed the necessity to clarify the RACs participation mode in SOMER-3 preparation.

National experts for the preparation of national inputs for the first part of SOMER 3 and participation in the second have been nominated. Due to impossibility to spend money allocated to POMRAC in PGI FEBRAS for the payment to the persons abroad, contracts for experts from China, Korea and Russia were arranged through the UNEP HQ with kind and great support of RCU.

Even with all efforts of RCU contracting process was delayed, and experts have not received contracts until now (15 November 2021). In spite of that, nominated experts have kindly submitted draft reports by 15 September 2021. CEARAC kindly agree to sign contract with expert nominated from Japan for the preparation of National input. National inputs from China, Republic Korea and Russian Federation received at POMRAC by 30 September 2021, although contracts with national experts have not yet been signed. For the time being (15 November) POMRAC has received draft Japanese National input reflecting the features of the vision on the major ecological problems in marine and coastal areas.

#### 3.4. Other POMRAC activities in 2020-2021.

During 2021 based on Small Scale Funding Agreement (SSFA 2021/4155) between UNEP and NOWPAP POMRAC, work was carried out on the topic: Assessment of ecosystem risks in marine and coastal areas due to increased microplastic pollution, including an appropriate study to assess the effects of marine microplastic pollution on marine organisms in the NOWPAP region.

Activities that were carried out with the support of this small-scale funding: Activity 1 – Preparation of National Input of microplastic concentration in coastal marine hydrobionts, primarily important for aquaculture in the Russian part of NOWPAP region Activity 2 – Development of recommendations for the compilation of Regional Overview.

As part of the first activity, samples were taken of the marine hydrobionts most used in aquaculture in the water areas most polluted with microplastics, as well as outside the zones of pollution of the environment by the microplastics. The method for determining microplastics in them is being worked out and analytical studies of samples are being performed.

As part of the second activity, the overview has been prepared on microplastic concentration in coastal marine hydrobionts, primarily important for aquaculture in the region based on available publications. As a result of the overview, recommendations were prepared for the development of possible structure of a regional overview on this issue for the potential POMRAC activities in future.

During 2020-2021, POMRAC staff members were actively involved in the meetings organized by NOWPAP RACs, WESTPAC, PICES and other organizations (in online format).

In addition, POMRAC employees participated in a number of scientific and other events with a presentation on the activities of NOWPAP:

**Kachur Anatolii**. Results of International Projects for Tumen River Basin. The 3<sup>rd</sup> meeting of the NAWRA (Northeastern Asia Water Research Association). 20 October 2020. Seoul, Dalian, Vladivostok, Khabarovsk (onlain).

**Kachur Anatolii** and others. Management Plans and Strategies at Selected Sites of NEAMPAN in the Russian Federation/ Third Steering Committee Meeting North-East Asian Marine Protected Areas Network 23 April 2021 Virtual meeting.

**Kachur Anatoly**, Sereda Amrtatdzhuti. Strengthening international cooperation in the Asia-Pacific region on integrated marine nature management for the sustainable development of the Russian Far East. // XIX ALL-RUSSIAN FORUM "STRATEGIC PLANNING IN REGIONS AND CITIES OF RUSSIA: The system of strategic planning for the development of maritime activities of the Russian Federation and maritime spatial planning. Saint Petersburg, October 26, 2021

Vladimir Shulkin, Anatolii Kachur, Aleksander Tkalin. DEVELOPMENT OF INDICATORS AND TARGETS FOR ECOLOGICAL QUALITY OBJECTIVES IN THE NORTHWEST PACIFIC REGION / 34<sup>th</sup> International Geographical Congress 16-20 AUGUST, 2021 • Istanbul. p 48.

**Shulkin, V.** Zhang, J. BIOGEOCHEMISTRY OF METALS IN AMUR RIVER AND YANGTZE RIVER ESTUARIES / 4th International Conference on the Status and Future of the WORLD's LARGE RIVERS. 3.-6. August 2021, Moscow, Russia p.171// Online

**Kozhenkova S.I**. Assessment of heavy metal pollution of the Peter the Great Bay (North-West Pacific Region) using brown algae // The 2<sup>nd</sup> International Conference on Advances in Geosciences & Geochemistry (CAGG 2020), November 6-8, 2020, Xiamen, China.

### 4. POMRAC Budget and Expenditure for 2020-2021

Table 1 shows the budget and work plan of POMRAC for 2020-2021 (until June 30, 2022) ...

Table 2 provides information on the costs of implementing the work plan for November 15, 2021.

Table 2 POMRAC Expenditure 2020 – 2021 (SSFA 2020/3044)

Activity 1Image: Constraint of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2)Staff and Other Personnel Costs Regional workshop "Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2)"2,0008,30010,3007,700Regional workshop "Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2)"2,00002,00000Supplies Commodities and Materials (Finalizing and printing of the National Development of NOWPAP EcoQO targets aligned (where possible) with SDG) indicators, phase 2)"20,0004,0008,30012,3007,700Supplies Commodities and Materials (SGG) indicators, phase 2)"20,0004,0008,30012,3007,700Activity 220,0004,0008,30012,3007,700Preparation of the Regional Overview 'Microplastics abundance in river runoff and coastal waters of the NOWPAP region for the biennium of 2020-202113,0003,5008,50012,0001,000Staff and Other Personnel Costs (Infiguration National Inputs on the river runoff of microplastics the marine and coastal environment of the NOWPAP region RE include Amur/Heilong)3,5008,50012,0001,000Supplies Commodities and 4,0002,00002,0002,0002,0002,000	Activity	Original Budget (USD)	Expenditur es in (2020) (USD)	Expenditur es in 2021 up to 15 November 2021) (USD)	Expenditur es incurred in the period 2020- 15.11.2021 (USD)	Planned Total Expendit ure up to 30 June 2022 (USD)
targets aligned (where possible) with SDG indicators, phase 2)18,0002,0008,30010,3007,700Staff and Other Personnel Costs (Preparation of National Inputs for RO; Compilation of National Inputs and preparation of draft regional synthesis report; Regional workshop 'Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators, phase 2)''2,0008,30010,3007,700Supplies Commodities and Materials (Finalizing and printing of the National Development of NOWPAP EcoQO2,00002,00000Supplies Commodities and Materials (Finalizing and printing of the National Development of NOWPAP EcoQO2,0004,0008,30012,3007,700Sub-total Overview 'Microplastics abundance in river runoff and costal waters of the NOWPAP region' for the biennium of 2020-202113,0003,5008,50012,0001,000Staff and Other Personnel Costs (Preparation of and draft RO and finalization National Inputs on the river runoff of microplastics to the marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff wiri river NOWPAP region; Seasonal survey of microplastic runoff wiri river NOWPAP region; Seasonal survey of microplastic runoff wiri river NOWPAP region; Seasonal survey of microplastic marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff wiri river NOWPAP region; Seasonal survey of microplastic sand Materials (Finalization and publication of the regional Overview)2,0002,0002,0002,000						
(Preparation national inputs for RQ: Compilation of National Inputs and preparation of draft regional synthesis report; Regional workshop "Development of NOWPAP EcoQ0 targets aligned (where possible) with SDG indicators, phase 2)"2,0002,00002,0000Supplies Commodities and Materials (Finalizing and printing of the National Development of NOWPAP EcoQ0 targets aligned (where possible) with SDG) indicators, phase 2)";20,0004,0008,30012,3007,700Activity 2 </td <td>targets aligned (where possible) with SDG indicators, phase 2)</td> <td></td> <td></td> <td></td> <td></td> <td></td>	targets aligned (where possible) with SDG indicators, phase 2)					
(Finalizing and printing of the National Development of NOWPAP EcoQO targets aligned (where possible) with SDG) indicators, phase 2)";20,0004,0008,30012,3007,700Activity 2Image: state of the	(Preparation national inputs for RO; Compilation of National Inputs and preparation of draft regional synthesis report; Regional workshop "Development of NOWPAP EcoQO targets aligned (where possible) with SDG indicators,	18,000	2,000	8,300	10,300	7,700
Sub-total20,0004,0008,30012,3007,700Activity 2Image: constraint of the Regional Overview 'Microplastics abundance in river runoff and coastal waters of the NOWPAP region' for the biennium of 2020-2021Image: constraint of the NOWPAP region' for the biennium of 2020-2021Image: constraint of the Regional Other Personnel Costs (Preparation of and draft RO and finalization National Inputs on the river runoff of microplastics to the marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff with river NOWPAP region RF include Amur/Heilong)13,0003,5008,50012,0001,000Supplies Commodities and Materials (Finalization and publication of the regional Overview)4,0002,00002,0002,000	(Finalizing and printing of the National Development of NOWPAP EcoQO targets aligned (where possible) with	2,000	2,000	0	2,000	0
Preparation of the Regional Overview 'Microplastics abundance in river runoff and coastal waters of the NOWPAP region' for the biennium of 2020-2021Image: Comparison of the NOWPAP Staff and Other Personnel Costs (Preparation of and draft RO and finalization National Inputs on the river runoff of microplastics to the marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff with river NOWPAP region; Seasonal survey of microplastic runoff with river NOWPAP region; Supplies Commodities and (Finalization and publication of the regional Overview)4,0002,00002,0002,000	Sub-total	20,000	4,000	8,300	12,300	7,700
Overview abundance in river runoff and coastal waters of the NOWPAP region' for the biennium of 2020-2021Microplastics abundance in river runoff and coastal waters of the NOWPAP region' for the biennium of 2020-202113,0003,5008,50012,0001,000Staff and Other Personnel Costs (Preparation of and draft RO and finalization National Inputs on the river runoff of microplastics to the marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff with river NOWPAP region RF include Amur/Heilong)13,0003,5008,50012,0001,000Supplies (Finalization and publication of the regional Overview)4,0002,00002,0002,000						
(Preparation of and draft RO and finalization National Inputs on the river runoff of microplastics to the marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff with river NOWPAP region RF include Amur/Heilong)Image: Commodities and Supplies Commodities and Materials (Finalization and publication of the regional Overview)4,0002,0002,0002,000	Overview 'Microplastics abundance in river runoff and coastal waters of the NOWPAP region' for the biennium of					
Materials (Finalization and publication of the regional Overview)	Staff and Other Personnel Costs (Preparation of and draft RO and finalization National Inputs on the river runoff of microplastics to the marine and coastal environment of the NOWPAP region; Seasonal survey of microplastic runoff with river NOWPAP region	13,000		8,500	12,000	1,000
Sub-total 17,000 5,500 8,500 14,000 3,000	Materials	4,000	2,000	0	2,000	2,000
	regional Overview)					

Preparation of SOMER-3 (phase 1)– The integrated assessment of environmental problems, status and trends related to existing and changing natural and socio-economic conditions in the NOWPAP region					
Staff and Other Personnel Costs; Workshop on SOMER-3 structure; Preparation Draft of SOMER-3 phase 2;	16,000	1,000	10,500	11,500	4,500
Supplies Commodities and Materials (Finalizing and printing of SOMER 3 in 2022 (phase 2)	2,000	2,000		2,000	0
Sub-total	18,000	3,000	10,500	13,500	4,500
Activity 4					
Strengthen regional capacity on pollution monitoring through knowledge and information sharing and capacity building					
Organization of 17 <sup>th</sup> and 18 <sup>th</sup> POMRAC Focal Points meetings Staff and Other Personnel Costs (Preparation of meeting reports of the 17th and 18th Focal Points Meetings)	51,000	3,750	10,316	14,066	36,934
Operating and Other Direct Costs (Communication expenses)	5,000	2,000	2,500	4,500	500
Sub-total	56,000	5,750	12,816	18,566	37,434
Activity					
Update, maintenance and enrichment of POMRAC Website					
Staff and Other Personnel Costs (A new design of the website; Maintenance and regular updates of the website)	2,000	1,000	1,000	2,000	0
Sub-total	2,000	1,000	1,000	2,000	0
Total	113,000	19,250	41,116	60,366	52,634