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Sixth Meeting of the Scientific and Technical Advisory Committee (STAC) of the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS) in the Wider Caribbean Region

Virtual, 01 February 2023 – 03 February 2023

WORK PLAN OF RAC CIMAB (2023-2024)

This meeting is being convened virtually. Delegates are kindly requested to access all meeting documents electronically for download as necessary.

RAC CIMAB 2023 2024 WORK PLAN DRAFT

1. BACKGROUND

The Fifth (5th) Decision of the Meeting of the Contracting Parties to the Protocol Relating to Pollution from Land-Based Sources and Activities (5th LBS COP) in the Wider Caribbean Region that took place virtually in July 2021, endorsed the Plans Medium-Term Strategic Plans presented by the Regional Activity Centers (RACs) Cimab and IMA and requested the development of biennial work plans by the RACs that could be approved as part of the Work Plan for the 2023-2024 biennium thus allowing greater integration of the activities of the RACs in the future Work Plans and Budgets of the AMEP subprogram (Assessment and Management of Environmental Pollution).

This document is the Draft Work Plan of the RAC Cimab for the 2023 - 2023 biennium with the objective of being presented at the 6th Technical Scientific Advisory Committee (6th LBS STAC) to be held virtually between February 1 and 3, 2023.

The Draft Work Plan is in line with the five strategic objectives presented in the RAC Cimab Strategic Projection for the period 2021 - 2030. The proposed activities/priorities reflect a combination of ongoing projects of the current biennium, new projects and activities, as well as other possible activities for which resources are not yet available.

The Draft Work Plan of RAC Cimab (2023 - 2024) will support the implementation of the Medium-term Strategy of the Cartagena Convention (2022 - 2030) and other regional strategies that have been adopted by the Contracting Parties of said agreement, including the Regional Strategy for Marine Debris and the Regional Strategy for the Reduction of Nutrient Pollution. In addition, the strategy reflects the efforts of the Secretariat of the Cartagena Convention to integrate relevant activities of the SPAW and AMEP Subprograms and facilitate greater cooperation between the Regional Activity Centers (RACs) and other agencies that are part of the Regional Activity Network (RAN).

The document has been divided into two sections. The first includes the general activities, according to the guidelines and the strategic objectives of RAC Cimab for the period and the second section includes the detailed Work Plan with the proposed activities.

2. Guidelines and strategic objectives of the Work Plan. General activities.

Guideline: The prevention, reduction and control of marine pollution from land-based sources, to achieve healthy marine and coastal ecosystems in the Wider Caribbean Region (WCR).

Strategic Objective 1: Increase the use of innovative tools and solutions to prevent, reduce and control marine pollution from land-based sources (LBS).

To achieve this objective, the following general activities will be carried out:

- Programs, projects and activities will continue to be carried out in the countries of the Wider Caribbean Region, together with the National Focal Points of the LBS Protocol, to avoid, mitigate and reduce the impact produced by land-based sources of marine pollution. Projects and activities related to the inventory,

classification, characterization, and management of the LBS will be included, as well as programs for monitoring and evaluating the environmental quality of marine-coastal waters and wastewater of all kinds.

- Other types of investigations and/or activities will be carried out on aspects relevant to the LBS Protocol that promote the ratification process in countries that are not yet contracting parties to said instrument or that favour compliance with the obligations in the case of countries that have already adhered to the protocol.

Guideline: Emerging pollutants and nutrients as environmental and health problems in the WCR that affect the living resources of coastal marine ecosystems, including human health.

Strategic Objective 2: Create capacities in the RAC Cimab (technical, analytical and human resources) for the execution of projects on **emerging pollutants** of the highest priority for the WCR and strengthen the existing ones for the evaluation of **nutrient contamination**.

To achieve this objective, the following general activities will be carried out:

- Actions will be carried out focused on creating or strengthening capacities (from the point of view of human and technological resources) in research on the presence and impact of microplastics and highly toxic substances (mercury mainly) on human health and in the environment and coastal marine ecosystems.
- The capacities of RAC Cimab will be strengthened in evaluating contamination by nutrients, including determining the sources of contributions and their impact on the environment.
- The RAC Cimab will continue to be strengthened, especially the Testing Laboratory, in the determination of other indicators of environmental quality and pollution parameters in residual waters and coastal marine waters.
- Actions will continue to be carried out to maintain the status of Laboratory Accredited by the Cuban Standard NC ISO 17025:2017 and expand its scope.

Guideline: The constant **mobilization of financial resources** necessary for the sustainability of activities to prevent, reduce and control marine and coastal pollution.

Strategic Objective 3: Develop national and regional initiatives for **the mobilization of financial resources** based on projects and activities that respond to the interest of the LBS Protocol.

To achieve this objective, the following general activities will be carried out:

- Support for the Secretariat of the Cartagena Convention will be strengthened in the search for new financing channels.
- Cooperation will be promoted with the National Focal Points of the LBS Protocol, to likewise seek financing alternatives (national and international) for projects and activities related to compliance with said instrument.

Guideline: The necessary **regional cooperation** to achieve compliance with national and regional commitments for the prevention, reduction and control of marine and coastal pollution from the LBS.

Strategic Objective 4: Continue expanding **regional cooperation between RACs and the RAN.**

To achieve this objective, the following general activity will be carried out:

- Scientific-technical cooperation will be increased between the institutions that are part of the RAN, with other specialized agencies of the United Nations System, as well as with the other RACs in the region with an emphasis on improving collaboration and communication with the Institute of Marine Affairs (IMA) of Trinidad and Tobago, which is the other Regional Activity Center for the LBS Protocol. For this, different collaboration mechanisms and instruments will be used.

Guideline: The correct **management of knowledge** as a fundamental tool for the identification, acquisition, exchange and dissemination of information.

Strategic Objective 5: Increase the number of actions aimed at **knowledge management.**

To achieve this objective, the following general activities will be carried out:

- The provision of technical and scientific assistance (experts, consultancies, training) will be facilitated to the governments and institutions of the WCR, through courses, seminars and workshops.
- Meetings, symposiums and useful field missions will continue to be organized for the fulfilment of the objectives and obligations of the LBS Protocol in correspondence with the functions of a RAC.
- The dissemination of successful experiences in the management of Land-Based Sources of Marine Pollution will be increased, including the results of national and regional programs and projects related to the subject.
- The execution of public awareness actions on related topics aimed at target audiences or interested parties will be strengthened.
- Actions will continue to promote the LBS Protocol, emphasizing the advantages and benefits of its ratification, as well as compliance with the obligations it stipulates.

Other activities that will be carried out in support of the Secretariat in terms of **Coordination and Management of the AMEP Sub-program** include:

- Collaborate in the organization and participate in the 6th LBS STAC and 6th LBS COP as well as in other meetings and/or workshops convened by the Secretariat.
- Support and participate in the meetings of the Open-Ended Working Group and the technical subgroups.
- Facilitate the exchange with relevant projects in the region, other Regional Seas Programs, Secretariats of other Multilateral Environmental Agreements (MEAs) and other cooperation mechanisms and associations related to the control, reduction and prevention of marine pollution.

3. DETAILED WORK PLAN RAC CIMAB 2023- 2024.

Name of the Project and Code	Activity	Date & Country Headquarters	Objectives	Funding Source	Budget (USD)	Receivers/ Participants	Products/ Outcomes
SSFA: “UNEP and CIMAB cooperation regarding the projects/programs GEF CRW+, ACP MEAs III and SIDA funds (UNEP HQ) in the Wider Caribbean Region”							
1-. Support RAC IMA in the development of a set of guidelines for the classification of coastal marine waters according to the LBS Protocol.	1.1. Design and send a questionnaire to Spanish-speaking countries related to the classification systems of marine-coastal waters. 1.2. Review of the international literature on the water classification system used globally. 1.3. Review the classification system for coastal waters according to the LBS Protocol. Successes and lessons learned in the region. 1.4. Subregional report (Spanish-speaking countries) with the information mentioned above. Translation of the subregional report into English to send to RAC IMA.	January – March 2023	Develop a set of regional guidelines for the classification of coastal marine waters under the LBS Protocol	UNEP HQ (SIDA funds)	4 000.00	Participants: RAC Cimab and RAC IMA Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention	Final Report of Spanish-speaking countries (in Spanish and English) to be sent to RAC IMA
2-. Support RAC IMA in the development of regional standards and criteria for nitrogen (N) and phosphorus (P) in terms of polluting loads of industrial and domestic origin.	2.1. Summary of the national criteria and standards of the Spanish-speaking countries of the Greater Caribbean Region for nitrogen and phosphorus in wastewater of industrial and domestic origin. 2.2. Summary of national criteria and standards in other regions for nitrogen and phosphorus in wastewater of industrial and domestic origin. 2.3. Evaluations of national and regional experts from Spanish-speaking countries	January – March 2023	Develop a set of regional standards for nitrogen and phosphorus in terms of pollutant load of industrial and domestic origin.	UNEP HQ (SIDA funds)	5 000.00	Participants: RAC Cimab and RAC IMA Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention	Final Report of Spanish-speaking countries (in Spanish and English) to be sent to RAC IMA

	<p>on limits, criteria, standards for N and P including their compounds and concentrations.</p> <p>2.4. Assessments of sensitive site designations in study countries or classification systems.</p> <p>2.5. Regulatory framework by countries in pollution control.</p> <p>2.6. Economic actors and related water statistics.</p> <p>2.7. Sub-regional report (Spanish-speaking countries) that includes the information mentioned above.</p> <p>2.8. Translate the sub-regional report and send it to RAC IMA.</p>						
<p>4-. Develop recommendations for amendments to the LBS Protocol to facilitate increased reuse of domestic wastewater including the adoption of new criteria or standards for domestic wastewater discharges</p>	<p>4.1 Review the limits or national standards for wastewater discharge in Spanish-speaking countries. Fundamentally review and evaluate the indicators currently included in Annex III of the Protocol</p> <p>4.2 Summary of the limits or standards for other regions regarding the same or other indicators.</p> <p>4.3 Results of studies by national experts on suggestions for other parameters/indicators to be included in Annex III of the LBS Protocol (and its limits).</p> <p>4.4 Sub-regional report (Spanish-speaking countries) that includes the above and also:</p> <p>4.4.1 Proposals for new limits (or not) of the indicators already included in Annex III of the LBS Protocol and proposals for new indicators (if considered).</p>	<p>January – May 2023</p>	<p>Recommend amendments to the LBS Protocol to facilitate increased reuse of domestic wastewater.</p>	<p>Regional Project GEF CREW+</p>	<p>60 000.00</p>	<p>Participants: RAC Cimab and RAC IMA</p> <p>Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention</p>	<p>Final Report of the Spanish and English-speaking countries with the recommendations for amendments to the LBS Protocol.</p>

	<p>4.4.2 Amendments to Annex III of the LBS protocol that includes criteria or standards for water reuse and/or decisions in this regard at the national level based on the above criteria</p> <p>4.4.3 Proposal for the inclusion or updating of new articles in the annexes of the LBS Protocol.</p> <p>4.5 Final Report. Integration of the results of both subregional reports (Spanish-speaking countries and English-speaking countries received from RAC IMA)</p> <p>4.6 Translate the final report into English.</p>						
<p>5-. Review, Analyze and Develop a Strategy or Protocol for the management of freshwater resources within the framework of the Cartagena Convention with a regional approach</p>	<p>5.1 Design and sending of questionnaires to Spanish-speaking countries.</p> <p>5.2 Update the work done by J. Eugenio Barrios in "Outline of Technical Document on the incorporation of the issue of fresh water in the LBS Protocol"</p> <p>5.3 Review the work done by other countries regarding the management of freshwater water resources, including the framework guidelines of the USA.</p> <p>5.4 Sub-regional study (Spanish-speaking countries) with information about the management of freshwater water resources.</p> <p>5.5 English Translation.</p>	<p>January - June 2023</p>	<p>Develop a Strategy or Protocol for the management of freshwater resources within the framework of the Cartagena Convention with a regional focus on Spanish-speaking countries</p>	<p>Regional Project GEF CREW+</p>	<p>30 000.00</p>	<p>Participants: RAC Cimab and RAC IMA</p> <p>Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention</p>	<p>Report with the Regional Strategy or Protocol for the management of fresh water in a Spanish-speaking country within the framework of the Cartagena Convention</p>

<p>6-. Promote the ratification of the LBS Protocol among Non-Contracting Parties (in Spanish-speaking countries), including the development of promotional material for ratification.</p>	<p>6.1 National workshops to promote the LBS Protocol (in at least four Spanish-speaking countries). 6.2 Design and develop promotional material related to the ratification of the LBS Protocol. 6.3 Organize meetings/workshops (online or face-to-face as appropriate) between contracting parties and non-contracting parties to exchange experiences and lessons learned on the process of ratification and implementation of the LBS Protocol.</p>	<p>January – December 2023</p>	<p>Increase the number of countries that are Contracting Parties to the LBS Protocol</p>	<p>Regional Project GEF CREW+</p>	<p>30 000.00</p>	<p>Participants: RAC Cimab and RAC IMA Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention</p>	<p>National workshops carried out Promotional materials Meetings/workshops held to exchange experiences and lessons learned</p>
<p>7-. Implement training in integrated and innovative wastewater management such as seminars conducted over the Internet, massive and open online courses, and training programs with the participation of civil society, among others.</p>	<p>7.1 Technical training on new, low-cost topics on the integrated management of water and wastewater (countries to be determined based on training needs). 7.2 Technical workshops or training in thematic areas according to the needs (modalities: online, virtual, face-to-face to be determined).</p>	<p>January – September 2023</p>	<p>Increase regional knowledge of integrated and innovative wastewater management.</p>	<p>Regional Project GEF CREW+</p>	<p>25 000.00</p>	<p>Participants: RAC Cimab and RAC IMA Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention</p>	<p>Technical workshops and/or training carried out</p>
<p>8-. Develop and update data and information distribution mechanisms on large and small-scale wastewater treatment technologies, as well as wastewater management policies and practices</p>	<p>8.1 Strengthen the capacities of RAC Cimab as a clearinghouse for information related to technologies and policies for wastewater treatment. Includes: 8.1.1 Acquisition of hardware (computers, printers) to improve capacities in terms of: a. Compilation of best practices and technologies from all countries.</p>	<p>January – December 2023</p>	<p>Improve regional mechanisms for distributing information related to wastewater treatment technologies and policies.</p>	<p>Regional Project GEF CREW+</p>	<p>15 000.00</p>	<p>Participants: RAC Cimab and RAC IMA Recipients: National Focal Points of the LBS Protocol and Secretariat of the</p>	<p>The capabilities of RAC Cimab as a clearinghouse for information related to wastewater treatment technologies and policies have been improved.</p>

	<p>b. Compilation of national policies related to pollution and wastewater management.</p> <p>c. Compilation of national norms or standards related to wastewater discharges.</p> <p>8.1.2 Improvement of the RAC Cimab website to have available information and links on the LBS Protocol, the Convention Secretariat, the GEF CReW+ Project and the academic sector.</p>					Cartagena Convention	
<p>9-. Strategy and a national action plan for the reduction of nutrient pollution in one (1) Spanish-speaking country. 12,000</p>	<p>9.1 Interview with national actors involved in the management and evaluation of nutrient contamination.</p> <p>9.2 Review of the legal framework related to the management, control and evaluation of nutrient contamination.</p> <p>9.3 Bibliographic search of the different topics included in the Strategy (sources and loads of nutrients, impact, governance, among others) of the selected country.</p> <p>9.3 Preparation of the Report (Strategy).</p>	<p>June – December 2023</p>	<p>Develop a national strategy and action plan for the reduction of nutrient pollution in one (1) Spanish-speaking country</p>	<p>Regional Project ACP MEA III</p>	<p>12 000.00</p>	<p>Participants: RAC Cimab and RAC IMA</p> <p>Recipients: National Focal Points of the LBS Protocol and Secretariat of the Cartagena Convention</p>	<p>Final Report with the National Strategy and the Action Plan for the reduction of nutrient contamination.</p>
<p>Regional Project "Integrated Management of Water, Land and Ecosystems in Small Island States of the Caribbean" (GEF IWeco Project) National Sub Project: Conservation and sustainable use of biodiversity from the Integrated Management of Basins and Coastal Areas in</p>	<p>Final Workshop of the IWeco Cuba national sub-project.</p>	<p>2nd Quarter of the year 2023</p>	<p>Present the final results of the IWeco Cuba sub-project and in particular the results of the Demonstration Area Monitoring Program for which RAC Cimab was responsible (Guanabo River Basin)</p>	<p>IWeco Project. IWeco Cuba Sub Project.</p>	<p>-</p>	<p>RAC Cimab specialists and technicians and other national actors of the project.</p>	<p>Disseminated the results of the national subproject.</p>

Cuba approach" (IWEco Cuba)							
<p>National Project: "Monitoring of the environmental quality of the ecosystem of the bays of Santiago de Cuba, Cayo Moa, Nipe, Puerto Padre, Cienfuegos, Mariel, Varadero - Cárdenas, Guantánamo, Matanzas, Nuevitas and Sagua"</p>	<p>1.- Compilation of information and bibliographic search 2.- Updating the inventory of land-based sources of contamination to the ecosystem. 3.-Evaluation of the main physical-chemical (nutrients, organic matter), bacteriological, biological and organic toxic indicators in the waters of the bays. 4.- Analysis and comparison of the results achieved with the historical records. 5.- Analysis of the effectiveness of the mitigation measures for LBS proposed in the previous studies.</p>	<p>January 2023 / December 2024</p>	<ul style="list-style-type: none"> • Update LBS inventory for each bay. • Evaluate the hydrochemical and sanitary quality of the water, the levels of organic pollutants and the level of deterioration of the biological communities of the bays in the rainy and dry seasons. • Evaluate the effectiveness of the corrective measures proposed for each LBS. 	<p>Ministry of Science Technology and Environment (CITMA) of Cuba.</p>	<p>2023 9 000 000.00 Cuban Pesos (CUP)</p> <p>2024: To define</p>	<p>Participants: Researchers and Technicians from RAC Cimab</p> <p>Receivers: Regulation and Security Office Provincial Delegations of the Ministry of Science Technology and Environment of Cuba (CITMA)</p>	<p><i>Result 1:</i> Report updating the LBS inventory for each bay. <i>Result 2:</i> Report on the evolution and control of the environmental quality of the marine ecosystem of each bay. <i>Result 3:</i> Report on the evaluation of the effectiveness of the measures proposed in each LBS for the control and mitigation of the effects on the studied coastal zone <i>Executive Summary</i></p>
<p>Regional project: "Comprehensive Environmental Surveillance Plan for the Bay of Havana and the adjacent coastline"</p>	<p>1.- Monitoring of the environmental quality of the waters and sediments of the bay through monthly sampling in a network of established stations. 2.- Determination of the contaminant load contributed by the main surface currents (Luyanó River, Martín Pérez River and Arroyo Tadeo) through monthly sampling.</p>	<p>January 2023 / December 2024</p>	<p>Execute the Comprehensive Environmental Surveillance System in the bay basin that guarantees compliance with the recommendations established in the GEF</p>	<p>State Working Group for the Bay of Havana</p>	<p>2023: 805 000.00 CUP</p> <p>2024: To be defined</p>	<p>Participants: Researchers and Technicians of RAC Cimab</p> <p>Receivers: 1.- Bahía Habana State Working Group</p>	<p>1- Annual report with the evolution of the environmental quality of the waters and sediments of the Bay of Havana.</p>

	<p>3.- Determination of the contaminant load contributed by the pluvial drainages that directly affect the quality of the waters of the bay (Agua Dulce, Matadero and San Nicolás), by means of monthly samplings.</p> <p>4.- Annual monitoring of selected polluting sources of industrial origin in Havana Bay.</p>		<p>RLA-93/G-41 Project for the improvement of the environmental state of the bay and its tributary basin</p>			<p>2.- Government of the Province of Havana</p> <p>3.- Industrial polluting sources to Havana Bay</p> <p>4.- National Institute of Hydraulic Resources</p>	<p>2- Annual report with the pollutant load contributed by the main surface currents.</p> <p>3- Annual report with the contaminant load contributed by storm drains.</p> <p>4- Report on the polluting load contributed to the bay by selected polluting sources of industrial origin.</p>
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