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First Meeting of the Contracting Parties (COP) to the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol) in the Wider Caribbean Region

Punta Cana, Dominican Republic, 24 October, 2012

**WORKPLAN AND BUDGET  
FOR THE  
ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL POLLUTION  
SUB-PROGRAMME FOR 2013-2014**

*For reasons of economy, documents for the Meeting will be printed in a limited number. Delegates are kindly requested to bring their copies of the Working and Information documents from the website as available, and not to request additional copies.*

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## Abbreviations

AMEP	Assessment and Management of Environmental Pollution
CAR/RCU	Caribbean Regional Coordinating Unit
CEHI	Caribbean Environmental Health Institute
CEP	Caribbean Environment Programme
CETA	Communications, Education, Training and Awareness
CHM	Clearing House Mechanism
CIMAB	Centro de Ingeniería y Manejo Ambiental de Bahías y Costas
COP	Contracting Parties
CREW	Caribbean Regional Fund for Wastewater Management
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
IDB	Inter-American Development Bank
IGM	Inter Governmental Meeting
IMA	Institute of Marine Affairs
INVEMAR	Centro de Investigaciones Marinas de Colombia
IOC	International Oceanographic Commission
STAC	Scientific and Advisory Committee
IWCAM	Integrating Watershed and Coastal Area Management
LBS	Land-based sources (of marine pollution)
NOAA	National Oceanic and Atmospheric Administration
NPA	National Programme of Action (for Pollution Prevention)
PAHO	Pan American Health Organization
PIF	Project Information Form (GEF)
RAC	Regional Activity Centre
REMPEITC	Regional Marine Pollution Emergency Training and Information Centre
REPCar	Reducing Pesticide Runoff to the Caribbean Sea
ROLAC	Regional Office for Latin America and the Caribbean
SOCAR	State of the Convention Area Report (for the Wider Caribbean Region)
SPAW	Specially Protected Areas and Wildlife
UNDP	United Nations Development Programme
UNEP-DEPI	UNEP-Division of Environmental Policy Implementation
UNEP-DEWA	UNEP-Division of Early Warning and Assessment
UNEP-DTIE	UNEP-Department of Technology, Industry & Economics
WWF	World Wildlife Fund

## **I. Background**

1. This work plan and budget covers ongoing and new projects and activities under the Assessment and Management of Environmental Pollution (AMEP) Sub-Programme of UNEP's Caribbean Environment Programme (CEP) for the biennium 2013-2014.
2. The overall goal of AMEP is to prevent, reduce, and control pollution of the coastal and marine environment from land and marine-based sources thereby enabling countries of the Wider Caribbean Region to meet their obligations under the *Protocol Concerning Pollution from Land-based Sources and Activities* (LBS Protocol) and the *Protocol Concerning Co-Operation in Combating Oil Spills* (Oil Spills Protocol).
3. The following projects and activities are designed to meet the objectives of the LBS Protocol, support its continued development, and assist countries in overcoming barriers to ratification, accession and/or implementation. Projects presented below include those that are ongoing from the 2012 Work Plan.

## **II. Projects and activities**

### **A. Programme Coordination (USD 1,040,000)**

#### *Objectives*

4. The objectives for Programme Coordination are to:
  - a. Coordinate and oversee the day-to-day implementation of AMEP Projects and activities within the framework of the Caribbean Environment Programme;
  - b. Ensure that the formulation and implementation of new projects and activities satisfy the obligations of the LBS Protocol and the Oil Spills Protocol;
  - c. Promote ratification of, accession to, and effective implementation of the LBS Protocol;
  - d. Enhance coordination, collaboration and communication with relevant Government Focal Points, Regional and International Organizations in the development and implementation of AMEP projects and activities; and
  - e. Enhance involvement of LBS and Oil Spills RACs in the design and implementation of the overall programme, projects and activities.

#### *Activities*

5. The AMEP Programme Officer will continue to be responsible for coordination and supervision of the implementation of the programme activities for 2013-2014 with support from the AMEP/CETA Team Assistant and AMEP Programme Assistant. These staff comprises the AMEP Sub-Programme. The Directors and staff of the LBS RACs will provide additional programming and technical support where appropriate.
6. In addition, for 2013-2014, the AMEP Programme Officer will oversee the CETA Sub-Programme and assist in the supervision of the Information Assistant. Further assistance to the CETA Sub-Programme will be provided through short-term consultancies and a UN Volunteer.

7. The AMEP Programme officer will also supervise a Communications Specialist and an Administrative Assistant recruited in 2012 to provide dedicated support to the GEF CReW Project.
8. New Project Management Units will be established for the two new GEF Projects which may be based at the offices of UNEP CAR/RCU and will require additional support staff from the AMEP Sub-Programme funded by the GEF projects.
9. The AMEP Sub-Programme will continue to place special emphasis on activities for the further promotion of the LBS Protocol at the national and regional levels during 2013-2014, building upon the success of the Wider Caribbean Region LBS Collage Competition. Where funding for projects and activities is limited, priority will be given to those countries that are Parties to the LBS Protocol and/or are in the final stages of the ratification process. The CEP Secretariat will continue to support national awareness workshops and will seek to identify funding to assist in other awareness activities. As with previous national workshops, the LBS RACs will play a major supporting role to the LBS focal points in organizing these workshops and acting as facilitators and resource agencies.
10. The AMEP Sub-Programme will continue to develop and strengthen linkages with key regional partners as well as collaborate with existing regional projects dealing with the management of environmental pollution.
11. The following activities will be undertaken with the support of CETA:
  - a. Evaluate existing LBS information products and the mechanisms used for dissemination so as to improve understanding by the wider society of pollution-related issues and design and implement campaigns to promote further ratification of the LBS Protocol in the region.
  - b. Assess the status of ratification of the LBS Protocol in each Contracting Party as a means of determining the specific type of support each country may require to assist them in their ratification process.
  - c. Compile and disseminate case studies and best practices and promote their greater implementation in the Wider Caribbean Region.
  - d. Facilitate sharing of technical information including the translation of existing training materials into other working languages of the Wider Caribbean Region.
  - e. Enhance the use of the CEP web site as a clearing house mechanism for technical implementation relating to the implementation of the LBS Protocol and for sharing information on monitoring and assessment models.
12. The AMEP Sub-Programme will provide support to the following key activities in 2013-2014:
  - a. Implement follow up projects to GEF IWCAM and GEF REPCar;
  - b. Implement the RAPMaLi on marine litter within the framework of the Honolulu Strategy and Integrated Solid Waste Management;
  - c. Support the GPAs Global Partnerships on nutrients, marine litter and wastewater;

- d. Coordinate with new regional projects of the OECS, CEHI and UNEP on coastal zone management, land use planning and climate change; (See Annex II)
  - e. Promote ratification and implementation of the LBS Protocol;
  - f. Mobilize financial support for developing the 1<sup>st</sup> State of Convention Area Report for the Wider Caribbean Region; and
  - g. Provide logistical support for the convening of the GEF 7<sup>th</sup> Biennial International Waters Conference in the Wider Caribbean.
13. The CEP Secretariat will convene the 2<sup>nd</sup> Meeting of the LBS STAC and 2<sup>nd</sup> Meeting of the LBS COP where the AMEP Programme Officer will present the AMEP work plan and budget for the biennium 2015-2016, in keeping with the objectives of the LBS Protocol.
14. Table 1 presents the main objectives, expected accomplishments and indicators of success for the AMEP Sub-Programme and Table 2 summarizes the main strategic priorities and targets for the 2013/2014 biennium.

**Table 1: Objectives, Expected Accomplishments and Indicators for AMEP**

<b>Objective: 1. Pollution Reduction and Prevention</b>			
<i>Expected Accomplishments</i>	<i>Indicators of achievement</i>	<i>UNEP Sub-Programme(s)</i>	<i>LBS Protocol Obligations</i>
States increasingly integrate an ecosystem management approach into national development and planning processes that include pollution prevention, reduction and control.	Increased number of states mainstreaming integrated watershed and coastal area management approaches (SIDS) and pollution prevention and reduction policies (WCR) into National Environmental Management Strategies and/or National Planning Processes through legal, institutional and policy reforms.	<ul style="list-style-type: none"> <li>• Ecosystem Management</li> <li>• Climate Change</li> <li>• Resource Efficiency</li> <li>• Environmental Governance</li> </ul>	Article III
States increasingly use pollution prevention and reduction tools and innovative/appropriate technologies to protect human health and reduce degradation of selected priority ecosystems.	Increased development and use of tools, technologies and management practices for pollution prevention and reduction leading to reduced degradation of coastal and marine ecosystems and improved delivery of ecosystem services at national and regional levels.	<ul style="list-style-type: none"> <li>• Ecosystem Management</li> <li>• Resource Efficiency</li> </ul>	Articles III, VI, VII
States increasingly implement their obligations under the Cartagena Convention, LBS Protocol and supporting MEAs while achieving their national environmental priority goals, targets and objectives.	Increased number of countries ratified /acceded to the Cartagena Convention and the LBS Protocol and associated MEAs and establish enabling legislation to fulfill MEA obligations;	<ul style="list-style-type: none"> <li>• Environmental Governance</li> </ul>	Article III

States increasingly implement local and/or national plans of action for pollution prevention, reduction and control.	Increased numbers of countries develop and implement local and national pollution reduction plans and monitoring and assessment of the Convention area.	<ul style="list-style-type: none"> <li>• Ecosystem Management</li> <li>• Environmental Governance</li> </ul>	Articles III, VI, VII, XII, XIV
<b>Objective: 2. Information Management/Decision-Support Systems</b>			
<i>Expected Accomplishments</i>	<i>Indicators of achievement</i>	<i>UNEP Sub-Programme(s)</i>	<i>LBS Protocol Obligations</i>
States and the CEP Secretariat increasingly partner with NGOs, private sector and civil society to achieve national and regional environmental priorities.	Increased number and strengthening of strategic partnerships for development and implementation of activities and projects for improving environmental management at the national and regional levels.	<ul style="list-style-type: none"> <li>• Environmental Governance</li> <li>• Climate Change</li> </ul>	Articles V, X, XI, XIII
States and other stakeholders have increased capacities and financing to assess, manage and reduce risks to human health and the environment posed by land and marine-based sources of marine pollution and associated activities including harmful substances and hazardous wastes.	Increased number of countries using available tools, mechanisms, strategies, technologies and decision-support systems for monitoring, analysis, evaluation and dissemination of environmental data and information including for improved general awareness and improved decision-making;	<ul style="list-style-type: none"> <li>• Harmful Substances</li> <li>• Environmental Governance</li> <li>• Ecosystem Management</li> <li>• Disasters and Conflicts</li> </ul>	Articles VI, VIII

**Table 2: AMEP Strategic Priorities and Targets for the 2013/2014 biennium**

<p><b>i. Programme Coordination</b></p> <p>a. At least one new management tool developed and being used for coordinating/monitoring implementation of AMEP Sub-Programme.</p>
<p><b>ii. National/Regional Impact of AMEP Projects</b></p> <p>a. At least three countries undergo policy, institutional and/or regulatory changes for meeting obligations of LBS Protocol.</p> <p>b. Strengthened national capacity to meet obligations of LBS Protocol through at least two regional training workshops.</p> <p>c. Issues of AMEP/LBS presented at a minimum of 2 high-level political meetings.</p>
<p><b>iii. New Project Development</b></p> <p>a. Funding sourced for at least two new unfunded AMEP Projects.</p>
<p><b>iv. New Partnership Development</b></p> <p>a. At least three new partnerships formalized or existing partnership enhanced with one being with the private sector.</p>
<p><b>v. LBS Protocol Ratification</b></p> <p>a. At least three countries ratify/accede to LBS Protocol.</p>
<p><b>vi. Education and Awareness</b></p> <p>a. At least two LBS promotional workshops convened.</p> <p>b. 8 AMEP Quarterly Reports prepared and disseminated.</p> <p>c. At least 8 articles/press releases on LBS issues disseminated.</p> <p>d. LBS Protocol &amp; Pollution issues highlighted at 2 regional events per year.</p>

<b>vii. Methodologies, Guidelines and/or Tool Boxes</b>
<ul style="list-style-type: none"> <li>a. At least two new model guidelines, methodologies or tool boxes developed for promoting policy, legislative and regulatory reforms for pollution prevention, reduction and control showing evidence of countries using these tools.</li> </ul>
<b>viii. Demo/Pilot Projects</b>
<ul style="list-style-type: none"> <li>a. At least three countries implementing demo projects in support of LBS Protocol Implementation.</li> <li>b. At least two innovative pollution reduction technologies demonstrated.</li> </ul>
<b>ix. Climate Change</b>
<ul style="list-style-type: none"> <li>a. Participation in at least one regional climate change meeting.</li> </ul>

15. The following provides a summary of new and ongoing projects for the 2013-2014 biennium.

## **B. Global Environmental Facility (GEF) Projects**

### Ongoing Projects

<b>i) Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW) (Ongoing)</b>
<b>Total Project Budget (IDB &amp; UNEP): USD 272, 886, 996 (Includes cash, in-kind and loan co-financing)</b>
<b>Total GEF Funds (IDB &amp; UNEP): USD 20,000,000</b>
<b>Biennium Budget (UNEP): USD 2,852,820</b>
<b>Time Frame:</b> 4 years (2011-2014)
<b>Scope:</b> Regional - Antigua and Barbuda, Barbados, Belize, Costa Rica, Guatemala, Guyana, Honduras, Jamaica, Panama, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago
<b>Partners:</b> Inter-American Development Bank (IDB), Caribbean Environmental Health Institute (CEHI), Caribbean Development Bank (CDB), Caribbean Water and Wastewater Association (CWWA)
<b>LBS Protocol Articles/Annexes:</b> Articles III, V, VI, VII, VIII, X, XI; Annex III;
<b>Website:</b> <a href="http://www.gefcrew.org">www.gefcrew.org</a>

### *Introduction*

16. The GEF CReW project is a 4 year project with a total budget of USD 20,000,000 from a GEF grant and more than USD 250,000,000 in loan and in-kind co-financing. It is co-implemented by the Inter-American Development Bank (IDB) and the United Nations Environment Programme (UNEP). Details of the co-financing are summarized below:



<b>Budget per Component - Summary Table - FULL SIZE PROJECT: Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)</b>			
<b>Project Budget</b>			
<b>Project Components/Sub-projects/Activities</b>	<b>GEF Funding USD: \$20 Million</b>	<b>Co-Financing USD: \$243 Million</b>	<b>Total Project Cost USD: \$273 Million</b>
<b>Component I: Investment and Innovative Financing for Waste Water Management (IDB)</b>	<b>15,073,000</b>	<b>244,392,000</b>	<b>259,465,000</b>
<b>Sub-project I.1:</b> Investment and innovative financing for wastewater management (4 Pilots)	<b>13,000,000</b>	<b>242,042,000</b>	<b>255,042,000</b>
<b>Sub-project I.2:</b> Project Development Support	<b>1,000,000</b>	<b>2,350,000</b>	<b>3,350,000</b>
<b>Sub-project I.3:</b> Capacity Strengthening for Wastewater Pilots	<b>1,073,000</b>	<b>0</b>	<b>1,073,000</b>
<b>Component II: Reforms for Waste Water Management (UNEP)</b>	<b>2,500,000</b>	<b>2,999,996</b>	<b>5,499,996</b>
<b>Sub-project II.1:</b> Capacity Building - Policy and Institutional Strengthening	<b>1,540,000</b>	<b>894,736</b>	<b>2,434,736</b>
<b>Sub-project II.2:</b> Capacity Building - Legislative Reform	<b>660,000</b>	<b>526,315</b>	<b>1,186,315</b>
<b>Sub-project II.3:</b> Capacity Building - Awareness Raising	<b>300,000</b>	<b>1,578,945</b>	<b>1,878,945</b>
<b>Component III: Communication, Outreach and Information Exchange (UNEP)</b>	<b>710,000</b>	<b>500,000</b>	<b>1,210,000</b>
<b>Sub-project III.1:</b> Information Sharing and Dissemination	<b>360,000</b>	<b>75,000</b>	<b>435,000</b>
<b>Subproject III.2:</b> Integrated Information System	<b>350,000</b>	<b>300,000</b>	<b>650,000</b>
<b>Component IV: Monitoring &amp; Evaluation (UNEP/IDB) (UNEP – 90,000)</b>	<b>760,000</b>	<b>1,104,000</b>	<b>1,864,000</b>
<b>Sub-project IV.1:</b> Monitoring & Evaluation	<b>590,000</b>	<b>0</b>	<b>590,000</b>
<b>Sub-project IV.2:</b> Financial & Operational Audits	<b>170,000</b>	<b>0</b>	<b>170,000</b>
<b>Component V: Project Management (UNEP/IDB) (UNEP 35,000)</b>	<b>957,000</b>	<b>3,891,000</b>	<b>4,848,000</b>
<b>Sub-project V.1:</b> Project Coordination	<b>510,000</b>	<b>0</b>	<b>510,000</b>
<b>Sub-project V.2:</b> Steering Committee	<b>197,000</b>	<b>0</b>	<b>197,000</b>
<b>Sub-project V.2:</b> Administrative Assistance	<b>250,000</b>	<b>0</b>	<b>250,000</b>
<b>TOTAL PROJECT COST (\$)</b>	<b>20,000,000</b>	<b>252,886,996</b>	<b>272,886,996</b>

17. The Project Coordinating Group (PCG) is based at the IDB offices in Jamaica and comprises a Project Coordinator, a Technical Specialist, a Communications Specialist and a Financial/Administrative Specialist.

18. The overall objective of CReW is to provide sustainable financing for the wastewater sector, support policy and legislative reform, and foster regional dialogue and knowledge sharing among key stakeholders in the Wider Caribbean Region. The project is divided into five different components as follows:

- Component 1: Investment and Sustainable Financing
- Component 2: Reforms for Wastewater Management
- Component 3: Communications, Outreach and Information Exchange
- Component 4: Monitoring and Evaluation
- Component 5: Project Management

19. UNEP CAR/RCU through the AMEP Sub-Programme is responsible for executing Components 2 and 3. The AMEP Sub-Programme will also support and participate in Annual Project Steering Committee Meetings, monitoring and evaluation of project implementation and periodic reporting to the Project's Inter-Agency Coordinating Group, Project Coordinating Unit, UNEP Headquarters and the GEF Secretariat.

*Activities*

**Component 2 - Reforms for Wastewater Management**

20. Sub -Component: Capacity Building - Policy and Institutional Strengthening will include:
- a. Strengthening the policy and institutional frameworks for wastewater management in the Wider Caribbean Region and engendering local and national reforms;
  - b. Enhancing implementation of the LBS Protocol;
  - c. Training on the use of Environmental and Natural Resource Accounting (ENRA);
  - d. Enhancing the financial capacity of wastewater management utilities and service providers;
  - e. Building capacity for Public-Private Partnerships (PPP) and bottom-up planning within the wastewater sector;
  - f. Initiation of Regional Monitoring, Evaluation and Reporting (ME&R) Framework to monitor progress in achieving regional and global wastewater/sanitation targets; and
  - g. Development of training programmes for wastewater professionals.
21. Sub-Component: Legislative Reform will include:
- a. Review existing legislative frameworks for wastewater management and develop regional toolkits for improving existing legislation and/or regulations; and
  - b. Improving compliance with the obligations of the LBS Protocol and Annex III on Wastewater Management.
22. Sub-Component: Awareness Raising will include:
- a. Development and dissemination of outreach materials targeted for the decision makers and media on wastewater management;
  - b. Design of guidelines for incorporating wastewater management into formal educational curriculum; and
  - c. Develop community programmes for enhancing public awareness on the importance of wastewater management.

### Component 3 - Communication, Outreach and Information Exchange

23. Sub Component: Information Sharing and Dissemination will include:
- Development of knowledge management products and publications documenting the project's best practices and experiences, and
  - Formulation of a replication strategy.
24. Sub Component: Integrated Information System will include:
- Development of a clearing house mechanism, and
  - Development of a knowledge and information system for the Wider Caribbean.

<b>(ii) Implementing Integrated Land, Water &amp; Wastewater Management in Caribbean SIDS (new)</b>
<b>Total Project Budget: USD 138,454,706 (Includes indicative cash and in-kind co-financing of USD 118,006,108)</b>
<b>Total GEF Funds: USD 20,448,598</b>
Proposed UNEP Biennial Budget (2013-2014): USD 6,000,000 (Detailed budget to be determined during the preparation of the full project proposal in 2013 and submission to the GEF Secretariat in late 2013)
<b>Time Frame:</b> 4 years (2013-2016)
<b>Scope:</b> <i>Regional:</i> Antigua and Barbuda, Cuba, Dominican Republic, Grenada, Jamaica, St. Kitts and Nevis, Saint Lucia and St. Vincent & the Grenadines.
<b>Partner Agencies:</b> UNDP; LBS RACs
<b>LBS Protocol Articles/Annexes:</b> Multiple Articles; Annexes III and IV;

#### Objective

25. To accelerate progress on WSSD targets on IWRM/WUE plans and water supply and sanitation MDGs and enhance resilience to climate change stressors through implementation of an integrated approach to land and ecosystems services management, water resource management and water use efficiency, including policy, institutional and legislative reforms, demonstration of more effective technologies and methodologies and the learning and exchange of best practices.

#### Introduction

26. Small Island Developing States (SIDS) have particular needs and specific issues in relation to sustainable development and environment. The requirements adopted by WSSD which are most pertinent to this project include:
- the need to accelerate the implementation of the Barbados Programme of Action,

- b. the need to provide support for development and implementation of freshwater programmes and work on marine and coastal biodiversity,
  - c. implementation of the GPA (Global Programme of Action for the Protection of the Marine Environment from Land-based Activities) in SIDS to prevent, reduce and control waste and pollution,
  - d. the need to provide support to develop capacity to reduce and manage waste and pollution and for maintaining and managing systems to deliver water and sanitation services,
  - e. the need to address IWRM WSSD targets,
  - f. the need to develop and implement integrated land management and water-use plans and strengthen the capacity of Governments, local authorities and communities to monitor and manage the quantity and quality of land and water resources, and
  - g. the need to promote programmes to enhance in a sustainable manner the productivity of land and the efficient use of water resources in agriculture, forestry, wetlands, artisanal fisheries and aquaculture, especially through indigenous and local community-based approaches.
27. A number of the participating islands have ratified the LBS Protocol, which entered into force in August 2010. Contracting Parties now have obligations to meet, related to domestic wastewater and pollution discharges into the coastal areas of the region. As such, support (from the GEF) to address these obligations will be timely and meaningful to address critical environmental management actions under the jurisdiction of the Protocol.
28. The Project Identification Form (PIF) proposes the development of a Full GEF multi-focal area project, with partnership between UNEP and UNDP, to address sustainable development needs of SIDS by managing pressures on natural resources from competing land uses in the Wider Caribbean landscape. The PIF will address measures to develop, adopt and implement an integrated approach to natural resources management (NRM), combined with Integrated Water Resource Management (IWRM), Integrated Coastal Zone Management (ICZM) mechanisms, and Water Use Efficiency (WUE) strategies, through a process of policy and legislative reforms, institutional and human resource capacity building and on-the-ground innovative interventions.
29. The PIF proposes:
- a. the adoption of an integrated and participatory management approach;
  - b. the development of more effective, appropriate technologies and methodologies;
  - c. the adoption of strategies to deal with extreme and chronic events; and
  - d. The adoption of more appropriate resource valuation and pricing policies.

Particular emphasis will be given to the protection and rational use of water supplies, both surface and ground waters (e.g. water safety plans, rainwater harvesting, groundwater recharge, pricing structures, improving efficient use, watershed management, flood control, climate change

adaptation, etc) and improved pollution control and wastewater management (e.g. EcoSan, constructed wetlands, etc.).

30. The proposed project would have various immediate socio-economic benefits for local communities. Coastal reforestation and prevention of habitat destruction, such as protection of mangroves, will be crucial for ecosystem-based adaptive strategies that reduce vulnerability of human coastal communities to climate change. Halting the decline of coastal ecosystems would also secure and generate economic revenue, food security and improve livelihoods in the coastal zone. Adoption of sustainable development strategies will also provide long-term economic opportunities for coastal communities around the region. Specifically, project activities would facilitate the possible increased investment in these SIDS, which naturally become more attractive, with improved watershed management regimes, improved access to clean water, and improved management of coastal resources. Injection of revenue into national and local economies will enhance efforts to protecting valuable ecosystem services that are useful for long-term sustainable development. Local communities and women's groups would be involved in the designing and implementation of small-scale interventions to ensure their equitability and sustainability. Regionally, this project would provide the methodologies and basis for Caribbean SIDS to evaluate the value of their land, water and coastal resources and to incorporate these results into their national plans of action for environmental protection and their national economic development plans.

#### *Activities*

31. The main activities to be undertaken under each of the Project Components include:

#### **Component 1- Development of targeted innovative approaches in SLM, IWRM, ICZM and WUE**

32. The first Component will implement or build upon a series of ICZM/IWRM/WUE baseline activities within each of the SIDS that will provide real, on-the-ground solutions to common problems. Expected outputs listed in the Project Framework will individually and collectively address surface, groundwater resource and coastal waters protection, land and watershed management, wastewater management and its impacts on the coastal zone, and water supply, water use efficiency and sanitation. **USD 10,718,645.**

#### **Component 2- National (SLM, ICZM, IWRM & WUE) Monitoring, and Indicators Framework**

33. This will develop further and apply regional/national IW related indicators (process, stress and environmental/socioeconomic status), many of which have been identified and agreed during previous projects, as part of the monitoring and evaluation plan, not just for the project but for the long term mechanism to assess the effectiveness of SLM, ICZM, IWRM and WUE in the participating SIDS. **USD 1,810,693**

#### **Component 3- Policy, legislative and institutional reforms and capacity building for IWRM, WUE, and SLM**

34. This Component addresses the policy, legislation, institutions and capacity needs to enable Caribbean SIDS to develop and implement ICZM, IWRM and WUE plans and enhance the enabling environment in the agro-forestry sector for the long term achievement of the Millennium

Development Goals and WSSD targets. Policy, legislation and institutional reforms will be developed and adopted that address the lack of financing and policy and the lack of coordination among sectors identified in many of the participating countries. **USD 5,283,737**

**Component 4- Knowledge Exchange, best-practices, replication and stakeholder involvement**

35. This will aim to provide support, from a global to a local level for countries to have the capacity, tools and knowledge to meet WSSD and MDG targets on IWRM, water supply and sanitation and SLM. The project will utilize existing networks of IWRM, ICZM, SLM and SIDS, to identify and share best practices and lessons from other SIDS in ICZM, IWRM, WUE and SLM, particularly in relation to the selection of more suitable and applicable technologies and practices and water resource management/use methodologies. **USD 1,600,051**

**Project Management**

36. UNEP and UNDP will be co-implementing the project with UNEP being the lead implementing agency. UNEP CAR/RCU and CEHI will be co-executing agencies with CAR/RCU being the lead co-executing agency. **USD 1,035,473**

**C. Monitoring and Assessment**

<b>(iii) State of the Convention Area in the Wider Caribbean Region (ongoing)</b>
<b>Activity Budget: USD 100,000 (80,000 unfunded)</b>
<b>Scope: Regional - All WCR Countries</b>
<b>LBS Protocol Articles/Annexes: Articles VI, XII, XIV</b>

*Introduction*

37. This activity will provide support to ongoing regional assessment activities in the Wider Caribbean Region.

*Activities*

38. The main activities to be undertaken include:
- a. Compile, translate and disseminate best management practices and case studies from completed GEF IWCAM and REPCar projects through the CEP Web Site and Clearing House Mechanism. **(USD 10,000)**
  - b. Compile recommended methodologies for field sampling, laboratory analyses, handling data, and documenting monitoring and assessment methods used in regional projects. This activity will be supported by the LBS RACs. **(USD 5,000 unfunded)**
  - c. Develop a draft protocol for information management in collaboration with GEF Projects. **(USD 5,000)**
  - d. Collaborate with regional and international agencies to facilitate activities that support further regional assessments of the Wider Caribbean region including consultations,

- workshops, presentations and publications and provide specific logistical support for the UN Regular Process and the completion of the UNEP Global Marine Assessment Report. **(USD 5,000)**
- e. Support at least 3 Member States to advance the classification of waters according to the LBS Protocol and to conduct hot spot assessments and valuation of coastal resources. LBS RACs and RAN can assist by providing support to countries that do not have the necessary facilities or capacity. **(USD 75,000 unfunded)**
  - f. Finalize guidelines for preparing the regional State of the Convention Area Report (SOCAR) so the scope and format for presenting the information is standardized. Guidelines should include a recommendation regarding the frequency and format for the SOCAR for consideration by the Conference of the LBS Protocol Contracting Parties. This has no additional financial cost and will be done internally by the CEP Secretariat.
  - g. Identify funding sources and projects that support the development of the State of the Convention Area Report and the necessary environmental assessment techniques, implementation strategies for best management practices to reduce negative impacts on watersheds and coastal areas, and capacity building for field and laboratory monitoring programs to document that selected BMPs were successful. This has no additional financial cost and will be done internally by the CEP Secretariat.

#### **D. Waste Management**

<b>(iv) Implementation of Regional Action Plan on Marine Litter (RAPMaLi) (ongoing)</b>
<b>Activity Budget: USD 100,000 (60,000 unfunded)</b>
<b>Scope: Regional-</b> All countries
<b>LBS Protocol Articles/Annexes:</b> Articles V, VI, X, XI, XIII;

#### *Introduction*

39. The CEP Secretariat will continue to promote the implementation of the Regional Action Plan on Marine Litter Management for the Caribbean which was endorsed at the 13<sup>th</sup> IGM. The CEP Secretariat will use the RAPMaLi as the framework for supporting implementation of the Honolulu Strategy and the UNEP Global Partnerships on Waste and Marine Litter.

#### *Activities*

40. The main activities to be undertaken include:
  - a. Expand marine litter educational and awareness materials developed in 2012 to include habitat and wildlife interactions. **(USD 40,000)**
  - b. Support education-based activities as part of the implementation of the Honolulu Strategy proposed at the 5<sup>th</sup> International Marine Debris Conference held in Hawaii in March, 2011 and launched at RIO + 20 in 2012 in Brazil. **(USD 20,000 - Unfunded)**
  - c. Support regional capacity building workshops on Integrated Waste Management including those that support implementation of the MARPOL Annex V Special Area Designation for the Caribbean Sea in coordination with IMO and RAC REMPEITC. **(USD 40,000 - Unfunded)**
  - d. Identify partners for developing joint projects on marine litter management as part of integrated solid waste management with particular focus on recycling and management of

sanitary landfills/waste disposal sites. This has no additional financial cost and will be done internally by the CEP Secretariat.

### **E. National Programmes of Action**

<b>(v) Implementation of Pilot NPAs (ongoing)</b>
<b>Activity Budget: USD 150,000 (110,000 unfunded)</b>
<b>Scope: Regional – WCR</b>
<b>LBS Protocol Articles/Annexes: Articles VI, XIII;</b>

#### *Introduction*

41. To reverse the decline in coastal and marine environments from pollution and degradation coming from the land; the 1995 Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) calls on Governments to develop National Programmes of Action for the protection of the marine environment from land-based activities (NPA). The main purpose of an NPA is to develop concrete projects that mobilize stakeholders and resources, and thus needs to be mainstreamed into relevant budgetary and policy frameworks.
42. UNEP-CAR/RCU and UNEP/GPA initiated a programme to strengthen the development and implementation of National Programmes of Action for the protection of the marine environment from land-based activities (NPAs) in the Wider Caribbean Region. Additionally, a new MOU between UNEP and the U.S. National Oceanic and Atmospheric Administration (NOAA) signed in 2011 established a framework for continued collaboration and support to NPA implementation in the Caribbean.
43. The Programme of Work for the implementation of the GPA over the period 2012–2016 was approved by member states in January 2012. It will help Governments to continue to develop and implement National Programmes of Action, and move towards ecosystem-based management approaches. The focus is on the promotion, facilitation and implementation of the GPA in an integrated and cross-sectoral manner at the national, regional and international levels. The GPA Coordination Office is establishing and/or supporting global partnerships on nutrients, wastewater and marine litter, thereby enabling the GPA to add value to the work being conducted within the Wider Caribbean Region.

#### *Activities*

44. The main activities to be undertaken in collaboration with GPA and NOAA include:
  - a. Develop with LBS Parties at least three small-scale projects to pilot test innovative approaches and technologies as it relates to nutrients and wastewater management. **(USD 90,000) – Unfunded**
  - b. Share lessons learnt and best management practices on wastewater-related technologies used in the Wider Caribbean Region. This has no additional financial costs and will be done internally by the CEP Secretariat.
  - c. Support the continued development and implementation of NPAs within the framework of LBS Protocol implementation. This has no additional financial cost and will be done internally by the CEP Secretariat.



- d. Convene at least two regional workshops for LBS Parties to showcase pollutant reduction technologies. These workshops are intended to promote exchange of experiences and best practices relating to the use of pollutant reduction technologies. **(USD 60,000 with 20,000 unfunded)**

#### **F. Climate Change and Disaster Risk Reduction**

<b>(vi) Climate Change Adaptation and Disaster Risk Reduction in Jamaica (Ongoing)</b>
<b>Total Project Budget: USD 6,101,022</b>
<b>Activity Budget for 2013: USD 2,097,683</b>
<b>Time Frame: 2011-2013</b>
<b>Scope: National (pilot): Jamaica</b>
<b>LBS Protocol Articles/Annexes: Articles VI, Annex IV</b>
<b>Website: <a href="http://www.cep.unep.org/eu-climate-change/">http://www.cep.unep.org/eu-climate-change/</a></b>

#### *Introduction*

This project supports the Global Climate Change Alliance (GCCA) in ACP regions and countries launched by the European Commission in 2007. The GCCA intends to step up cooperation between the EU and the developing countries that are most vulnerable and have the less capacity to react. The United Nations Environment Programme (UNEP) has been entrusted by the European Union with resources, on behalf of the Government of Jamaica. The United Nations Environment Programme (UNEP) through CAR./RCU is the primary agency responsible for project management. UNEP CAR/RCU works along with the Planning Institute of Jamaica (PIOJ) who co-manages the project. Both organizations work along with the National Environment and Planning Agency (NEPA), the Environmental Management Division (EMD) of the OPM, the Forestry Department, and the Meteorological Services of Jamaica. These organizations along with the European Union comprise the steering committee for the project.

#### *Activities:*

45. The main activities to be undertaken include:
- a. Rehabilitate and improve management of selected watersheds to reduce downstream run-off and associated pollution and health risks. The selected watersheds include: Yallahs and Hope River Watershed Management Unit; Buff Bay /Pencar Watershed Management Unit; Rio Bueno Watershed Management Unit; Activities to be done in watersheds include: the establishment and improvement of community-based management structures in the selected Watershed Management Units (WMUs); reforestation and agroforestry in selected WMUs; Assessment of forested crown lands and declaration of forest reserves; Development of a Forest Fire Management Programme; promotion of sustainable livelihood/economic activities; and the establishment of river protection infrastructure/structures; **(USD 923,330)**
  - b. Restore and protect coastal ecosystems to enhance natural buffers and increase resilience; **(USD 732,100)**
  - c. Integrate climate change mitigation and adaptation into relevant national policies and plans, enhance institutional (human and technical) capacity and facilitate awareness building amongst Jamaica's population to better adapt to climate change. **(USD 442,253)**

<b>(vii) Replication of Risk and Vulnerability Assessment Methodology (RIVAMP) (New)</b>
<b>Total Budget: USD 150,000 (unfunded)</b>
<b>Scope: National Pilot</b>
<b>LBS Protocol Articles/Annexes: Articles VI; Annex IV</b>

*Introduction*

46. Ecosystems degradation is occurring globally at an alarming rate, contributing to increasing disaster risk. As ecosystems degrade, so do the multiple services they provide to sustain human life and well-being, including protection and building resilience against the impacts of natural hazards. With climate change expected to exacerbate disaster risk, there is global interest to better understand the value of ecosystems for hazard mitigation and livelihood protection.
47. The Risk and Vulnerability Assessment Methodology Development Project (RiVAMP) was conceived by UNEP to develop an assessment tool that takes into account ecosystems and climate change factors in the analysis of disaster risk and vulnerability. It is designed to assist national and local government decision makers in evaluating their development options effectively by recognizing the role of ecosystems in reducing risk and adapting to climate change impacts. It specifically targets Small Island Development States (SIDS) and other coastal areas that are highly vulnerable and exposed to tropical cyclones and related hazards.
48. Piloted in the western coast of Jamaica in collaboration with the Government of Jamaica and the University of the West Indies, RiVAMP utilizes an evidence-based, scientific approach that is combined with a stakeholder consultation process.
49. The AMEP Sub-Programme partnered with UNEP GRID Geneva to facilitate training of persons from St. Lucia and Jamaica in the use of the methodology.
50. There is a need to promote replication of RiVAMP to other SIDS and to evaluate possible application to watersheds as a pollution prevention tool. The following would be a pilot study of a single “hot spot” watershed with the objective being to identify measures for rehabilitation, improve management and reduce run-off and pollution affecting coastal and marine ecosystems.

*Scope: Regional – SIDS (Pilot Study)*

*Activities (Indicative):*

- Assessment of ecosystems services for a selected watershed/catchment “hot spot”; **(USD 40,000)**
- National and community consultations; **(USD 25,000)**
- Review of existing scientific literature **(USD 5,000)**
- Collection of existing data & generation of missing data; **(USD 10,000)**
- Satellite image analysis (change detection + classification of landcover); **(USD 5,000)**
- GIS analysis; **(USD 10,000)**
- Modeling soil and beach erosion; **(USD 20,000)** and
- Training of communities and local experts **(USD 35,000)**

## Annex I - Biennial Budget for the AMEP Sub-Programme

ID <sup>1</sup>	Project & Activities	Sub-Programme	Partner(s)	Start Date		End Date		Budget USD						
								2013	2014	Beyond 2014	Total 2013 - 2014	Secured		To be secured
												CTF	Others	
(i)	<i>Programme Coordination (includes staffing, travel, reporting, communication and other support costs from the Caribbean Trust Fund)</i>	AMEP	RAC IMA, RAC CIMAB, RAC REMPEITC	Ongoing		520,000	520,000	N/A	1,040,000	1,030,000	10,000	0		
GEF (ii)	Testing a Prototype Regional Fund for Wastewater Management	AMEP	IDB, CDB, CWWA, CEHI, CAWASA	June 2011	June 2015	2,196,547	656,273	N/A	2,852,820	0	2,852,820	0		
	Policy, legislative and institutional Reforms for Wastewater Management Communication, Outreach and Information Exchange Monitoring and Evaluation													
GEF (iii)	Implementing Integrated Land, Water & Wastewater Management in Caribbean SIDS	AMEP	UNDP, CEHI, UWI, UNESCO, NOAA, Sandals,	Nov 2013	Nov 2016	2,500,000 (est)	3,500,000 (est)	14,448,598	6,000,000	0	0	6,000,000		
	Innovative approaches in land management, water resources management and coastal zone management National monitoring and indicators framework Policy, legislative and institutional reforms for water resources and coastal zone management Knowledge exchange, best practices, replication and stakeholder involvement													
A.	<b>TOTAL GEF (13% Programme Support Costs are not applied to GEF Funding)</b>					4,696,547	4,156,273	14,448,598	8,852,820	0	2,852,820	6,000,000		
EU (iv)	Climate Change Adaptation and Disaster Risk Reduction	AMEP	GOJ, PIOJ,	Nov 2011	Dec 2013	2,097,683	0	0	2,097,683	0	2,097,683	0		



ID <sup>1</sup>	Project & Activities	Sub-Programme	Partner(s)	Budget USD								
				Start Date	End Date	2013	2014	Beyond 2014	Total 2013 - 2014	Secured		To be secured
										CTF	Others	
(vii)	Implementation of Pilot NPAs	AMEP	GPA, NOAA	Jan 2013	Dec 2014	30,000	120,000	0	150,000	0	40,000	110,000
	Testing of innovative approaches and technologies for nutrients and wastewater management Sharing of lessons on wastewater technologies At least two Regional workshops on pollutant reduction technologies											
(viii)	Replication of Risk and Vulnerability Assessment Methodology	AMEP	DEWA	Jun 2013	Dec 2014	50,000	100,000	0	150,000	0	0	150,000
	Assessment of ecosystem services for selected watershed National and community consultations Review of literature and collection of data Satellite and GIS analysis Modelling of soil and beach erosion Training of communities and local experts											
	<b>Other Sub-Total (includes Programme Coordination)</b>					660,000	880,000	0	1,540,000	1,060,000	80,000	400,000
	<b>Programme Support Cost (PSC) to UNEP HQ at 13% (Actual Amount charged subject to change based on source of funding)</b>					85,800	114,400	0	200,200	137,800	10,400	52,000
C.	<b>Total Other (includes Programme Coordination)</b>					745,800	994,400	0	1,740,200	1,197,800	90,400	452,000
	<b>TOTAL AMEP (A+B+C)</b>					7,686,867	5,150,673	14,448,598	12,837,540	1,197,800	5,187,740	6,452,000

## Annex II - List of Related Global and Regional Projects

Project Title	Project Focus	Organization	Project Cost
Climate Variability, Change and Mitigation Project for the 6 independent states of the OECS	Tourism sectors , water resources and sustainable land management	OECS, USAID (Barbados and the OECS)	13,750,000
Improving the management of coastal resources and the conservation of the marine biodiversity in the Caribbean region	Improving community adaptation and resilience; biodiversity and ecosystems conservation, sustainable use of natural resources	German Agency for International Cooperation (GIZ), CEHI	Under Development