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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

REPORT OF ACTIVITIES FOR THE LBS REGIONAL ACTIVITY CENTRES: IMA (TRINIDAD) AND CIMAB (CUBA) FOR 2021-2022

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

REPORT OF ACTIVITIES 2021 – 2022

REGIONAL ACTIVITY CENTER LBS RAC-LBS RAC- CIMAB, HAVANA, CUBA

1.- Participation in regional and national projects related to or in support of the LBS Protocol:

Project name and code	Activity	Date & Country Headquarters	Objectives	Funding Source	Budget (USD)	Financing provided for RAC-Cimab (Cuban pesos, CUP)	Receivers/ Participants	Products/ Outputs
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 Cuba approach" (IWeco Cuba)	1.- The Report of the first sampling of the quality of the waters (rain and coastal) of the Habana del Este Demonstrative Area was completed and delivered.	February 2021, Cuba	Evaluate the water quality of the Guanabo river and the coastal zone of influence and compare with previous results.	GEF IWeco project Sub project: IWeco Cuba	76 100.00 (in the form of equipment acquisition)	85 200.00 CUP (co-financing from Cimab)	Participants: RAC Cimab researchers and specialists Receivers: Sub project IWeco Cuba, component 2	First report with the water quality of the Guanabo river and the coastal zone of influence
	2.- Review of the report: "Selection and analysis of sentinel biota in the Guanabo basin and coastal area of influence, 2021"	April 2021, Cuba	Analyze the composition and abundance of phytoplankton as indicators of the trophic state in the Demonstration Area of the Guanabo River basin.				Participants: RAC Cimab researchers and specialists Receivers: Sub project IWeco Cuba, component 2	Revised report that included the composition of phytoplankton on in the surface waters of the Guanabo River and in the coastal zone of influence

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								and its relationship with chlorophyll-a.
	3.- Realization of the second sampling of the quality of the waters (rain and coastal) of the Guanabo River Basin Demonstrative Area.	June 2022, Cuba	Evaluate the water quality of the Guanabo river and the coastal zone of influence and compare with previous results.				Participants: RAC Cimab researchers and specialists	Second report with the water quality of the Guanabo river and the coastal zone of influence.
	4.- The Report of the first sampling of the quality of the waters (rain and coastal) of the Habana del Este Demonstrative Area was completed and delivered.	September 2022, Cuba					Receivers: Sub project IWeco Cuba, component 2	

Project name and code	Activity	Date & Country Headquarters	Objectives	Funding Source	Budget (USD)	Financing provided for RAC-Cimab (Cuban pesos, CUP)	Receivers/ Participants	Products/ Outputs
Small-Scale Funding Agreement (SSFA): “Cooperation UNEP and CIMAB regarding the projects/programs GEF CReW+, 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 marine-coastal waters according to the LBS Protocol.	June / October 2022	Develop regional guidelines for the classification of marine-coastal waters according to the LBS Protocol.	ACP MEA III Project GEF CReW+ project	Total budget: 176 000.00 USD Activity 1: 4 000.00 USD	35 000.00 CUP	Participants: RAC Cimab researchers and specialists Recipients: LBS Protocol National Focal Points	Technical Report with a proposal for regional guidelines for the classification of coastal marine waters of the Wider Caribbean Region according to the LBS Protocol
	2.- Support RAC IMA in the elaboration of regional standards and criteria for nitrogen (N) and phosphorus (P) in terms of polluting loads of industrial and domestic origin.	June / November 2022	Develop regional standards and criteria for nitrogen (N) and phosphorus (P) in terms of polluting loads of industrial and domestic origin.	AIDS Funds (UNEP HQ)	Activity 2: 5 000.00 USD	45 000.00 CUP	Participants: RAC Cimab researchers and specialists Recipients: National Focal Points and other actors involved in the LBS Protocol.	Technical Report with a proposal for regional standards and criteria for nitrogen and phosphorus in terms of polluting loads of industrial and domestic

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								origin
	3.- Support RAC IMA in facilitating a Regional Workshop on the Coastal Eutrophication Index (ICEP) and on harmful algal blooms.	July 2022 RAC IMA (T&T)	Facilitate, together with RAC IMA, the realization of a Regional Workshop on Coastal Eutrophication Index (ICEP) and harmful algal bloom		-	6 000.00 CUP	<i>Participants and recipients:</i> Researchers from RAC Cimab, RAC IMA and INVEMAR and other experts from the Region	Hold the Regional Workshop on ICEP and Harmful Algal Blooms
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"	1.- Updating of the inventory of terrestrial sources of contamination (FTCM) in the evaluated bays. 2.-Evaluation of the main physical-chemical (nutrients, organic matter) bacteriological, biological and organic toxic indicators in the waters of the	February 2021 / December 2022	General objectives: <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 	Ministry of Science Technology and Environment (CITMA) of Cuba.	2021: 2 800 000.00 Cuban pesos (CUP) 2022: 2 800 000.00 Cuban pesos (CUP)	-	<i>Participants:</i> RAC Cimab researchers and specialists / <i>Receivers:</i> Provincial Delegations of the Cuban Ministry of Science, Technology and Environment (CITMA)	<u>Result 1:</u> Report with the update of the inventory of the LBS of each bay. <u>Result 2:</u> Report on the evolution and control of the environmental quality of the marine ecosystem of each bay.

Project name and code	Activity	Date & Country Headquarters	Objectives	Funding Source	Budget (USD)	Financing provided for RAC-Cimab (Cuban pesos, CUP)	Receivers/ Participants	Products/ Outputs
	<p>bays.</p> <p>3.- Analysis and comparison of the results achieved with the historical values.</p> <p>4.- Analysis of the effectiveness of the mitigation measures for LBS proposed in the previous studies.</p>		<p>corrective measures proposed for each LBS.</p> <p>Bays studied: 2021: Mariel Bay, Santiago de Cuba Bay, Matanzas Bay and Varadero Bay - Cárdenas 2022: Cienfuegos Bay, Puerto Padre Bay, Sagua La Grande Bay and Moa Bay</p>					<p><u>Result 3:</u> 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</p> <p><u>Executive Summary</u></p>

Participation in meetings, workshops and/or regional training:

1. RAC-Cimab actively participated in the following virtual meetings:

- 5th Meeting of the Technical Scientific Advisory Committee of the Protocol of Terrestrial Sources of Marine Pollution (5th LBS STAC), March 2021.
- 5th Meeting of the Contracting Parties to the Protocol Related to Pollution from Land-based Sources and Activities, (5th COP - LBS), July 26, 2021.
- 19th Intergovernmental Meeting on the Action Plan of the Caribbean Environment Program and 16th Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region, (19th IGM), July 28, 2021.

The Director General and the Coordinator of RAC Cimab participated in these meetings, where the main activities carried out by RAC Cimab in the 2019-2020 biennium were presented. Likewise, they participated in the discussions of the Work Plan and the Budget for the biennium 2021-2022. They participated in the meetings prior to the 5th COP LBS and the 19th IGM (also virtual) from June 21 to 25, 2021.

2. RAC Cimab participated in the two meetings between the RACs and the Secretariat held in the period: the first in November 2021 and the second in June 2022. The objective of these meetings was to strengthen the collaboration between the RACs and the Secretariat and establish new work strategies.
3. In the 2021-2022 biennium, representatives of RAC Cimab participated in the teleconferences held by the "Open Composition Group on Monitoring and Evaluation" (OEWG): January, July and December 2021 and June 2022.
4. RAC Cimab participated in the Online Training on Environmental Diplomacy and Multilateral Environmental Agreements (MEA), held in February 2021. The training was organized by the UNEP Legal Affairs Division and by the Secretariat.
5. In October 2021, RAC Cimab participated in a meeting with the Focal Point of the LBS Protocol in Cuba (Directorate of International Relations of the Ministry of Science, Technology and Environment, CITMA) with the objective of presenting the new General Director of the RAC Cimab, to know the status of two issues of common interest: the process of ratification/adherence by Cuba to the LBS Protocol and the signing, by Cuba, of the Cimab Headquarters Agreement as a Regional Activity Center of the Sources Protocol Terrestrial Marine Pollution as well as evaluating joint actions to support said processes.
6. A representative of RAC Cimab participated as an expert and speaker in the Special Course on water governance and water security in Central America and Mexico, particularly in Module 3: International water management and transboundary basins, Session: Linking the "Basin" approach to the Coast" with the Seascape of the Greater Caribbean, held on September 16, 2021. The course was organized by the Central American Commission for Environment and Development (CCDA) and supported by the GEF CREW+ Project and the German Cooperation Agency (GIZ).
7. RAC Cimab participated in the virtual meeting of the Secretariat with the Focal Points of the LBS Protocol of the Spanish-speaking countries on November 26, 2021 and made a small presentation with the benefits of ratifying the Protocol and in collaboration, through of regional projects, with the most recent countries that have acceded to said legal instrument. RAC Cimab also participated as an observer in the

virtual meeting of the Secretariat with the Focal Points of the LBS Protocol of the English-speaking countries held on November 3, 2021.

8. An expert from RAC Cimab participated as a speaker in the Joint Workshop between the Global Alliance on Environmental Law (ELAW) - Secretariat of the Cartagena Convention held in April 2022 where he presented the generalities of the LBS Protocol and its most relevant obligations as well as the main results of two regional reports: The State of the Marine Pollution Convention Area (SOCAR Report) and the Regional Nutrient Pollution Reduction Plan for the Wider Caribbean Region (NPRSAP Report).
9. Two experts from RAC Cimab participated in the Regional Workshop on Coastal Eutrophication Index (ICEP) and Harmful Algae Bloom held in July 2022, held at the Institute of Marine Affairs of Trinidad and Tobago (RAC IMA). . The occasion was used to carry out a work exchange between the RACs and strengthen the working ties between them.
10. Two young researchers from RAC Cimab participated in the Regional Training on the Regional Environmental Monitoring Platform that is being developed by GRID Geneva during three sessions in October 2022.
11. Two experts from RAC Cimab participated in the Regional Eutrophication Workshop held in December 2022, at the Cartagena Convention Secretariat headquarters, Kingston, Jamaica. The objective was to exchange experiences and lessons learned in the development of National Nutrient Reduction Strategies in Barbados and Jamaica.

Other activities:

- ⇒ Between April and September 2021, experts from RAC Cimab reviewed the 3 summaries of the State of the Cartagena Convention Area Report: Assessment of marine pollution from land-based sources and activities in the Wider Caribbean region (SOCAR Report) to:
 - Decision makers (responsible for policy formulation)
 - Civil society
 - Private sector
- ⇒ During 2021, participation in virtual work meetings and email exchanges with contracted consultants for the following documents (in addition to their final review):
 - Strategic and operational evaluation of the Secretariat of the Cartagena Agreement.
 - Update of the Strategy of the Caribbean Environment Program for the period 2021-2030
 - Review and update of the structure, internal functioning and sources of financing of the Regional Activity Centers.
- ⇒ Sending reports / information on the activities carried out by RAC Cimab to be included in the quarterly newsletters of the Secretariat during 2022.

- ⇒ Collaboration in the design of the training (webinar) to be carried out soon within the framework of the GEF CREW+ Regional Project that should begin in January 2023.

- ⇒ Review of the drafts of the PROCARIBE+ Project Document, in particular the Results of Component 3 for the countries Venezuela, Colombia, Trinidad and Tobago, the Dominican Republic and those that make up the Mesoamerican Reef System (Mexico, Belize, Guatemala and Honduras). Activity carried out between March and May 2022.

- ⇒ Participation in the launch of the Video for the 35th Anniversary of the Cartagena Convention in June 2022.

**REPORT ON THE ACTIVITIES OF THE LAND-BASED SOURCES OF POLLUTION
(LBS) REGIONAL ACTIVITY CENTRE**

**INSTITUTE OF MARINE AFFAIRS (TRINIDAD AND TOBAGO)
2021 – 2022**



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ACTIVITY REPORT 2021 – 2022

REGIONAL ACTIVITY CENTRE LBS-RAC/IMA, Trinidad and Tobago

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
CLME+ Ecosystem Based Management Component- Implementation of an Ecosystem- Based Management (EBM) approach for addressing the Impacts of Land-based Sources of Pollutants on Critical Coastal Habitats such as Mangrove Swamp.	As listed in previous Activity Report 2019-2020 for entire project. Activity performed for this biennium as follows: Outcome 5: Site-specific technical communications on the ecosystem-based management process defining the step by step actions, strategies and outcomes while showcasing lessons learnt and recommendations towards regional governance frameworks	August - September 2022.	Successes/ lessons learnt will be documented and shared with the wider farming community in the CRB	UNEP CEP SSFA	Total 70,000 for entire Project. For present Project component during period 13,000	59,006 for entire Project.	Institute of Marine Affairs, Trinidad and Tobago UWI St Augustine Farmers /Fisherfolks /Scientific agencies/Regulatory agencies/Regional corporations	IMA's 7 th Community symposium at Warrenville, Cunupia on September 20 th 2022. Stakeholder consultation/Farmers /Fisherfolks /Scientific agencies/Regulatory agencies/Regional corporations. Community symposium recorded and shared via Youtube among stakeholders. Contribution nationally towards pollution reduction and abatement in the Cunupia/Guayamare watershed and regionally towards conservation and preservation of coastal mangroves and wetlands within the NBSLME. Promotion of Ecosystem Based Management (EBM) in the Wider Caribbean

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<p>Small Scale Funded Agreement (SSFA) UNEP and IMA. Project/programme entitled Capacity Building Related to Multilateral Environmental Agreements in African, Caribbean and Pacific Countries (ACP MEAs III) and Global Environment Facility CReW+ Project: An integrated approach to water and wastewater management in the Wider Caribbean Region using innovative solutions and sustainable financing mechanisms (GEF CReW+)</p>	<p>This SSFA consist of nine activities each broken down in separate rows below</p>	<p>May 2021-December 2023</p>	<p>This agreement contributes to UNEP's 2021/2022 programme of work under ecosystem management for the Specially Protected Areas and Wildlife (SPA) and AMEP Sub-programmes, including the EU-funded ACP MEAs III Project and GEF CReW+, for which the Cartagena Convention Secretariat is a partner executing agency. This agreement provides support for the implementation of the Cartagena Convention Regional Strategy and Action Plan for the Valuation, Protection and/or Restoration of Key Marine Habitats in the Wider Caribbean 2021 – 2030 United Nations Environment Programme - Caribbean Environment Programme (UNEP CEP).</p>	<p>UNEP HQ ACP MEAs III GEF CReW+ Project</p>	<p>158,000.00</p>		<p>RAC IMA RAC CIMAB, Cartagena Convention Secretariat Focal points of LBS protocol</p>	<p>Expected Outputs under the SIDA Funds (UNEP HQ):</p> <ol style="list-style-type: none"> 1. Integrated report on guidelines for the classification of waters according to the LBS Protocol 2. Integrated report on the regional criteria and standards for Nitrogen (N) and Phosphorus (P) loads in domestic and industrial wastewater discharges 3. A regional workshop convened on Eutrophication & Harmful Algal Blooms Under Component 1 (Output 1.1.2 and Output 1.1.3) of the GEF CReW+ Project: 4. Support RAC CIMAB in developing recommendations for amendments to the LBS Protocol to facilitate increased reuse of domestic wastewater including adoption of new criteria or standards for domestic wastewater discharges 5. Review, Analysis and Report for developing a new Strategy or Protocol on the management of freshwater resources within the framework of the Cartagena Convention with a focus on freshwater and the regional level. <p>A sub-regional report (English-speaking countries) with the information about the national management of freshwater resources with a focus on Source to Sea and Integrated Watershed Management (in English).</p>

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								<p>A short integrated report in English and Spanish including recommendations for the STAC, which is based on the separate sub regional reports by RAC-IMA and RAC-CIMAB. Under Component 4 (Output 4.3.2) of the GEF CREW+ Project, IMA will deliver:</p> <p>An updated clearinghouse mechanism.</p> <p>Under the ACP MEAs III Project, IMA will deliver: National pollution strategy developed in one English-speaking country</p>
<p>SSFA- Activity 1 - Develop Guidelines for classification of waters according to the LBS Protocol with in kind support by RAC CIMAB.</p>	<p>1.1. Design and send questionnaire to the English speaking countries on water classification system. 1.2. A literature review on water classification system used globally. 1.3. A review on water classification system according to the LBS Protocol implemented in the wider Caribbean region on successes and lesson learnt.</p>	<p>May – December 2022</p>	<p>Develop Guidelines for classification of waters according to the LBS Protocol</p>	<p>UNEP HQ</p>	<p>6000</p>		<p>RAC IMA RAC CIMAB, Cartagena Convention Secretariat Focal points of LBS protocol</p>	<p>Questionnaire developed for the English speaking countries on water classification systems.</p> <p>A literature review on water classification systems used globally.</p> <p>A review on water classification systems according to the LBS Protocol implemented in the wider Caribbean region including successes and lesson learnt.</p>

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	<p>1.4. Sub-regional report received from RAC CIMAB based on questionnaire responses from Spanish Speaking countries on water classification system and implemented according to the LBS Protocol.</p> <p>1.5. Integration of sub regional reports the results of both reports (sub-regional studies) and preparation of the final report in both languages</p>							
<p>SSFA- Component 2 - Establish regional criteria and standards for Nitrogen (N) and Phosphorus (P) loads in domestic and industrial wastewater discharges together</p>	<p>2.1. Summary of the criteria and national standards of the English-speaking countries of the Greater Caribbean Region for N and P for discharges or discharges of</p>	<p>May – December 2022</p>	<p>An integrated approach to water and wastewater management in the Wider Caribbean Region using innovative solutions and sustainable financing mechanisms</p>	<p>UNEP HQ</p>	<p>10000</p>		<p>RAC IMA RAC CIMAB, Cartagena Convention Secretariat Focal points of LBS protocol</p>	<p>A sub regional report (Spanish speaking countries) received from RAC CIMAB (Spanish and English languages) on Establish regional criteria and standards for Nitrogen (N) and Phosphorus (P) loads in domestic and industrial wastewater discharges.</p> <p>Final report to be produced in February 2023.</p>

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
with support from RAC CIMAB.	<p>industrial and domestic wastewater.</p> <p>2.2. Summary of criteria and standards for N and P in other regions or countries for discharges or discharges of industrial and domestic wastewater.</p> <p>2.3. Surveys to national or regional experts from Spanish-speaking countries on limits, criteria or standards for N and P, including which compounds they propose and the limits.</p>		<p>Establish regional criteria and standards for Nitrogen (N) and Phosphorus (P) loads in domestic and industrial wastewater discharges</p>					

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	<p>2.4. Sub-regional report with the proposed criteria or standards for N and P that will include types of compounds and limits in the form of concentration or in the form of pollutant load.</p> <p>2.5. Survey on designation of sensitive sites in countries or classification system.</p> <p>2.6. Regulatory Framework in country for pollution control.</p> <p>2.7 Key Economic and Water related statistics</p> <p>2.8 Integration of the results of both reports (sub-regional studies) and preparation of</p>							

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	the final report in both languages							
SSFA- Activity 4 Support RAC CIMAB in Developing recommendations for amendments to the LBS Protocol to facilitate increased reuse of domestic wastewater including adoption of new criteria or standards for domestic wastewater discharges	3.1. Revise the discharge national standards for wastewater in the English-speaking countries specially indicators that are now included in Annex III of the LBS Protocol (SST, BOD5, pH, fats and oils, fecal coliforms, E Coli). 3.2. Summary of limits or standards for other regions of the same indicators or other selected ones. 3.3. Results of surveys of national or regional experts on	May – December 2022	An integrated approach to water and wastewater management in the Wider Caribbean Region using innovative solutions and sustainable financing mechanisms	UNEP HQ	40000		RAC IMA RAC CIMAB, Cartagena Convention Secretariat Focal points of LBS protocol	Report on recommendations for amendments to the LBS Protocol to facilitate increased reuse of domestic wastewater including adoption of new criteria or standards for domestic wastewater discharges.

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	<p>other indicators/parameters to be included in Annex III of the LBS Protocol (and its limits).</p> <p>3.4. Sub-regional report (English-speaking countries) that includes all information above and also:</p> <p>a. Proposal of new limits (or not) to the indicators already included in Annex III of the LBS Protocol and with the proposal of new indicators (if considered necessary).</p> <p>b. Amend Annex III on wastewater to include criteria or standards for wastewater reuse and/or adopt a decision to develop these at the national level based on some proposed criteria</p> <p>c. Proposal to include or update any article in the</p>							

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	annexes of the LBS Protocol 3.5. Provide RAC - CIMAB with Sub-regional report (English-speaking countries) for preparation of the final report in both languages							
SSFA- Activity 3 Organize a Regional Workshop on Index of Coastal Eutrophication & Harmful Algal Blooms with Staff of RAC CIMAB and selected country/agency experts that form part of the Regional Activity Network.	3.1 Development of material and training content (Mix of webinars, training material on sampling, analysis, use of GIS on eutrophication). 3.2. Hosting of work shop by RAC IMA. RAC IMA to lead workshop supported by Convention Secretariat and RAC CIMAB country/agency experts that form part of the Regional Activity Network. 3.4. Workshop with translation in English and Spanish.	July 2022 2 day workshop mix of virtual and face to face on 25-26 July 2022.	a) to provide insights and share experiences into the recent research on eutrophication and HABs undertaken in Europe and in the Caribbean region. b) To understand the basics of ICEP HABs indicator and reporting requirement towards UN SDG 14.1.1a. c) To develop a framework for implementation of regional monitoring with respect to ICEP HABs. d) To provide basic training in methods of detection and monitoring for ICEP HABs from laboratory	UNEP HQ	30000		RAC IMA RAC CIMAB, Cartagena Convention Secretariat Focal points of LBS protocol	a) A work shop report with recommendations for building monitoring capacity in the region. b) Greater sensitization to policy makers on the need to implement policies leading to pollution reduction and protection of the marine environment. c) Informative training to technical audience on current detection, assessment and monitoring methods used for reporting Eutrophication and HABs in the region and in Europe. d) Generated awareness for training opportunities in water quality analysis and ICEP HABs detection and monitoring via collaboration with RAN INVEMAR and GEF IWECO e) The development of a framework for implementation of regional monitoring

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			<p>tests, remote sensing and other technologies.</p> <p>e) To develop collaborative linkages in securing new investment opportunities for reducing risks to human health and coastal and marine ecosystem services.</p> <p>f) To bring together policy makers and scientists in the region in consultation towards mitigation the impacts of nutrient pollution and implementing the nutrient reduction strategy.</p>					<p>with respect to ICEP HAB and reporting towards UN SDG 14.1.1a indicator.</p> <p>f) collaborative linkages formed in securing new investment opportunities for reducing risks to human health and coastal and marine ecosystem services.</p>
<p>Hosting of RACs/ RAN Network, work plan and collaboration of the Cartagena Convention</p> <p>July 2022.</p>	<p>Hosting of RACs/ RAN Network, work plan and collaboration of the Cartagena Convention</p>	<p>27th July 2022</p>	<p>1. To Identify Opportunities for Joint Activities</p> <p>2. Reviewing the Recommendations and Action Plan for RACs/RAN workplan (Consultant Report)</p> <p>3. Work Plan for the SSFAs.</p>				<p>Cartagena Convention Secretariat</p> <p>RAC IMA</p> <p>RAC CIMAB,</p> <p>RAC</p> <p>REMPEITC</p> <p>RAC SPAW</p>	<p>Summary notes on the RAC/RAN workshop.</p> <p>Recommendation for improved collaboration among RACs/RAN network in the Cartagena convention.</p> <p>Potential opportunities for collaboration and information exchange with the OSPAR Commission (The Convention for the Protection</p>

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			4. Knowledge exchange from OSPAR. 5. Identify ways of improving engagements with Focal Points.				the OSPAR Commission	of the Marine Environment of the North – East Atlantic Commission).
Development of RAC IMA six year long term strategic plan 2021-2026	Consultation with Cartagena convention Secretariat. Consultation with RAC IMA staff. Development of first draft report in January 2021. Development of second draft document in July 2021	January – March 2021 January 2021– on going	RAC-IMA will seek over the 2021-2026 period to provide the overall supervision, technical guidance and administrative oversight for the implementation of specific and selected activities to fulfil the LBS Protocol and its Convention assigned by the Contracting Parties for the RAC through UNEP-CAR/RCU				Cartagena Convention Secretariat RAC IMA RAC CIMAB, RAC REMPEITC RAC SPAW Focal points of LBS protocol	IMA six year long term strategic plan 2021-2026 submitted to LBS COP and endorsed in meeting of July 2021. Finalized document with review and comments of Ministry of Ministry of Planning and Development in September 2022. Implementation of plan by RAC IMA on going.

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
<p>Oil Spill Satellite monitoring in Trinidad and Tobago/Training by Satellite Analysis Branch (SAB) of the National Oceanographic and Atmospheric Admission (NOAA)</p>	<p>IMA Staff of the Geomatics Units and personnel of the Ministry of Energy and Energy Industries (MEEI) and the Environmental Management Authority (EMA), Trinidad and Tobago were trained on using a variety of optical and synthetic aperture radar (SAR) satellite platforms to identify oil on the surface of the sea. These satellite platforms included: United States Geological Survey (USGS) Landsat 7, 8 and 9; European Space Agency (ESA) Sentinel 1 and 2; NOAA Suomi; and NASA Aqua and Terra.</p> <p>Monthly oil spill satellite monitoring by IMA, EMA and MEEI in waters of Trinidad and Tobago</p>	<p>April 2021</p>	<p>To train staff in Trinidad and Tobago to monitor for oil spills in region.</p> <p>To link oil spills with suspected sources by satellite monitoring.</p> <p>To establish a pilot project in Trinidad and Tobago in oil satellite monitoring to be upscaled in the wider Caribbean region.</p> <p>To generate oil spill maps with trained staff for upscaling</p>				<p>SAB NOAA RAC IMA MEEI</p>	<p>Trained staff in Trinidad and Tobago to monitor for oil spill in region.</p> <p>Oil pollution reports on oil spill in region.</p> <p>Memorandum of Agreement between SAB NOAA and MEEI /Government of Trinidad and Tobago in oil spill monitoring for Trinidad and Tobago.</p>

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	and other areas of the Caribbean region.							
Preparation of State of Marine Environmental Report for Trinidad and Tobago		June 2020 – December 2022	To prepare and make available report to a diverse range of stakeholders highlighting environmental concerns leading to mitigation actions towards environmental preservation and conservation	Government of Trinidad and Tobago	12,000		Trinidad and Tobago, IMA	State of the Marine Environment Report 2020 for Trinidad and Tobago. Newspaper articles Policy Brief
National Coastal Conservation Programme: Long Term Environmental Monitoring and Assessment in Trinidad and Tobago	On-going water, water quality monitoring. Parameters include, physiochemical (pH, temperature, Dissolve oxygen, salinity, turbidity) nutrients (ammonia, nitrites, nitrates, reactive and total phosphates), total suspended solids,	Sampling conducted during the dry and wet seasons in 2021/2022 at 12 sites within the Gulf of Paria, Trinidad.	Monitoring programme established to provide timely and continuous data and information on the environmental status and impacts of Trinidad and Tobago so as to effect policy changes/making for the improvement in the quality of life of citizens	Government of Trinidad and Tobago	5,000		Trinidad and Tobago, IMA	Data used towards producing a State of the Marine Environment Report 2020 for Trinidad and Tobago. Research Reports Water quality data for future SOCAR reports.

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	chlorophyll A, and hydrocarbons.		<p>and preservation of our natural environments.</p> <p>To assess the contribution of land- based sources of pollution in Trinidad</p>					
Bacteriological Water Quality at Popular Recreational Water-Use Sites in Trinidad and Tobago	Bacteriological Water Quality Surveys at popular bathing beaches on the east coast and west coast of Trinidad.	Bacteriological Water Quality Surveys during the wet and dry season of 2021/2022.	<p>To identify possible sources of sewage contamination for beaches surveyed for mitigation measures.</p> <p>To provide data and information to safeguard public health from risk of illness and infectious disease.</p> <p>To ensure representative bacteriological water quality data is obtained at popular beaches</p>	Government of Trinidad and Tobago	5,000		Trinidad and Tobago, IMA	<p>Data used towards producing a State of the Marine Environment Report 2020 for Trinidad and Tobago.</p> <p>Research Report</p> <p>Water quality data for future SOCAR reports.</p>

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
Monitoring of coral reef and seagrass beds in Trinidad and Tobago	<p>Coral reefs in Tobago are monitored annually to determine changes in % coral cover</p> <p>Productivity and biomass of seagrass beds at selected sites in Trinidad and Tobago are monitored 2 times per years</p> <p>Water quality sampling (nutrient, TSS, Chl A, bacteria) is conducted at 12 sites in SW Tobago twice per year.</p> <p>Water quality sampling at 4 sites along the NW peninsula of Trinidad is collected 2 times per year</p> <p>Maintenance of 2 Coral Reef Early Monitoring</p>	<p>Coral reef monitoring on Buccoo Reef began in 1992.</p> <p>Monitoring of other reefs began in 2008 and is on-going</p> <p>Seagrass monitoring commenced in 2002 and is on-going.</p> <p>Water quality monitoring in Tobago and at seagrass sites in Trinidad commenced in 2006 and is on-going</p>	<p>To monitor ecosystem health and determine impacts from land-based sources of pollution and climate change.</p> <p>To conduct an integrated baseline assessment of coral reefs around Tobago using environmental (physical and chemical), ecological and socio-economic indicators of reef health.</p> <p>To provide timely and continuous data and information on the environmental status and impacts of Trinidad and Tobago so as to affect policy changes/making preservation of our natural environments.</p> <p>To monitor coral reefs systems for detection of environmental conditions</p>	Government of Trinidad and Tobago	10,000		Trinidad and Tobago	<p>Coral Reef Health Report Card</p> <p>Data used towards producing a State of the Marine Environment Report 2020 for Trinidad and Tobago.</p> <p>Research Reports</p> <p>Water quality data for future SOCAR reports.</p> <p>Data on ecosystem health that is shared with Management Agencies such as THA.</p>

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	<p>System (CREWS) installed in 2013</p> <p>Planning and installation of new CREWS system based on NOAA and 5C's initiative</p> <p>Outfitting of new instrument with water quality probes</p>	<p>Ongoing</p> <p>On going</p>	<p>linked to degradation and risk to coral reef health.</p>	<p>New CREWS provided under 404539 GCCA+CC CCC project</p>	<p>20,000 for additional probes purchase by IMA.</p>			<p>Data on ecosystem health that is shared with Management Agencies such as THA and stakeholders.</p>
<p>Regional Nutrient Reduction Strategy and Action Plan.</p> <p>The UNDP/GEF CLME+ Project "Catalysing Implementation of the Strategic Action Programme for the Sustainable</p>	<p>Coordinate review of the first draft of Chapter Five on the Nutrient Management Strategy with consultants and reviewers</p>	<p>January 2021</p>	<p>To contribute to the development of the Regional Nutrient Strategy and Action Plan for the reduction of impacts from excess nutrient loads on priority marine ecosystems in the wider Caribbean Region (WCR).</p> <p>To expand the baseline developed under the State of</p>	<p>UNEP CEP SSFA</p>	<p>50,000</p>		<p>Institute of Marine Affairs, Trinidad and Tobago</p> <p>LBS Focal points</p>	<p>Regional Nutrient Reduction Strategy and Action Plan that will contribute regionally towards nutrient pollution reduction and abatement.</p> <p>Policy towards maintaining healthy ecosystems and associated fisheries in the CLME+ region.</p>

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
<p>Management of Shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems" in conjunction with the Regional Coordination Unit of the Caribbean Environment Programme/Cartagen a Convention Secretariat (UNEP CAR/RCU)</p>	<p>Coordination and assistance with Info graphics for consultants of the nutrient strategy</p> <p>Coordination with consultants in Production of final report on Regional Nutrient Reduction Strategy</p>	<p>February 2021</p> <p>March 2021</p>	<p>Convention Area (Pollution) report and identify most important "regionally relevant" pollution sources in terms of the transboundary nature of both sources and impacts;</p> <p>To identify high priority areas for further action based on most affected ecosystem types and most important socio-economic impacts;</p> <p>To contribute to the operationalization of the Caribbean Platform for Nutrients Management;</p> <p>To assist in defining new areas of research relating to nutrient pollution in the Wider Caribbean Region</p>					
<p>Integrated Environmental Incident & Lionfish Mobile Application & Software Solution</p>	<p>Creation of a App – SeaiTT for reporting of lionfish sightings and other environmental</p>	<p>On going</p>	<p>Creation of SeaiTT that will also be used to report on environmental incidents and conditions on oil spills, chemical spill, algal blooms and forms of pollution</p>	<p>Government of Trinidad and Tobago</p>	<p>20,294</p>		<p>Institute of Marine Affairs, Trinidad and Tobago</p>	<p>A mobile application in which stakeholders can download and report sighting of lion fish and report environmental incidences</p> <p>Maps of environmental incidents and conditions.</p> <p>Data on state of the environment.</p>

Project Name and Code	Activity	Dates of Activity	Objective(s)	Source of Funds	Budget (USD)	Estimate of "in kind" Contribution of RAC-IMA (TT\$)	Recipients/ Participants	Outputs
	incidences such as fish kills, oil spills		detrimental to the environment.					
ISO/IEC 17025 Laboratory Accreditation	To gain ISO/IEC 17025 accreditation for the scope-nitrates and nitrites	Jan 2020-ongoing	<p>Development / update of procedures, quality manual, and forms for record keeping</p> <p>Training of staff</p> <p>Implementation of quality management system</p> <p>Application for assessment Pre assessor evaluation</p> <p>Final Assessment for accreditation in March 2022.</p> <p>Addressed all non conformities and observations</p>	Government of Trinidad and Tobago	25,000		IMA	<p>ISO/IEC 17025 Laboratory Accreditation for scope Nitrates and Nitrites.</p> <p>Awaiting accreditation from Accrediting body.</p>

Related Activities:

2021-2022

- **Support to RCU CAR UNEP:** Provided further comments on SSFA document to RCU CAR/UNEP and RAC-CIMAB on way forward of the small scale funded agreement (SSFA) during week of the 10th January 2022. Provided information to CAR/RCU UNEP on information on Nominations of Chair and Experts to the OEWG on emails during week of the 15th November 2021. Provided review and comments on concept note from CAR/RCU UNEP on information to LBS RAC Support for CReW+, ACP MEA and UNEP HQ Norway Funding during period 25th October 2021. Coordinated activity with Dr Lorna Inniss of the Cartagena Secretariat for selection of Speakers for the Tropical Americas Clean Ocean Co-Design Workshop August 31, 2021 09:00 am "The Year 2031 a Clean Ocean Steps to Success" during week of 16th August 2021. Attended meeting on debriefing of the recently concluded Cartagena convention IGM/CoPs meeting with Cartagena Secretariat on Monday, 9 August 2021, 8:30 AM (GMT-5) via Microsoft Teams. Attended meeting with Cartagena Secretariat on planning meeting of the Clean Ocean Working Group Flash Presentations on 13th August, 2021, 1.00 -2.00pm via zoom meeting. Provided comments to Cartagena Secretariat on first draft of the 19th IGM/COP16 decisions on 29 July 2021 Prepared information on form for the Cartagena Reporting template as required by the Secretariat to the Cartagena Convention week 1st June 2021 Provided response to CAR RCU UNEP on Request for Feedback on Ranking of Possible Regional Projects for IWEco during week of the 14th June 2021. Provided response to compilation of questions and answers to Environmental Law Alliance Worldwide (ELAW) on 7th May 2021 based on Webinar collaboration with ELAW and Cartagena Secretariats on Thursday 29th April 2021 Provided response to CAR RCU UNEP on the need for closer Collaboration with RAC –REMPETIC on the issue of oil spills and rescue of cetaceans during week 14 May 2021. Submitted comments to RCU CAR UNEP on the document on Recommendations of the 5th LBS STAC on 2 April 2021. Provided summary of IMA presentations on the 5th LBS STAC meeting to RCU CAR UNEP for production of STAC report during 12-16 April 2021. Provided comments and inputs to the draft Regional Nutrient Management Paper to Programme Officer Mr Chris Corbin of RCU CAR UNEP during 19-23 April 2021. Prepared information on LBS RAC Work Plan for submission to UNEP CAR RCU on week 1st February 2021. Provided comment on review of UNDP PIF PROCARIBE+ for review/endorsement during February 2021. Attended meeting with Nutrient strategy consultants and UNEP CAR/RCU on 1 February 2021 via zoom meeting. Attended Meeting with RCU CAR UNEP on the Operationalization of IMA-RAC 14 April , 2021 1:30pm - 3:30pm via zoom meeting.

1. Attended and presented at IMA's 7th Community symposium at Warrentville, Cunupia on September 20th 2022. Presented on "The assessment of nutrient pollution in the Guayamare/Cunupia catchment".
2. Attended Meeting with Mr Christopher Corbin on Appointment as Chair to Open Ended Working Group on Monitoring and Assessment-D. Banjoo on 27th September 2022, 1-1.30pm, via Microsoft Teams.
3. Attended meeting with IMA team and Dr Lisbet Diaz, a Cuban expert on monitoring of benthic dinoflagellate species (ciguatoxin vectors) and the analysis of ciguatoxins in marine organisms on August 17th 2022, 9-10am at IMA Auditorium
4. Attended second meeting of the Specification Committee (SC) for UEM on Tuesday 16th August from 1:00 pm to 3:00 pm via zoom meeting.
5. Attended training session with Dr Lisbet Diaz and IMA EQP staff on 17th and 18th August on monitoring of benthic dinoflagellate species (ciguatoxin vectors) and the analysis of ciguatoxins in marine organisms. Field sampling on 18th August 2022, 1-3pm, Analysis of samples on 19th August 10am to 12 pm.
6. Attended regional workshop entitled "Regional Workshop on the Index of Coastal Eutrophication & Harmful Algal Blooms". Gave the opening remarks to the workshop, chaired sessions and was panellist.
7. Attended and participated in the Third Day work shop meeting of the RACs/RAN Network, work plan and Collaboration that was held on the 27th July 2022, IMA auditorium 9.00 am to 12.00pm.
8. Attended meeting with RCU CAR/UNEP, RAC-CIMAB and RAC-IMA on way forward of the small scale funded agreement (SSFA), nutrients, on June 6th 2022, 3-4pm via Microsoft Teams.
9. Attended meeting and video Launch of Cartagena Convention 35th Anniversary, provided remarks on Behalf of IMA on 21st June 2022 11.00am to 12.30 pm via Microsoft Teams
10. Attended meeting with RCU CAR/UNEP, RAC-CIMAB and RAC-IMA on way forward of the small scale funded agreement (SSFA) on February 24th, 3-4pm via Microsoft Teams.
11. Attended the Regional Caribbean Satellite Oil Spill Monitoring Partnership Meeting on 21 St December 2021 11.00am to 12.30am via WEBEX.
12. Attended training Session 3 on the 'Formulation of an Ecological Risk Assessment Associated with Exposure to Potentially POPs Contaminated Sites,' facilitated by the Basel Convention Regional Centre (BCRC) of the Caribbean region on Monday 29th November, 2021 at 1pm (-4 GMT) via Microsoft Teams.
13. Attended training Session 2 on the 'Formulation of a Human Health Risk Assessment Associated with Exposure to Potentially POPs Contaminated Sites' facilitated by the Basel Convention Regional Centre (BCRC) of the Caribbean region on Wednesday 24th November, 2021 at 1pm (-4 GMT) via Microsoft Teams.
14. Attended training Session 1 on the 'Overview of Risk Assessments and the relevance to POPs' facilitated by the Basel Convention Regional Centre (BCRC) of the Caribbean region on November 22, 2021 Time: 01:00 pm (GMT-4) via Microsoft Teams.
15. Attended and participated in Meeting with UNEP HQ Representatives, Secretariat of the Cartagena Convention and Regional Activity Centres on Tuesday, 23 November 2021 from 9:30am to 11:30am EST (Jamaica time) via Microsoft Teams.

16. Attended and participated in Inception Meeting to enhance collaboration among the Caribbean Environment Programme Regional Activity Centers (RACs) on Tuesday, 16 November 2021 from 11:30am to 12:30am EST (Jamaica time) via Microsoft Teams.
17. Attended and participated in Webinar hosted by the Department of the Civil and Environmental Engineering, Faculty of Engineering, UWI, St. Augustine, entitled "**Oil Spill Analysis: An Application in the Gulf of Paria** " on Friday, **November 12th from 1 pm- 3 pm** via zoom.
18. Attended and participated in Meeting on the Review and Analysis of the General Operations and Financing for the RACs and RANs of the Cartagena Convention with Ms Monic Borobia, Consultant of CAR RCU/UNEP on 10 November 2021 from 10:00am to 11:30am EST (Trinidad time) via Zoom meetings.
19. Organised, chaired and participated meeting on Satellite Oil Spill monitoring in the Caribbean Region with Regional bodies, Secretariat of the Cartagena Convention, RACREMPETIC, NOAA, IOC CARIBE on 10 November 2021 from 1:00pm to 2.30pm EST (Trinidad time) via Zoom meetings.
20. Attended and participated in National Inception Meeting (E-waste Management), facilitated by the Basel Convention Regional Centre (BCRC) of the Caribbean region on 9th November, 2021 at 9am (Trinidad time) via Microsoft Teams.
21. Attended and participated in Workshop on the Ratification Process of the Cartagena Convention's LBS Protocol (English-speaking) on 3rd November, 2021 at 9am (Jamaica time) via Microsoft Teams.
22. Attended workshop on promoting Ratification for Spanish-speaking Non-Contracting Parties to the LBS Protocol and Secretariat of the Cartagena Convention on 26th November 2021, m 10:00am - 1:030 p.m. GMT-5 (Jamaica time).
23. Attended NOAA and Trinidad and Tobago support TagUp meeting on Satellite analysis of oil spill on Thursday October 14th 1,00 pm to 2.00pm via Webex meeting.
24. Attended choreography and planning for ratification workshops for LBS Protocol with with RAC CIMAB and CAR RCU UNEP on October 28, 2021 12.00 to 1.00 PM, via zoom meetings.
25. Attended EMA's Knowledge Series on Tuesday 26th October 2021 at 2:00pm via zoom on the following presentations: Discover how air quality is monitored and measured by the Ambient Air Quality Monitoring Network, and Based on public concern in the aftermath of spill incidents in the Gulf of Paria, we share the Baseline Ecological Risk Assessment (ERA) for the south-western peninsula of Trinidad.
26. Attended Upstream Effluent Management Working Group Meeting - October 22, 2021 9:30am -11.30 am via Microsoft Teams.
27. Attended NOAA and Trinidad and Tobago support TagUp meeting on Satellite analysis of oil spill on Wednesday September 8th, 1,00 pm to 2.00pm via Webex meeting.
28. Attended meeting on Paria Oil Spill Assessment of Quantity of Oil Spilled with MEEI on September 1st , 11.00am to 12.00pm via zoom.
29. Attended meeting on Coordinating with LBS RACs re AMEP Projects and Activities and planning for Workshop for LBS Non Contracting Parties with RAC CIMAB and CAR RCU UNEP on September 21, 2021 02:30 to 3.30 PM, via zoom meetings.
30. Attended meeting on Satellite monitoring of oil spills with Satellite analysis branch of NOAA and Representative of MEEI, EMA and IMA on 18th August 2021 1.30- 2.30 pm via WEBEX meeting.

31. Presented as key note speaker on the topic of “Snapshot of Marine Pollution in the Western Tropical Atlantic Region” on the virtual session of the UN Decade Ocean Western Tropical Atlantic series “A Clean Ocean,” where sources of pollution are identified, quantified and reduced, and pollutants are removed from the ocean” on 31st August 2021, via Microsoft teams, Colombia Time (09:00-11:00 EST).
32. Attended and participated in the Working Group – Strategic and Functional Review of the Cartagena Convention Secretariat on July 15, 2021, 9.00am to 1.00pm 2021 via Microsoft Teams.
33. Attended and participated in LBS Pre-COP Preparatory Meeting on July 12th 2021 10:00 AM-11:00 Am via zoom meeting.
34. Attended and participated in UNEP Caribbean Sub Regional Office Webinar: Ecosystem Based Management on July 9th 2021 1.30-2.30 via zoom meeting.
35. Attended and participated in the 19th Intergovernmental Meeting and 16th Meeting of the Contracting Parties (IGM 19/COP16) 28 – 30 July 2021 via Microsoft Teams
36. Attended and participated at the 5th Meeting of the Contracting Parties to the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS COP5), 26 July 2021 via Microsoft Teams
37. Attended the 11th Meeting of the Contracting Parties to the Protocol Concerning Specially Protected Areas and Wildlife (SPAW COP 11), 27 July 2021 via Microsoft Teams
38. Made presentation entitled “RAC IMA Long Term Strategy for Biennium 2021/22” at the 5th Meeting of the Contracting Parties to the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS COP5), 26 July 2021 via Microsoft Teams.
39. Attended and participated in the LBS & SPAW COPs Final Preparatory Meeting with CAR RCU UNEP on 22nd July 2021, 10am to 11 pm via zoom.
40. Attended and participated in meeting with IMA and Dr Linroy Christian on the Strategic Implementation Programme(SIP) on monitoring of mercury in the region on June 9, 2021 11:00 AM-12:00 Pm via zoom meeting.
41. Attended the IMA webinar, “Below the Blue; Exploring the Caribbean Deep and Harnessing its Benefits Virtual Distinguished Lecture and Panel Discussion”- World Oceans Day, 8 June 2021.
42. Attended and participated in Pre-Meetings of Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Pre-COP), 21-25 June 2021 - 8:00 am to 2:30 pm (EST) via Zoom Meeting.
43. Delivered presentation entitled “IMA RAC Strategy and work plan for 2021/2022” during Cartagena Convention Pre-COP meeting on 22nJune 2021 via zoom meeting.
44. Attended Meeting with Ms Bibi S. Ali, Support to the FAO Innovation Agenda in the Caribbean for development of proposal for funding in wastewater management on May 27, 2021 11:30 AM via zoom meeting.
45. Attended and participated in the First Meeting of the Working Group for GEF-CReW+ Water Information Management System (WIMS) on 21st May 2021, 10.00 -11.30 am via zoom meeting.
46. Attended meeting with Mrs Christina Haffner's on Update on the Development of the CEP Strategy 2021-2030 on 6 April 8.00-9.30 am via zoom meeting
47. Attended and participation in Upstream Effluent Management Working Group meeting on 16 April 9.30 am to -11.00 am via zoom meeting.

48. Attended and participation in Webinar presentation entitled “Pollution in the Caribbean Region, A focus on Water, Status, Standards, and Improvements” in collaboration with Environmental Law Alliance Worldwide (ELAW) and Cartagena Secretariats on Thursday 29th April 11.00 am to 12:30pm via zoom meeting Attended and Participated in the Fifth Meeting of the Scientific and Technical Advisory Committee of the Protocol Concerning Pollution from Land-Based Sources and Activities (5th LBS STAC), 15th – 17th March 2021.
49. Attended and Participated in the Ninth Meeting of the Scientific and Technical Advisory Committee of the Protocol Concerning Specially Protected Areas and Wildlife (9th SPAW STAC), 17th – 19th March 2021.
50. Attended and Participated in the Pre -LBS Scientific and Technical Advisory Committee Meetings 8th and 9th March 2021 9.00 am to 12.00pm via Microsoft Teams meeting.
51. Attended Invitation to the IWEco Project Component 3 Focus Group for Trinidad & Tobago 17 February 2021 09:30 AM-11:00 AM via zoom meeting.
52. Attended Ocean Deoxygenation workshop on Adaptation and Building Resilience on Thursday, 25 February 2021 10:00 AM-12:30 via zoom meeting.
53. Attended updated invitation with note: SAB, IMA, MEEI Trainer & Trainee Meet and Greet on oil spill training Wed Mar 24, 2021 2:30pm - 4:30pm via zoom.