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Fourth Meeting of the Interim Scientific,
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the Protocol Concerning Pollution from Land-
Based Sources and Activities (LBS) in the Wider
Caribbean Region

Petén, Guatemala, 30 October – 1 November 2007

DRAFT WORKPLAN AND BUDGET

**SUB-PROGRAMME ON THE
ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL
POLLUTION
2008-2009**

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Assessment and Management of Environment Pollution

Background

1. This workplan and budget covers ongoing activities and those to be developed under the Assessment and Management of Environmental Pollution (AMEP) sub-programme of UNEP's Caribbean Environment Programme (CEP) for the 2008-2009 biennium. This is in support of the Protocol to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention) Concerning Pollution from Land-based Sources and Activities (LBS Protocol).
2. This workplan and budget is presented to the Fourth Meeting of the Interim Scientific Technical and Advisory Committee of the Protocol to the Cartagena Convention Concerning Pollution from Land-based Sources and Activities (LBS/ISTAC) for comment and revision. Following endorsement by the LBS/ISTAC, this workplan will be recommended to the Thirteenth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme and Tenth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (13th IGM), for approval.
3. As a subprogramme of the CEP, the AMEP workplan and budget is developed for a two-year period. 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. Many of the projects presented below are ongoing from the 2006-2007 biennium. This is largely due to the significant AMEP workplan that was approved at the 12th IGM and the projected continuing workload for these projects. In addition, the workplans of the two Regional Activity Centres (RACs) have been incorporated into this proposed workplan.

Projects and activities

(a) Programme coordination

Objectives

4. The objectives of the AMEP/LBS programme for the 2008/2009 biennium are to:
 - Coordinate and oversee the day-to-day implementation of AMEP Projects and activities within the framework of the Caribbean Environment Programme;
 - Ensure that the formulation and implementation of projects and activities satisfy the obligations of the LBS and Oil Spills Protocols;
 - Promote ratification of, accession to, and effective implementation of the LBS and Oil Spills Protocols;

- Enhance coordination, collaboration and communication with relevant regional and international organizations in the development and implementation of AMEP projects and activities; and
- 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 the next biennium. The Programme Officer for the CETA subprogramme will provide assistance in public awareness and information management and the Coordinator of CAR/RCU will continue to play a supporting role in promoting ratification of the Protocol. The Directors of the LBS RACs and the Regional Project Managers for the GEF Projects will provide additional programming and technical support.
6. Funds from the two GEF projects will be used to support the AMEP Programme Assistant for 2008. Efforts will be made to identify additional funds that will allow this support to be maintained into 2008.
7. The LBS Protocol will continue to serve as the regional instrument for the implementation of the GPA in the Caribbean. Coordination with other relevant regional and global programmes, organizations, and initiatives will be further promoted. Fund-raising efforts for the programme will continue in coordination with the Coordinator of CAR/RCU, Governments, donors and partner organizations.
8. The Secretariat will convene the Fifth Meeting of the LBS/ISTAC where the AMEP Programme Officer will present the AMEP/LBS workplan and budget for the biennium 2010-2011, in keeping with the objectives of the LBS Protocol.
9. The following provides a summary of new and ongoing projects for the 2008-2009 biennium.

Ongoing Projects

(b) Reducing Pesticide Run-off to the Caribbean Sea (GEF)

Introduction

10. During the next biennium, activities under the various project components will enter full implementation.

Activities

11. The activities for the project will centre around three main components with various subcomponents:

Component 1 - Project Coordination

12. Activities will take place to strengthen and maintain successful networking and to ensure optimal stakeholder participation. The National Committees will meet regularly. In addition to frequent contact by e-mail, the Project Coordinator will conduct two monitoring missions to the countries and convene a Project Steering Committee meeting every year to follow the activities and to approve detailed workplans.

Component 2 - Demonstration Projects

13. Four demonstration projects will be implemented in each of the three project countries and will focus on improving agricultural practices on different crops, farm types (subsistence, low intensity and high intensity) or examining other useful contrasting conditions (e.g. soil types).
14. With the demonstration project sites selected by the end of 2007, MOUs will be developed with the implementing agencies in the first quarter of 2008. Training workshops are planned for the participants in GAP/BMP (including integrated pest & waste management). Training will also be provided in monitoring and assessment to establish a baseline and for site evaluation. The demo projects will be implemented over a two-year period from the second quarter of 2008 onwards and will be monitored for agronomic, socio-economic and environmental impacts, including but not limited to crop yields, worker safety, pesticide runoff and cost of production compared to control farms.
15. A train-the-trainer and a farmer-training programme will be designed and implemented as part of the demo projects in the second quarter of 2009. Short progress reports will be submitted to UNEP-CAR/RCU on a quarterly basis and more comprehensive reports will be done annually.

Component 3 - Institutionalise Improved Pesticide Management and Strengthen the Capacity for Reducing Pesticide Runoff

16. The coastal monitoring programme will monitor and assess the status of pesticides runoff into rivers and the Caribbean Sea. The required regional protocols will be developed in the first quarter of 2008. MOUs will be developed with the implementing agencies by the end of the first quarter of 2008. As part of the monitoring programme and depending on the diagnoses of the actual infrastructure and capacity, support will be given to local laboratories to increase the capacity for monitoring pesticide runoff. By the end of 2008, the coastal monitoring programme will be in place. Short quarterly progress reports will be combined with more extensive annual technical reports. It is expected that by the second quarter of 2009, a data GIS-IMS database will be functional, providing statistics on pesticide runoff.
17. The study of legal frameworks will include the analysis of possible incentives for reducing pesticide runoff and the analysis of mechanisms to follow-up the implementation of regulatory frameworks. The activity will start by the end of 2009 and will be carried out

by specialized legal officers of the Ministries of Environment, Agriculture and Health, combined with external consultants.

18. As part of the information dissemination strategy, the project web page will be regularly updated with status reports on pesticide use in the participating countries, news and results concerning the demo projects, and with the training resources that will be developed as part of the training programme. At the end of 2009, awareness and education materials will be published.

(c) Integrating Management of Watersheds and Coastal Areas in Small Island States in the Caribbean (GEF IWCAM)

Introduction

19. During the next biennium, activities under the various project components will enter full implementation.

Activities

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

Component 1 – Demonstration, Capture and Transfer of Best Practices

21. UNEP CAR/RCU, CEHI and the PCU will continue to assist the national GEF-IWCAM demonstration focal points and their National Project Management Units (NPMU), in managing and reporting on Demo project implementation during the next biennium. A number of countries did not develop demonstration projects and efforts will be made to develop additional Medium Sized Projects.
22. The capture of lessons and best practices will be an on-going process, involving desk research and exchange of experiences with other relevant projects and regions. During 2008/2009, interaction with projects, such as the Caribbean Large Marine Ecosystem (CLME) project being implemented by CERMES, and the OECS Protected Areas and Associated Livelihoods (OPAAL) project being implemented by the OECS Environment & Sustainable Development Unit will be facilitated. Interaction with the South Pacific SIDS, through the Pacific GEF Sustainable Integrated Water Resources and Wastewater Management Project is planned.
23. A project database will be refined during 2008 and will be a building block for the regional Project Information Management System (PIMS). Components will include a database on GEF-IWCAM contacts and relevant on going and completed projects. The database will be linked with other relevant databases in order to achieve synergies. It is expected to also be the node for the storage of indicator-related information.

Component 2 – Development of IWCAM Process, Stress Reduction and Environmental Status Indicators Framework

24. Based on the review of the existing indicator mechanisms in the region for the three sets of indicators used in monitoring and evaluating GEF International Waters Projects – Process, Stress Reduction and Environmental Status indicators, the development and dissemination of indicator templates will begin in 2008.
25. Hotspot diagnostic analyses (HSDA) will be conducted with emphasis on the non-demo countries, including identification of priority water-related issues/problems, immediate and root causes and required reforms. Based on the analyses, project concepts for follow-up/project preparation will be prepared. The HSDA will be guided by UNEP CAR/RCU.
26. The development and establishment of a monitoring system for indicators will continue in 2008. Additional training of stakeholders in the application of relevant indicators will take place building on training conducted in 2007. The establishment of a pilot monitoring system using the indicator templates will begin in 2008 in coordination with other CEP activities such as the Know Why Network Partnership Project.

Component 3 – Policy, Legislation and Institutional Reforms

27. Following the review of the national policies and institutional structures related to integrated watershed and coastal area management in 2007, support will be provided for required reforms during the 2008/2009 biennium. The regional programme for amendment of national legislation and policy and improvement of institutional arrangements will be initiated in 2008. Additional activities will include the development of incentives for the ratification of relevant MEAs including the LBS Protocol.
28. Efforts will continue to assist countries in achieving the World Summit on Sustainable Development (WSSD) Directive on IWRM plans and strategies and specifically on developing “Integrated Water Resources Management and Water Efficiency Plans by 2005”.

Component 4 – Regional and National Capacity Building and Sustainability

29. In 2008, national and regional efforts will continue to raise awareness of GEF-IWCAM, both as a project and as an approach. Bulletins, brochures, leaflets, videos and other appropriate information products will be made available to various publics. Bulletins will be prepared eight times per year for electronic distribution, and translated into Spanish. A newsletter will be prepared on a quarterly basis, in both electronic and hard copy. The bulletins and newsletters will also be placed on the project website (www.iwcam.org). These promotional efforts will be consolidated through a regional Communications Strategy for the Project and a broader Communications Strategy for UNEP CAR/RCU.
30. Capacity building will focus at both the national and regional levels. During the next biennium, capacity building for monitoring of the environment, particularly water quality will be the main priority. Training in environmental monitoring and data handling will be conducted for the demo sites and for laboratory personnel in PCs, based on the findings of

local needs assessments. The project will also support laboratory development at the national and regional levels. The reference capability of the accredited laboratory within CEHI will be strengthened as well as that of other regional laboratories in PCs.

31. In order to establish the Clearing House, which will be housed within CEHI, a review of all projects of relevance took place during 2007. The findings of the review will form the baseline data for the Clearing House. The Clearing House will be managed by CEHI, with direct support provided by the Communications, Networking, and Information Specialist within the PCU and in coordination with the CETA Sub-Programme at UNEP CAR/RCU. The Clearing House will form part of the Project Information Management System (PIMS) and will be part of the evolution of the website.

Component 5- Project Management and Coordination

32. At least one Annual Regional Project Steering Committee (PSC) meeting will be convened. The Regional PSC meetings will focus on reviewing the Annual Work Plans and budgets, and updating the participating countries on the status of national project implementation. The IA/EA Management Group will meet formally, just prior to the Regional PSC meeting.
33. Technical support will be provided to the project through the Regional Technical Advisory Group (RTAG). RTAG meetings will take place prior to the Regional PSC Meetings. The RTAG may review the reports of consultants, endorse selection of pilot countries for testing of the Indicator Mechanism, advise on clearinghouse functions and IWRM Planning, review/endorse HSDA and the criteria for Hot Spot designation, and endorse lessons learned from the demos.
34. The demo projects will report on a quarterly basis to the Project Coordinating Unit at CEHI. CEHI, CAR/RCU and UNOPS will also report on a quarterly basis with CAR/RCU to coordinate information flow to UNEP and UNDP. Additionally, a Project Implementation Report (PIR) will be completed and submitted to GEF. As lead IA, UNEP will coordinate the submission of this report with the Project Coordinating Unit, and with support, as required, from UNDP, CEHI, CAR-RCU and UNOPS.

(d) Training for Rehabilitation of Contaminated Bays (GEF)

Introduction

35. This Regional Project is expected to be completed during the next biennium with the completion of the UNDP component of the project, the construction of a wastewater treatment plant in Cuba. The focus for UNEP CAR/RCU will be the identification of appropriate follow up activities including the preparation of a follow up GEF proposal and sharing of lessons learnt and best practices.

Activities

36. The main activities to be undertaken include:
 - Identification of countries interested in participating in a follow up project activity;
 - Preparation of a Regional Project Proposal by the second quarter of 2008 for submission to GEF in the first or second quarters of 2009. This would be facilitated by a consultant and baseline analysis for beneficiary countries. It will also be informed by the lessons learnt from the national Cuban component of the project.
 - Convening of terminal regional workshop in the fourth quarter of 2008 to review and endorse the regional proposal. This will occur following the completion of the construction of the wastewater treatment plant in Cuba.

(e) Assessment of Pollutant Loads and Sources in the Wider Caribbean Region

Introduction

37. This activity represents the continuation of the activities carried out in previous years for updating CEP Technical Report No. 33 and in improving the management of pollution data and information.

Activities

38. The main activities to be undertaken include:
- Production and Dissemination of Technical Report # 33 (TR 33): The Secretariat will work along with the LBS RACs to finalize the completion of TR 33 for submission to the Thirteenth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme and Tenth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (13th IGM) scheduled for June 2008. Once approved, the report will be formally published and disseminated widely.
 - Development of Pollution Data Bases: The data obtained from TR 33 and other AMEP projects such as the Know Why Network Partnership Project, the GEF Pesticides Project, and the GEF IWCAM Project will be compiled into an appropriate pollution database by the Secretariat. This will be linked to existing clearinghouses with pollution data for the Wider Caribbean Region.
 - Production of Pollution Fact Sheets: In order to improve the dissemination and update of pollution data and information, the Secretariat working in collaboration with the LBS RACs is proposing to develop a set of Fact Sheets relating to the State of the Marine Environment of the Wider Caribbean.

(f) Implementation of Sewerage Needs Assessment Pilot Projects and Case Studies

Introduction

39. The management of wastewater continues to be a high priority for the countries of the Wider Caribbean Region. The next biennium will see the completion of two national pilot studies on sewage needs assessment in Tobago and Panama. Activities will focus on production of case studies, exchanging of experiences and sourcing of funding for additional pilots.

Activities

40. The main activities to be undertaken include:
- Completion of pilot projects in Panama and Tobago according to agreed work plans;
 - Preparation and dissemination of case studies from all pilots – Saint Lucia, Panama and Tobago;
 - Mobilization of funding for additional pilot projects; and
 - Development of a regional project proposal concept based on common needs identified in the case studies

(g) Best Management Practices for Agriculture – Small Grants Programme*Introduction*

41. As a result of the success of the first AMEP Small Grants Programme for Best Management Practices for Agriculture, the Secretariat has mobilized funds for two additional pilots in Guatemala and Nicaragua. Efforts will focus on sharing of the lessons learnt and best practices among the beneficiaries. Linkages will also be established with the Demo Projects for the GEF Reducing Pesticides Project in Colombia, Costa Rica and Nicaragua. Similar pilot projects are being coordinated by WWF as a follow up to the now concluded ICRAN MAR Project. Depending on the availability of funds, the Secretariat will convene a regional workshop to facilitate the sharing of experiences from these projects and will seek additional funds to expand the small grants programme to other countries in the Wider Caribbean Region.

Activities

42. The main activities to be undertaken include:
- Implementation of Pilot projects in Guatemala and Nicaragua
 - Translation and Dissemination of all case studies
 - Source funding to expand small grants programme to other countries
 - Convene Regional Workshop to support sharing of experiences

(h) Implementation of National Programmes of Action (NPAs)*Introduction*

43. 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) incorporating dynamic and iterative processes that institutionalize

the phased implementation of priority activities within a cross-sectoral, participatory framework. The main purpose of an NPA is to develop concrete projects that mobilize both stakeholders and resources, and thus needs to be mainstreamed into relevant budgetary and policy frameworks.

44. 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. Its main aim is to strengthen the long-term sustainability of the programmes through increased focus on strategic planning, prioritisation, strengthening sustainable financing (mainly through domestic resource mobilisation and effective leveraging of international sources), and identifying and tackling barriers to implementation by legislative, institutional and capacity constraints.

Activities

45. The main activities to be undertaken in collaboration with UNEP GPA and NOAA include:
- supporting the implementation of completed NPAs with a specific focus on strategic planning and sustainable financing;
 - convening of a regional donors forum
 - assessing the willingness and capability of additional countries to develop an NPA;
 - supporting willing countries with an initial assessment of ongoing or planned policies, expenditure, legislation and other activities that meet the objectives of the GPA;
 - supporting the convening of initial stakeholder consultative meetings at the national level;
 - promoting the development of full scale NPAs, including pilot projects, in selected countries; and
 - integrating pilot projects being developed under GEF funded projects among others within the policy framework of an NPA.

(i) Capability Development for application of Geographic Information Systems

Introduction

46. The Secretariat has recognized the importance of building up the capacity of the LBS RACs in the use and application of GIS and other spatial decision making tools. Now that this capacity has been built, future focus will be on the use of this improved capacity in adding value to ongoing and new AMEP projects and activities. The Secretariat will also facilitate national and regional capacity building for using GIS to improve environmental decision-making processes.

Activities:

47. The main activities to be undertaken include:
- Acquisition of Hardware and software
 - Installation of upgraded systems
 - Implementation of maintenance programmes
 - Regional training opportunities

(j) Regional Network in Marine Science and Technology for the Caribbean: The Know-why Network

Introduction

48. The implementation of this project was delayed due to several factors. There included difficulties in obtaining national pollutant inventory data for the update of CEP TR 33 and the administrative changes in LBS RAC IMA. However, this delay has allowed the Secretariat to benefit from information gathered from other assessments and baseline studies conducted under related AMEP Projects. Future activities can now be designed to more effectively support the needs of the LBS RACs and the member Governments in the areas of pollution monitoring and assessment, laboratory capacity building and GIS strengthening. This project will form the major framework for cooperation between IAEA and UNEP CAR/RCU following the signing of an MOU between the two agencies in 2006.

Activities

49. The main activities to be undertaken include:
- Training for selected personnel from the WCR institutions on the application of methodologies for monitoring and control of land based sources of marine pollution and determination of point and non-point polluting loads. This will be primarily for sampling and analytical methods and will be done in coordination with similar activities under the GEF IWCAM and GEF Reducing Pesticides Projects. Additional technical and training support is expected to be provided by IAEA;
 - Training of selected personnel in municipal and industrial solid waste characterization;
 - Development of monitoring programmes for areas of high risk (regional “hot spots”) in collaboration with IAEA, GEF IWCAM and GEF Pesticide Projects;
 - Determination of selected parameters (physical, chemical and microbiological) to obtain the pollution levels in selected hot spots. Selection of hot spots will be informed by the updated TR 33 report and work done under the UNDP Large Marine Ecosystem Projects;
 - Compilation of monitoring data from the areas of pollution risk to establish an environmental baseline. This will be supplemented with data from similar activities implemented under the GEF IWCAM and GEF Reducing Pesticides Projects;
 - Analysis of data to determine possible major polluting inputs and main causes of pollution of the coastal and marine environment. This will be used to verify some of the information provided in the updated TR 33;
 - Convening of Regional and Sub-regional workshops to discuss the main causes of marine pollution as well as measures to overcome the problem;
 - Determination of relevant parameters/guidelines for marine waters classification, into Class I and Class II, according to the LBS Protocol. These guidelines will consider

recommendations provided in the sewage needs assessment case studies for marine waters classification;

- Training of personnel in the application of the methodological guidelines for marine waters classification, in Class I and Class II; and
- National Promotional Workshops on the LBS Protocol that will be facilitated by the LBS RACs.

(k) Promotion of the LBS Protocol

Introduction

50. The Secretariat will continue to place special emphasis on activities for the promotion of the LBS protocol at the national and regional levels during the 2008/2009 biennium. This will include reproducing existing promotional material, increasing the dissemination of material at national and regional levels, and developing new promotional material. Subject to funding availability, existing material will be translated in to French and all new material will be produced in English, Spanish and French. The Secretariat will continue to support national promotional workshops and will seek to identify funding to convene workshops in countries where they have not yet been held. As with previous national workshops, the LBS RACs will to play a major supporting role to the LBS focal points in organizing these workshops and acting as facilitators and resource agencies.

Activities

51. The main activities to be undertaken include:
- reproduction of existing promotional material including brochures and DVDs;
 - translation of the LBS Promotional DVD and brochures into French;
 - convening of national promotional workshops in remaining Spanish and English speaking countries with support from RAC CIMAB and RAC IMA;
 - production of additional promotional material on the LBS protocol in English, Spanish and French by the Secretariat with support from the two LBS RACs; This will form part of CEP's Communication Strategy; and
 - Strengthening of the web site to provide more technical information related to AMEP and its projects and activities.

(l) Regional Action Plan on Marine Litter

Introduction

52. The Secretariat developed a Draft Regional Action Plan for Marine Litter Management for the Caribbean region during the last biennium. Development of this Plan involved a host of international, regional and national experts who work on marine litter and other related conservation issues in the Caribbean Region. These experts included government representatives associated with coastal zone management, environmental protection, fisheries, solid waste management, and tourism and regional and national conservation

NGOs that manage marine litter programmes and activities and conduct annual beach cleanups. With the momentum and interest that has been generated in marine litter management in the Caribbean, UNEP CAR/RCU proposes to further assist Caribbean Countries in the phased implementation of the Draft Regional Action Plan for Marine Litter Management through a series of pilot projects for which external funding has been sought.

Activities

53. The main activities to be undertaken include:

1. Implementation of regional pilot project on Discarded Fishing Gear in USVI and SIDS;
2. Implementation of regional pilot project in 3 SIDS on policy reform, monitoring and assessment, and education and awareness;
3. Implementation of regional pilot project in 2 SIDS on the assessment of sources of marine litter, beach clean ups and awareness building;
4. Convening of at least one Regional Capacity Building Workshop for sharing of experiences and lessons learnt;
5. Support to the hosting of the Annual General Meeting of the International Coastal Clean Up by the Ocean Conservancy; and
6. Development of a web-based interactive database on marine litter as part of the enhancements to the CEP web site.

(m) New Project Concepts

I. Strengthening the development and application of Geographic Information Systems (GIS) in the Wider Caribbean Region

(Implementing Agencies: UNEP CAR RCU, Regional Activity Centres for LBS, SPAW and Oil Spills Protocol)

Funding request: US\$ 180,000

Background

54. Geographical Information Systems (GIS) is a globally established application used to assist in the management, analysis and visualization of data. Member states who are Parties to the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region, adopted in Cartagena, Colombia on 24 March 1983 and its three Protocols, the Oil Spills Protocol, Specially Protected Areas and Wildlife Protocol

(SPAW) and Land-Based Sources of Marine Pollution (LBS) Protocol have called for greater efforts to be placed on the development of databases and effective use of environmental information in the decision making processes.

55. Unfortunately, within the Wider Caribbean Region the effective use of GIS in an environmental context is limited as a result of the general paucity of baseline data and capacity in GIS at all levels. Although several ongoing UNEP projects have GIS components and activities, an integrated approach has not been established to allow for the sustained use of GIS methodologies. The absence of a regional strategy for GIS usage, and inadequate awareness of the scope of GIS applications are constraints that need to be addressed. Presently, The Secretariat for the Cartagena Convention is improving the capacity of the Regional Activity Centre for the LBS Protocol based in Cuba through the provision of GIS hardware and software and the attachment of a GIS expert for an initial period of two years. This is expected to provide direct assistance and support to member states in the further development and application of GIS technologies.
56. In response to the critical needs and current interventions, this project would establish a regional strategy for the development and application of GIS technology in the Wider Caribbean Region. It will allow for the more effective use of information generated by a range of regional projects and allow for this data to be analyzed and shared among all member countries towards the management and sustainable development of the Wider Caribbean Region.

Objective

57. To develop a Regional Strategy for the increased application of GIS and other spatial decision-making tools in the implementation of the Cartagena Convention and its Protocols through database development, capacity strengthening and pilot assessments.

Expected Accomplishments:

- A GIS compatible regional pollution database to supplement existing databases on marine ecosystems in the Wider Caribbean Region.
- Three (3) completed case studies to identify GIS applications that demonstrate specific economic and social impacts of pollution and habitat destruction.
- Development of national capacity in the use and application of GIS for environmental management including for example development of GIS based models for classification of marine waters under the Cartagena Convention and Protocols.

Output Indicators:

- Pollution database established and populated with marine data from the Wider Caribbean Region.
- Number of Case studies compiled.
- Number of Countries engaged in the use of GIS based models for classification of marine waters under the Cartagena Convention and Protocols.

Primary Activities:

1. Development of Regional Pollutant Data Bases:
 - Needs Assessment: this component will aim to build upon earlier projects in identifying what are the critical environmental parameters needed to make more informed decisions at the national level.
 - Evaluation of Similar Data Bases: this component will aim to evaluate similar regional data bases, and consistent with the data already available for the region, develop a data base that will allow for more effective sharing of environmental data promoting increased collaboration in the management of the Caribbean Sea.
2. Improved National Capacity of the WCR for application of GIS in environmental decision-making:
 - **Case Studies:** this component will involve the selection of at least 3 demonstration countries and applying GIS technologies to evaluate the social and economic consequences of pollution and habitat destruction.
 - **Capacity Building:** this component will involve the design and deliver of national and regional workshops in the application of GIS technology aimed at improved decision-making

Relationships:

The outcomes and activities encompassed within this project are in direct fulfilment of priorities set for a variety of global targets and MEAs, including:

- Millennium Development Goals 7 to ensure environmental sustainability and 8 to develop global partnerships
- Resolution XVII (b)-(c) of the Mauritius Strategy for further implementation of the Plan of Action for SIDS that specifically highlights the relevance of GIS and database management in the decision-making process.
- Decision 24/6 and 24/9 of the Twenty-fourth session of the Governing Council for UNEP.

Proposed Budget

Implementation to begin in January 2008 – December 2009

Programme	2008	2009
Development of Regional Pollutant Data Bases	\$50,000	10,000
National Capacity Building – Regional Workshops	\$30,000	30,000
Implementation of 3 Case Studies	\$40,000	20,000
TOTAL	\$120,000	60,000

(Expressed in USD)

- II. Assessment and Evaluation of the Criteria for the classification of the waters of the Caribbean according to the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol) based on an assessment of risks to recreational water quality and human health.

(Implementing Agencies: UNEP CAR RCU, Regional Activity Centres for LBS, SPAW and Oil Spills Protocol)

Funding request: US\$ 230,000

Background

58. In 1994, the Caribbean Environment Programme overview of land-based point sources of marine pollution in the Wider Caribbean Region (WCR). The report (UNEP-CEP Technical Report #33) indicated that domestic wastewater was the largest point source contributor by volume to the Caribbean Sea. In developing a classification system for the marine waters of the WCR, the level of anthropogenic impacts on areas listed as Class I waters in Annex III of the LBS Protocol should be taken into consideration together with the potential for reversing these impacts.
59. Domestic wastewater pollution in the WCR results in public health, social, economic and sustainable tourism concerns. At the launch of the WHO Guidelines for Safe Recreational Water Environments in 2002, it was agreed that epidemiological studies should be conducted in Latin America and the Caribbean to evaluate the applicability of the WHO Guidelines to the region. Other beach management interventions which address both public health and sustainable tourism issues are being implemented in the Caribbean Region, for example, the Blue Flag Campaign
60. UNEP-CAR/RCU working in collaboration with the Regional Activity Centres (RAC) for the LBS Protocol is proposing under this project to assist in the development of safe recreational water environments in countries of the Wider Caribbean Region by undertaking epidemiological trials for the WHO Guidelines on Safe Recreational Water Environments and to use the results to assist the Governments of the WCR in classifying their marine waters so as to facilitate the implementation of the LBS Protocol. Additional cooperation is expected with the Pan American Health organization (PAHO) and the Caribbean Environmental Health Institute (CEHI).

Objective(s)

61. To facilitate the Governments of the WCR in the classification their marine waters as required for the implementation of the LBS Protocol and improving safe recreational aquatic environments.

Expected Accomplishments:

- Regional Guidelines developed for classifying the Convention Area into Class I and Class II waters in accordance with the LBS Protocol Criteria
- Improved awareness of the government and people of the Wider Caribbean Region on the need to classify their marine waters and correlation with human health and ecosystem balance.

- Government personnel from WCR countries trained in the classification of marine waters.

Output Indicators:

- Presence /Absence of Regional Classification Guidelines for the WCR
- Number of persons participating in workshop and outreach activities
- Number of personnel trained/No of countries participated in training workshop

Primary Activities:

- Epidemiological trials and classification exercises conducted at selected beaches in the Wider Caribbean Region
- Guidelines developed for the classification of marine waters in the wider Caribbean according to the criteria for the LBS Protocol.
- Public awareness programme implemented on the importance of classification of marine waters for human health and biodiversity protection.
- Regional/National Training Workshop(s) for personnel from Government Ministries and Agencies responsible for planning and/or environmental management.
- Regional Workshop to enable the participating countries to present and discuss the results of their classification of marine waters exercise and epidemiological trials
- Regional Report on the classification of the Marine Waters and the epidemiological studies in demonstration countries.

Relationships:

The outcomes and activities encompassed within this project are in direct fulfilment of priorities set for a variety of global targets and MEAs, including:

- UNEP Global Plan of Action for the Protection of the Marine Environment from Land Based Sources of Pollution through support to Regional Seas Programmes and Conventions in particular the LBS Protocol of the Cartagena Convention
- Resolution of the Mauritius Strategy XVI to create regional and national enabling environment that will assist countries in responding to agreed international and regional targets
- UN Millennium Development Goals 7 to ensure environmental sustainability and 8 to develop global partnerships

Proposed Budget

Implementation to begin in January 2008 – March 2009

Programme	2008	2009
Epidemiological Trials (3 countries)	\$50,000	\$10,000
Public Education and Awareness	\$30,000	\$10,000
National/Regional Training Workshops	\$30,000	\$20,000
Marine Water Classification in Pilot Countries (3 countries)	\$20,000	\$10,000
Regional Consultative Workshop and Final Report	0	\$50,000
TOTAL	\$130,000	\$100,000

III. Impact Assessment of Inadequate Municipal Solid Waste Disposal Sites on the Marine Environment of the Wider Caribbean Region.

(Implementing Agencies: UNEP-CAR/RCU, UNEP BASEL Regional Centres, Caribbean Environmental Health Institute (CEHI))

Funding request: US\$ 150,000

Background

62. Historically, the use of solid waste to fill coastal wetlands and perform land reclamation activities was commonly accepted as a cost effective waste disposal method. Many of these disposal sites (Choc Bay and Ciceron waste disposal sites in Saint Lucia and Perseverance disposal site in Grenada) are now closed, however they still pose serious risks to the marine environment by the production of leachate. The presence of these disposal sites in fragile nursery areas has the potential for allowing contaminants in the form of heavy metals and Persistent Organic Pollutants (POPs) to enter and traverse the tiers of the food chain. The effect on the water quality and biota of the surrounding areas by the influx of leachate is unknown and the risk to human health from the consumption of contaminated food as well as contact with the polluted water has never been explored.
63. Most of these countries of the Wider Caribbean are party to The Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region, adopted in Cartagena, Colombia on 24 March 1983 and are in the process of giving due consideration to ratification of the Caribbean Protocol on Land-Based Sources of Marine Pollution, adopted on October 6, 1999. They are also signatories to the BASEL Convention on the Control of the Transboundary Movement of Hazardous Wastes and its disposal. The constituent substances of the leachate are most likely to contain substances listed as primary pollutants of concern under Annex I of the LBS Protocol. Specifically, pertaining to the characteristics and other factors to be considered in evaluating additional pollutants of concern section of the protocol outline all aspects in which the disposal sites can influence the marine and coastal resources. These include: persistency, bio-accumulation, potential to cause eutrophication, risk to human health and has negative impacts on marine life and development of living resources or on other legitimate uses of the seas.
64. In recent years the OECS Solid and the Ship Generated Waste Management Project has resulted in an improvement in the environmental management of solid waste in most territories of the sub-region. Additionally, the other States took the initiative to improve their solid waste facilities as well. New disposal facilities were built with leachate control and monitoring systems and separation of waste was instituted. However, the closed sites were allowed to remain subject to the elements and assessing the risk to human health and the environment particularly the marine and coastal realm were never assessed.

Objective

65. To determine the effects of hazardous leachate from solid waste landfills through data compilation and analysis in order to generate practical and sustainable management guidelines for landfill management.

Expected Accomplishments:

- Regional database of the closed landfill and solid waste disposal sites comprised of baseline leachate and water quality data from adjacent sites
- Protocol developed for sampling, trans-shipment and analysis of leachate.
- Mitigation measures and recommendations for further planning and management of disposal sites and adjacent sensitive areas.
- Evaluation of the environmental risks and potential for marine pollution concerns from leachate.

Indicators of achievement:

- Regional database of leachate quality parameters established
- Vulnerability/risk maps of marine space and marine resources including trend and spatial
- analyses of leachate generated by disposal sites
- Risk assessment reports for disposal sites utilized in policy for one of the pilot countries

Primary Activities:

- Inventory of the relevant closed and existing disposal sites in selected case sites
- Identify natural resources at risk and assess environmental health risks
- Data collection, collation and analyses
- Establish leachate monitoring and control stations
- Mapping and spatial analysis of collated data
- Hazard analysis and vulnerability assessment of marine areas

Relationship:

This project directly relates to the objectives outlined in a variety of global targets and MEAs, including:

- Millennium Development Goals 7 regarding environmental sustainability and MDG8 in support of the development of global partnerships
- Resolution III Section 23 (a)-(d) of the Mauritius Strategy of the Plan of Action for SIDS that calls for further action in the management of solid waste and the identification of environmentally sound technologies and methodologies with the support of the international community.
- Decision 24/5 of the Twenty-fourth session of the Governing Council for UNEP regarding solid waste management and disposal.

Proposed Budget

Implementation to begin in January 2008 – December 2008

Programme	2008
Inventory and Monitoring of Closed Disposal Sites in Wider Caribbean Region <ul style="list-style-type: none"> ▪ Data collection, collation and analyses ▪ Establish leachate monitoring and control stations 	\$75,000
Development of Regional Databases <ul style="list-style-type: none"> ▪ Mapping and spatial analysis of collated data 	\$25,000
Preparation of Risk Assessment and Vulnerability Maps for selected countries <ul style="list-style-type: none"> ▪ Hazard analysis and vulnerability assessment of marine areas 	\$50,000
TOTAL	\$150,000

(Expressed in USD)

IV. Sewage Needs Assessment (SNA) of the OECS

(Implementing Agencies: UNEP CAR RCU, Regional Activity Centres for LBS Protocol, Caribbean Water and Wastewater Association (CWWA), Caribbean Environmental Health Institute (CEHI))

Funding request: US\$ 175,000

Background

66. One of the key areas which has been identified by Member States who are Parties to The Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region, adopted in Cartagena, Colombia on 24 March 1983 and the Caribbean Protocol on Land-Based Sources of Marine Pollution, adopted on October 6, 1999, is the need for efficient and effective domestic waste water management. In actual fact, both of these legal instruments set ambitious goals to govern domestic sewage discharges into the waters of the wider Caribbean. Accordingly, Annex III of the LBS Protocol was designed to meet these goals by providing sewage effluent quality guidelines, criteria for classification of receiving waters, and timetables for countries to implement appropriate wastewater treatment services.
67. According to a UNEP/CEP 1994 report, domestic wastewater was the largest point source contributor by volume to the Wider Caribbean Region and is regarded as one of the most important and widespread causes of degradation of the coastal environment in the Caribbean.
68. As a result of rapidly expanding populations, poorly planned development, and inadequate or poorly designed and malfunctioning sewage treatment facilities in most Caribbean

SIDS, untreated sewage is often discharged into the environment with serious human health implications. Added to this is the discharge of untreated or partially treated sewage from many tourism facilities.

69. In 2006, the Caribbean Environmental Health Institute (CEHI) with support from UNEP CAR/RCU completed a Sewage Needs Assessment (SNA) for the town of Vieux Fort in the South of Saint Lucia. Based on the requirements of the LBS Protocol there is need to expand the SNA to other communities in Saint Lucia and other States of the more vulnerable Organization of Eastern Caribbean States (OECS). There is also need to raise awareness of the need to protect the marine environment and the importance of the Cartagena Convention and LBS Protocol as tools ensure the sustainable development of the region as a whole

Long-term objective:

- Sustainable development and protection of the marine areas of the Caribbean through improved management of domestic wastewater within the OECS.

Expected Accomplishments:

- Determination of appropriate sewage treatment and disposal measures and options for specific areas where the SNA was conducted
- Classification system for receiving waters established and shared among OECS nations
- Maps of the receiving waters including important natural resources and recreational areas within the various territories available and utilized as a management tool
- Awareness and promotion of the LBS Protocol

Main Project activities:

- Literature review
- Digital cartography and field reconnaissance
- Water bodies classification
- Public awareness seminars/workshops

Proposed Budget

Implementation to begin in January 2008– December 2008

Programme	2008
Assessment of Sewage Needs – 6 countries	\$90,000
Mapping of Coastal Resources and Classification of Waters – 6 countries	\$60,000
Public Awareness Programmes	\$25,000
TOTAL	\$175,000

(Expressed in USD)

Relationships:

- This project will address domestic wastewater issues and related directly to the objectives as outlined in Annex II of the LBS Protocol of the Cartagena Convention. This activity is complementary to the regional priority rankings documented in the

2006 State of the Environment Report by Global Plan of Action (GPA) pollutant categories, which showed sewage to be the first priority.

- Millennium Development Goals 7 regarding environmental sustainability and MDG8 in support of the development of global partnerships
- Resolution XVII section (d) of the Mauritius Strategy of the Plan of Action for SIDS that calls for further action in the implementation of targeted health programmes to prevent ill health for SIDS populations including pollution and water quality.
- Decision 24/5 of the Twenty-fourth session of the Governing Council for UNEP regarding solid waste management and disposal.

Implementation of these obligations requires substantial planning and financial considerations to be taken into account. In support of the regional requirements and priorities, and national needs, UNEP-CAR/RCU proposed to take a two-tiered approach through the progressive development of national plans and subsequent assistance in seeking financing to implement these plans.

V. Improving the Quality of Recreational Coastal Water in the Wider Caribbean

(Implementing Agencies: UNEP CAR RCU, Regional Activity Centres for LBS, University of the West Indies, Caribbean Environmental Health Institute (CEHI), Ministries of Health, Ministries of Environment)

Funding request: US\$ 180,000

Background

70. Two of the Caribbean's major economic drivers, tourism and fisheries, are highly dependent on the quality of the marine environment, which is at an alarming rate (UNEP-CEP/RCU, 2005). Despite the dependence and projected increased reliance on marine resources for growth and development, further degradation is likely if unsustainable practices such as over fishing, unplanned coastal developments, poor land use practices and pollution persist. The tourism product, in particular, is dependent on beautiful beaches and high quality marine recreational waters. In the past few years, there have been increasing concerns expressed by both health officials and the general public on the suitability of coastal water for contact recreational purposes due to the effects of non-point sources and point sources of pollution, in particular sewage discharges, and community and industrial practices on the quality of river water and consequently, sensitive coastal marine waters. Analysis of samples taken randomly from selected countries suggests that a significant percentage of coastal water bathing areas around tourist areas may not meet international standards for contact recreational waters.
71. At present, there is limited data available for making informed assessments of the quality of water of bathing beaches and the extent of pollution as monitoring is done on an ad hoc basis or in response to a health related crisis. Because of the Caribbean's dependence on tourism and the stringent requirements of EU tour operators who are liable in their country

for the health and safety of their clients, it is imperative that ongoing surveillance programs be implemented. Before any interventions for improving the quality of the recreational coastal waters can properly and effectively be pursued, baseline data must be collected. However, there is paucity of this data at the national level. This concept note seeks to address the problem of the lack of adequate baseline data.

Overall Objective:

- To assess the quality of coastal bathing water with a view to determining the interventions necessary for meeting and maintaining environmental standards for contact recreational coastal waters. Towards the ultimate outcome of reducing the negative impacts on human health by users of coastal recreational waters in the Caribbean

Expected Accomplishments:

- Improved quality of recreational coastal water for selected representative Caribbean Countries
- Increased confidence by users of recreational coastal water in suitable quality of bathing waters.
- Improved attitude, practices and behaviour of key stakeholders to coastal recreational waters.

Indicators of Achievement:

- 75% of the designated coastal recreational waters meet the World Health Organisation (WHO) standards for recreational waters by year 3
- 50% reduction in related health complaints from bathers at selected sites

Main Project activities:

- Collect baseline data on recreational coastal water quality from selected countries and selected beaches
- Conduct a Knowledge, Attitudes, Practices and Behaviour (KAPB) study on recreational Coastal water improvement in selected countries and communities
- Regional training of environmental health officers and laboratory analysts in the design and implementation of coastal water surveillance programs
- Provide technical support for the development and implementation of national coastal water surveillance programs
- Develop and implement a Public Awareness & Public Education programme for improved coastal recreational waters in the Caribbean
- Provide technical support for developing and implementing interventions for improving coastal recreational water quality in selected countries
- Conduct compliance audits of the national coastal water surveillance programmes.

Proposed Budget

Implementation to begin in January 2008 – June 2009

Programme	2008	2009
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Collection of baseline data	\$75,000	0
Community Survey	\$20,000	0
Regional Training Programmes	\$30,000	\$30,000
Public Awareness and Education Programme	\$10,000	\$10,000
TOTAL	\$140,000	\$40,000

(Expressed in USD)

Relationships:

- Resolution XVII section (d) of the Mauritius Strategy of the Plan of Action for SIDS that calls for further action in the implementation of targeted health programmes to prevent ill health for SIDS populations including pollution and water quality.
- Millennium Development Goals 7 regarding environmental sustainability and MDG8 in support of the development of global partnerships
- UNEP Governing Council Decisions 24/6 and the 23/2 relating to SIDS and the management of freshwater and marine resources.
- Blue Flag Campaign and other internationally recognized beach and marina certification programmes
- After the interventions are implemented, there would be a need to generate on-going data for the purpose of monitoring and evaluating the efficiency and effectiveness of these interventions. The data generated through the baseline would be used to assess the effect of mitigation measures and justify any measures (policy, legislative, institutional or administrative) required to bring about further changes in behaviour required for improvement of water quality at the national level, e.g., enactment of compulsory wastewater effluent standards and beach management regimes.

ANNEX 1
WORKPLAN AND TIMETABLE

Activity	2008				2009			
	1 st	2 nd	3 rd	4 th	1 st	2 nd	3 rd	4 th
a. AMEP Programme Coordination								
b. Reducing Pesticide Run-off to the Caribbean Sea (GEF)								
• <i>Support Implementation of Workplan</i>								
c. Integrating Watershed and Coastal Area Management (IWCAM) in SIDS (GEF)								
• <i>Support Implementation of Workplan</i>								
d. Training for Rehabilitation of Contaminated Bays (GEF)								
• <i>Conduct Baseline Studies and Develop GEF Project Concept (PIF with UNDP and LBS RACs)</i>								
• <i>Convene Terminal Regional Workshop</i>								
• <i>Submit Project Proposal to GEF</i>								
e. Assessment of Pollutant Loads and Sources in the Wider Caribbean Region								
• <i>Publish and Disseminate updated TR 33 Report</i>								
• <i>Develop Pollution Data Bases</i>								
• <i>Prepare Pollution Fact Sheets</i>								
• <i>Coordinate assessment and hot spot diagnoses</i>								
f. Sewerage Needs Assessment Pilot Projects and Case Studies								
• <i>Implement pilot projects in Panama and Tobago</i>								
• <i>Seek financing for two new pilot projects</i>								
• <i>Prepare and disseminate case studies</i>								
• <i>Prepare and Submit Regional Project Proposal based on recommendations from pilot projects</i>								
g. Best Management Practices for Agriculture – Small Grants Programme								
• <i>Source Funding for additional 4 small grants</i>								
• <i>Second call for Proposals from Nicaragua</i>								
• <i>Disseminate Lessons Learnt from Pilot Projects</i>								

Activity	2008				2009			
	1 st	2 nd	3 rd	4 th	1 st	2 nd	3 rd	4 th
<ul style="list-style-type: none"> • Convene Regional Workshop for sharing of lessons 								
h. Implementation of National Programmes of Action (NPAs)								
<ul style="list-style-type: none"> • Convene Donor’s Forum with UNEP GPA 								
<ul style="list-style-type: none"> • Support financing and strategic planning for implementing NPAs and related strategies in selected countries; 								
<ul style="list-style-type: none"> • Support development and implementation of new NPAs in response to country requests 								
i. Capacity Development for application of GIS								
j. Regional Network in Marine Science and Technology – “Know Why Network”								
<ul style="list-style-type: none"> • Implement workplan 								
k. Promotion of the LBS Protocol								
<ul style="list-style-type: none"> • Conduct national promotional workshops (maximum of 4 countries per year) 								
<ul style="list-style-type: none"> • Translate LBS Promotional Material into French 								
<ul style="list-style-type: none"> • Disseminate promotional brochures and DVDs 								
<ul style="list-style-type: none"> • Enhance Websites of CEP and LBS RACs 								
<ul style="list-style-type: none"> • Develop additional LBS promotional material 								
l. Regional Action Plan on Marine Litter								
<ul style="list-style-type: none"> • Implement pilot project on Discarded Fishing Gear in USVI and SIDS 								
<ul style="list-style-type: none"> • Implement pilot projects in 3 countries on policy reform, monitoring and assessment, and education and awareness 								
<ul style="list-style-type: none"> • Implement pilot projects in two countries on assessment of sources of marine litter, beach clean ups and awareness 								
<ul style="list-style-type: none"> • Convene Regional Capacity Building and Lessons Learnt Workshop 								
<ul style="list-style-type: none"> • Convene Annual General Meeting of International Coastal Clean Up with Ocean Conservancy 								
<ul style="list-style-type: none"> • Develop web-based Regional Data Base 								

ANNEX II
DETAILED BUDGET

Activity	2008			2009		
	CTF	Other	Total Cost	CTF	Other	Total Cost
a. AMEP Programme Coordination (Overall Coordination and Common Costs)	200,000 Budgeted in OCCC	50,000	250,000	200,000 Budgeted in OCCC	50,000	250,000
b. Reducing Pesticide Run-off to the Caribbean Sea (GEF) ¹	0	1,292,900 (GEF)	1,292,900	0	1,381,510 (GEF)	1,381,510
c. Integrating Watershed and Coastal Area Management (IWCAM) in SIDS (GEF) ²	0	1,731,281 (GEF)	1,731,281	0	1,820,912 (GEF)	1,820,912
d. Training for Rehabilitation of Contaminated Bays (GEF) <ul style="list-style-type: none"> • <i>Develop GEF Project Concept (PIF) in collaboration with UNDP and LBS RACs</i> • <i>Convene Terminal Regional Workshop (Twenty 20 participants)</i> 	0	35,049	35,049	0	76,475	76,475
e. Assessment of Pollutant Loads and Sources in the Wider Caribbean Region (Sida & UNEP GPA) <i>Publish and Disseminate updated TR 33 Report</i> <ul style="list-style-type: none"> ▪ <i>Production of Pollution Fact Sheets</i> 	0	30,000	30,000	0	30,000	30,000
f. Sewerage Needs Assessment Pilot Projects and Case Studies (Sida & UNEP GPA) <ul style="list-style-type: none"> • <i>Implement two pilot projects in Panama and Tobago</i> • <i>Implement two new pilot projects</i> • <i>Prepare Case Studies from pilots and disseminate lessons learnt</i> • <i>Develop Regional project proposal</i> 	10,000	60,000	70,000	10,000	0	10,000
SUB TOTAL	210,000	3,199,230	3,409,230	210,000	3,388,897	3,568,597

Activity	2008			2009		
	CTF	Other	Total Cost	CTF	Other	Total Cost
g. Best Management Practices for Agriculture Small Grants Programme (Sida) <ul style="list-style-type: none"> ▪ <i>Source Funding for additional 5 small grants</i> ▪ <i>Second call for Proposals from Nicaragua</i> ▪ <i>Disseminate Lessons Learnt from Initial Projects</i> 	0	25,000	25,000	0	25,000	25,000
h. Implementation of National Programmes of Action (UNEP GPA) <ul style="list-style-type: none"> ▪ <i>Develop financing and strategic planning strategies for completed NPAs and NEMS in OECS;</i> ▪ <i>Support development and implementation of four new NPAs</i> 	5,000	40,000	45,000	5,000	40,000	45,000
i. Capacity Development for application of GIS (Sida)	0	30,000	30,000	0	0	0
j. Regional Network in Marine Science and Technology – “Know Why Network” (Sida) ³	0	120,000	120,000	0	0	0
k. Promotion of the LBS Protocol (Sida) <ul style="list-style-type: none"> • <i>Conduct national promotional workshops (4 countries per year)</i> • <i>Translate Existing Promotional Material</i> • <i>Develop New Promotional Material</i> 	20,000	20,000	40,000	10,000	20,000	30,000
l. Tela Project (Sida)	0	11,600	11,600	0	0	0
<i>SUB TOTAL</i>	25,000	246,600	266,600	15,000	85,000	100,000

Activity	2008			2009		
	CTF	Other	Total Cost	CTF	Other	Total Cost
m. Regional Action Plan on Marine Litter (UNEP Environment Fund, Ocean Fund, NFWF) <ul style="list-style-type: none"> ▪ <i>Implementation of pilot project on Discarded Fishing Gear in USVI and SIDS</i> ▪ <i>Implementation of pilot projects in 3 countries on policy reform, monitoring and assessment, and education and awareness</i> ▪ <i>Implementation of pilot projects in two countries on assessment of sources of marine litter, beach clean ups and awareness</i> ▪ <i>Regional Capacity Building and Lessons Learnt Workshop</i> ▪ <i>Development of web-based Regional Database</i> 	5,000	77,500	82,500	5,500	57,000	62,500
(n) New Projects:						
1. Strengthening the development and application of Geographic Information Systems (GIS) in the Wider Caribbean Region.	0	120,000	120,000	0	60,000	60,000
2. Assessment and Evaluation of the Criteria for the classification of the waters of the Caribbean according to the LBS Protocol	0	100,000	100,000	0	130,000	130,000
3. Impact Assessment of Inadequate Municipal Solid Waste Disposal Sites on the Marine Environment of the Wider Caribbean Region.	0	125,000	125,000	0	25,000	25,000
4. Sewage Needs Assessment (SNA) of the OECS	0	100,000	100,000	0	75,000	75,000
5. Improving the Quality of Recreational Coastal Water in the Wider Caribbean	0	140,000	140,000	0	40,000	40,000
<i>SUB TOTAL</i>	5,000	662,500	667,500	5,500	387,000	392,500

Activity	2008			2009		
	<i>CTF</i>	<i>Other</i>	<i>Total Cost</i>	<i>CTF</i>	<i>Other</i>	<i>Total Cost</i>
<i>TOTAL PROJECT COSTS</i>	240,000	4,108,330	4,348,330	230,500	3,860,897	4,091,397
<i>PROGRAMME SUPPORT COSTS (13%)⁴</i>	31,200	534,083	565,283	29,965	501,917	531,882
GRAND TOTAL	271,200	4,642,413	4,913,613	260,465	4,362,814	4,232,279

¹ 4 year Project (2006-2009)

² 5 year Project (2005-2009)

³ 4 year Project (2005-2008)

⁴ Programme Support Costs are not levied on GEF funds or on contributions from UNEP GPA and UNEP Nairobi.

ANNEX III
CONSOLIDATED BUDGET

(to be posted later)