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**Thirteenth Meeting of the Monitoring Committee on the
Action Plan for the Caribbean Environment Programme
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to the Convention for the Protection and Development of the
Marine Environment of the Wider Caribbean Region**
San José, 9-13 July 2001

**Draft workplan and budget for the Caribbean Environment
Programme for the biennium 2002-2003**

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Abbreviations

CaMPAM	Caribbean Marine Protected Area Managers network
CAR/RCU	Caribbean Regional Coordinating Unit
CAST	Caribbean Alliance for Sustainable Tourism
CBD	Convention on Biological Diversity
CCA	Caribbean Conservation Association
CEP	Caribbean Environment Programme
CEPNET	Information Systems for the Management of Marine and Coastal Resources
CFRAMP	Caribbean Fisheries Resource Management Programme
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CORAL	Coral Reef Alliance
CTO	Caribbean Tourism Organization
ECCN	Eastern Caribbean Cetacean Network
GCRMN	Global Coral Reef Monitoring Network
GEF	Global Environment Facility
GEO	Global Environment Outlook
GIS	Geographic information systems
GIWA	Global International Waters Assessment
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
GRID	Global Resource Information Database
ICLARM	World Fish Centre
ICRAN	International Coral Reef Action Network
ICRI	International Coral Reef Initiative
IDB	Inter-American Development Bank
IFAW	International Fund for Animal Welfare
IUCN	World Conservation Union
MER	Marine Education and Research Centre
NOAA	National Oceanic and Atmospheric Administration
OECS	Organization of Eastern Caribbean States
ROLAC	Regional Office for Latin America and the Caribbean

TNC	The Nature Conservancy
UNEP-WCMC	UNEP World Conservation and Monitoring Centre
WIDECAST	Wider Caribbean Sea Turtle Conservation Network
WRI	World Resources Institute

I. Introduction

1. This workplan covers the biennium 2002-2003 and sets forward the environmental priorities for the Wider Caribbean Region, as they relate to the implementation of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention) and its protocols and the Action Plan of the Caribbean Environment Programme (CEP). During this period, CEP will focus on activities to support the Protocol Concerning Specially Protected Areas and Wildlife (SPAW Protocol) and the Protocol Concerning Pollution from Land-based Sources and Activities (LBS Protocol). Additionally, this workplan calls for coordination with the Regional Activity Centre for the Oil Spills Protocol with regard to a workplan for the implementation of that Protocol. During the 2002-2003 biennium, CEP will also coordinate with other relevant global initiatives, such as the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and other related multilateral environmental agreements, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Ramsar Convention on wetlands.

2. This document is presented in draft by the secretariat as an indicative set of activities and presented to the Thirteenth Meeting of the Monitoring Committee on the Action Plan for the Caribbean Environment Programme and Special Meeting of the Bureau of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region for consideration and subsequent referral to the Tenth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme and Seventh Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, to be held from 25 February to 1 March 2002. The secretariat prepared this draft document with inputs received during working group meetings convened since the Ninth Intergovernmental Meeting and taking into consideration relevant global or regional initiatives, as well as on the basis of past and ongoing activities.

II. Overall coordination and common costs

A. Background

3. CEP was established to provide a mechanism whereby the diverse States and Territories of the region could collectively address the protection and development of the marine and coastal resources of the Wider Caribbean Region, the base for the economic development of the region. The achievement of this goal is dependent upon the incorporation of the principles of mutual technical assistance; the development and strengthening of regional and national, institutional and legislative frameworks; the standardization of approaches and methodologies and the encouragement of appropriate research; and the joint management of shared resources and the exchange of relevant information, among others. To provide cohesiveness to the various components of the Programme, while minimizing the duplication of effort and maximizing project return, the overall coordination of the Programme's components is centralized and undertaken by the Caribbean Regional Coordinating Unit (CAR/RCU) in Kingston.

4. The Regional Coordinating Unit is the secretariat of CEP and is responsible for coordination and implementation of the Programme. The Unit carries out the programmatic, administrative, financial and personnel functions related to the administration of the Action Plan and the Cartagena Convention and its protocols. RCU operates under the authority of UNEP headquarters through the Division of Environmental Conventions, in cooperation with the UNEP Regional Office for Latin America and the Caribbean (ROLAC) and the Governments of the region through an Intergovernmental and Contracting Parties body and a Monitoring Committee.

B. Objectives

5. The objective of CEP, through this workplan, is to:

(a) Provide a consolidated legislative, institutional, and programmatic framework for cooperation among member countries and organizations concerned with the management of

marine and coastal resources in the Wider Caribbean Region;

(b) Provide effective coordination for the implementation of the various components of CEP;

(c) Convene such meetings as required by the Cartagena Convention and its protocols, to facilitate the implementation of the Programme within the appropriate legislative and technical authority.

C. Caribbean Environment Programme coordination

6. The basic secretariat support of CEP rests on the core staff and operational budget. All staff requirements (salaries and related expenses), office supplies and materials, equipment, Intergovernmental Meetings, some travel, and miscellaneous items are included in the overall coordination and common costs workplan and budget. Single activities and short-term projects appear under the workplans of the subprogrammes.

1. Personnel and office administration

7. In the light of the expected level of ordinary contributions to the Caribbean Trust Fund, the secretariat predicts that RCU will continue to operate at a skeletal budget for the biennium 2002-2003 for the overall coordination and common costs component. Therefore, the secretariat has compensated by optimizing both personnel and office administration costs.

8. The secretariat was successful in raising a significant level of extraordinary Caribbean Trust Fund funding and the payment of arrears in the biennium 2000-2001. These additional funds allowed for an increase in the number of Professional staff positions in RCU. Nonetheless, the secretariat still seeks to open the full complement of posts in the Unit to be funded by other extraordinary contributions to the Caribbean Trust Fund or other counterpart contributions. During the biennium 2000-2001, the post of the Information Systems for the Management of Marine and Coastal Resources (CEPNET) Programme Officer was filled and a two-year Associate Programme Officer post (to assist in the implementation of the SPAW and LBS Protocols) was opened. Funding of these posts is expected to continue through most, if not all, of the

biennium 2002-2003. Additional posts will be subject to the availability of additional funding.

9. Communication, travel and equipment costs have been reduced to the most cost-efficient level possible without sacrificing productivity.

2. Key concerns of the overall coordination and common costs workplan and budget

10. The budget for overall coordination and common costs presented herewith places the success of the implementation of the objectives on:

(a) The full participation of all CEP member countries in making ordinary contributions to the Caribbean Trust Fund in accordance with the proposed level of contributions;

(b) The capacity of the secretariat to attract extraordinary contributions. The secretariat must therefore continue to dedicate time to fund-raising efforts to cover the additional operational costs of the secretariat that exceed the level of ordinary contributions to the Trust Fund.

3. Meetings of the Caribbean Environment Programme

11. Several meetings of CEP are held on an annual or biennial basis. These meetings are necessary for monitoring project implementation, efficient functioning of the Programme, and for administrative purposes of the secretariat. The following meetings are proposed during the biennium 2002-2003.

(a) Second Meeting of the Scientific and Technical Advisory Committee to the SPAW Protocol

12. In addition to the Second Meeting of the Scientific and Technical Advisory Committee (STAC) to the SPAW Protocol in the biennium 2002-2003, it may be necessary to convene the Second Meeting of the Contracting Parties to SPAW. This need is dependent upon a request by the Parties and available resources. Depending on resource availability, this meeting of the Contracting Parties could be held in conjunction with another CEP meeting.

(b) Second Interim Scientific, Technical and Advisory Committee Meeting of the LBS Protocol¹

13. In February 2001, the First Meeting of the Interim Scientific, Technical and Advisory Committee to the LBS Protocol (LBS/ISTAC) was convened in Ocho Rios, Jamaica. The Second Meeting of the LBS/ISTAC will be convened to further the development and implementation of the LBS Protocol, as well as to develop a workplan and budget for the biennium 2004-2005. Specifically, the Second Meeting of LBS/ISTAC will, among other things:

(a) Review the needs and requirements of the LBS Protocol, with a view to making project and activity recommendations to the Contracting Parties for the implementation and continuing development of the Protocol;

(b) Review the status of activities in the workplan for the biennium 2002-2003 and make recommendations for changes and amendments;

(c) Develop a workplan and budget for the biennium 2004-2005.

(c) Fourteenth Meeting of the Monitoring Committee on the Action Plan for the Caribbean Environment Programme and Special Meeting of the Bureau of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region

14. The joint Meeting of the Monitoring Committee and Special Meeting of the Bureau of Contracting Parties is held every two years, alternating with the Intergovernmental Meeting. The Monitoring Committee is composed of nine States and the Bureau is composed of five Contracting Parties (the Chairman for both groups is the same). Both groups are elected by the Intergovernmental Meeting. The Monitoring Committee is responsible for monitoring the development of the Programme and providing policy direction in the period between Intergovernmental Meetings.

¹ Should the Protocol enter into force during this period the meeting will be converted into the First Meeting of LBS/ISTAC.

(d) Tenth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme and Seventh Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region

15. The joint Intergovernmental and Contracting Party Meetings are convened every two years to provide overall authority to CEP, review progress of the Programme, oversee financial and institutional arrangements and to decide on the biennial workplan and budget of CEP. The meeting is scheduled for early 2002.

D. Overall coordination and common costs

16. Overall coordination and common costs are set out in the annex, page 2 to the present report.

III. Subprogramme workplan

A. Assessment and Management of Environment Pollution²

1. Background

17. This workplan covers the activities to be developed under the Assessment and Management of Environment Pollution (AMEP) subprogramme of CEP for the biennium 2002-2003. The AMEP subprogramme is responsible for the coordination of activities related to both the LBS Protocol and the Protocol Concerning Oil Spills. Along with the establishment of the Regional Marine Pollution Emergency, Information and Training Centre for the Wider Caribbean Region (REMPEITC) as the Regional Activity Centre for Oil Spills (RAC/REMPEITC-Carib), a Steering Committee is being established to develop a workplan for the RAC. As RAC/REMPEITC-Carib is established as of 1 June 2001, the Steering Committee has not yet met to develop the workplan. The Committee will try to meet

² Consistent with the comments expressed by some Parties during the First Meeting of LBS/ISTAC, the linkage of each activity to the various articles or annexes of the LBS Protocol is explicitly stated in the objectives of each project.

prior to the tenth Intergovernmental Meeting so that a workplan can be submitted for approval. As such, projects and activities for the continuing development of the Oil Spills Protocol are not presented here.

18. Since the negotiations of the LBS Protocol began, and then continuing following its adoption, CEP has been developing, funding, and coordinating the implementation of activities to support the objectives of the Protocol. As a subprogramme of CEP, the AMEP workplan and budget is developed for a two-year period and within the context and realities of the Wider Caribbean and considering other relevant initiatives. The following projects and activities are therefore designed to meet the needs of the continuing development of the LBS Protocol, as well as to support its current objectives and the needs of the Governments for ratification and implementation. The projects and activities in this draft workplan were reviewed by the First Meeting of the LBS/ISTAC in February 2001 and have been referred to the thirteenth Monitoring Committee for further review.

2. Projects and activities

(a) Programme coordination

Objectives

19. The objectives of the coordination of the AMEP/LBS programme are:

(a) To promote the LBS Protocol as appropriate to ensure ratification by the Contracting Parties to the Cartagena Convention and gain support for the programme;

(b) To ensure that the formulation and implementation of the programme activities satisfy the requirements and needs of the LBS Protocol;

(c) To develop coordination, collaboration and communication with organizations relevant to the AMEP/LBS Protocol objectives;

(d) To oversee the day-to-day activities and general coordination of the various subprogrammes.

Activities

20. An AMEP Programme Officer at CAR/RCU will continue to provide the day-to-day coordination and backstopping to the implementation of the programme activities. The CAR/RCU Programme Officer for the

CEPNET subprogramme will also provide assistance in the area of information management. Emphasis will continue to be placed on coordinating with other regional programmes and organizations and with existing regional or global initiatives relevant to AMEP/LBS (e.g., GPA) or emerging initiatives. The Coordinator of CAR/RCU will also promote ratification of the Protocol as appropriate.

21. Fund-raising efforts for the programme will be continued in consultation with the Coordinator of CAR/RCU and in coordination with relevant Governments, donors and partner organizations.

22. Development will continue, in consultation with Governments, of the AMEP/LBS workplan and budget for the biennium 2004-2005 in keeping with the objectives of the Protocol and within the context of CEP.

(b) Reducing Pesticide Run-off to the Caribbean Sea (Global Environment Facility project)³

Background

23. Agricultural non-point sources have been considered a priority land-based source of pollution in need of regional action and cooperation for its control. Work was completed under the former Programme of Assessment and Control of Marine Pollution project on Best Management Practices for Agricultural Non-Point Sources, resulting in the development of CEP Technical Report No. 41. CEP Technical Report No. 41 provides technical guidance on best management practices appropriate for the crops, climate, and society of the Wider Caribbean Region. Annex IV to the LBS Protocol specifically calls for national plans for the control of agricultural non-point sources of pollution. This project, involving Colombia, Costa Rica, Nicaragua and Panama, at the national level, has, as a GEF/Project Development Fund project, guided the development of four national plans to improve pesticide management, thereby reducing run-off to the

³ This project is a continuation of a project developed in 1999 in the International Waters Focal Area of GEF. The completion of the Project Development Fund phase of this project will be completed in 2001. As a result of project development, a project brief will be developed and submitted to the GEF Council for approval in November 2001. This workplan therefore represents those activities to be implemented in the biennium 2002-2003.

Caribbean Sea. National committees of stakeholders developed these national plans with facilitation by the Ministries of the Environment. Four national workshops were convened (one per country) to provide for comment and feedback beyond the national committees. At the publishing of this draft workplan, the four countries were preparing to present their findings at a subregional workshop (January 2001) of the four countries, with participants from other regional and global partner organizations and donors. Following the subregional workshop, a GEF full project proposal will be developed and submitted to GEF for funding.

Objectives

24. This project will assist in the implementation of Annex IV to the LBS Protocol. Additionally, the subregional nature of the project also assists in article V of the Protocol on Cooperation and Assistance. The main objective of the project is to protect the marine environment in the Caribbean Sea by reducing reliance on pesticides in agricultural activities and improving pesticide management overall. The project will focus on the subregion that includes Colombia, Costa Rica, Nicaragua and Panama, to evaluate and assess the current national and local practices of pesticide management with the ultimate goal of improving management to reduce the introduction of pesticides to the Caribbean.

25. The specific objectives of the project include national and regional components. Within the framework of National Action Programmes to address non-point sources of pollution in the agricultural sector, the project seeks to strengthen pesticide management in each of the four target countries, resulting in less pesticide run-off. This will address issues such as permitting, compliance control, enforcement, trade, handling, and use of pesticides, as well as the disposal of pesticide waste.

26. The regional component of the project will contribute to the analysis and evaluation of the pesticide load in the shared seas of the region and promote subregional cooperation and coordination among the four countries to determine the transport mechanisms of these substances.

Activities

27. At publication, the activities for the project were still being worked out and this workplan will be modified accordingly. Activities are planned in the areas of:

- (a) Education and training;
- (b) Institution-strengthening;
- (c) Establishment of incentives;
- (d) Information management, evaluation and monitoring;
- (e) Alternative technologies and information sharing;
- (f) Demonstration projects (e.g., integrated pest management, best management practices, etc.).

28. The institutional infrastructure for the project, developed as part of the GEF/Project Development Fund is expected to remain in place, including the regional participation of the Escuela Agrícola para la Región Tropical Húmeda (EARTH) College in Costa Rica.

(c) Planning for Rehabilitation, Environmental Management and Coastal Development in the Wake of Hurricane Mitch⁴

Background

29. Improper coastal watershed planning and poor management practices contributed to the extensive impacts of hurricane Mitch, which hit the Caribbean countries of Central America in October 1998. Clear-cutting of forests, monocultures and poor soil management and conservation have added to the loss of lives and property, not to mention the untold damage to the coastal and marine environment (including critical marine habitats, such as coral reefs, mangroves and seagrass beds) caused by severe sedimentation and presence of land-based pollutants. These pollutants, in turn, have negative impacts on human health and recovery of fisheries and other coastal resources, as well as on tourism.

Objectives

⁴ The project will begin in 2001 and will continue into the biennium 2002-2003. Funding has been secured and project initialization is under way.

30. This project implements several provisions of the LBS Protocol. However the main provisions addressed are in article III, General obligations, where Parties are requested to use integrated coastal area management in developing national programmes and measures to prevent, reduce and control marine pollution from land-based sources and activities. In addition, the project will assist in the implementation of Annex III to the Protocol on Domestic wastewater, through the implementation of sewage treatment technologies.

31. Through this project, CEP proposes to assist the Central American countries impacted by hurricane Mitch in managing and planning for the damaged coastal areas in a sustainable manner. The primary objectives are to:

(a) Identify coastal areas vulnerable to natural disasters;

(b) Establish local community stakeholder groups to assist in the development and implementation of coastal watershed management plans;

(c) Develop coastal watershed management plans with a view to increasing protection against future natural disasters, increasing sustainability, and reducing negative impacts on the marine environment;

(d) Develop investment strategies for each project site;

(e) Assist in the search for donors to fund the investment strategies.

Activities

32. *Coastal watershed identification.* Identification and selection of three small urban coastal watersheds (one for each of the countries) impacted by hurricane Mitch and in need of an integrated watershed management plan and improved sanitary facilities. Coastal watersheds will be selected in coordination with national environmental and planning authorities (to be completed in 2001).

33. *Preparation of integrated coastal watershed management plans.* In cooperation with the watershed planning and management committees, investment plans will be developed. Various investment options will be explored and evaluated. Sustainable funding plans will be emphasized that maximize local and national funding schemes and that minimize continued

reliance on international assistance. Public awareness will be an integral component to the management planning (to begin in 2001).

34. *Local construction of sanitation facilities and latrines.* Consistent with the coastal watershed management plans developed for the identified watersheds in the activities above, funding will be provided for the construction of sanitary facilities in accordance with the requirements and provisions of the LBS Protocol, with particular attention to Annex III to the Protocol.

35. *Implementation of public awareness campaigns.* As part of the management plans, a public awareness component will focus on the various sectors of the community.

36. *Subregional workshop.* UNEP-CAR/RCU will design and conduct a subregional workshop for the three target countries and invite other national and regional partner agencies and institutions. The workshop, the purpose of which will be to increase the potential for replication in the other coastal watersheds or other countries at risk of natural disasters, will focus on lessons learned from the projects and include presentations from each of the three watershed management committees on their plans.

(d) Integrating Management of Watersheds and Coastal Areas in Small Island States in the Caribbean (Global Environmental Facility project)⁵

Background

37. Small island States have particular physical, biological, demographic and economic features that include: very limited land areas (the entire island ecosystem is often a coastal area); extensive exclusive economic zones; limited terrestrial biological diversity with high rates of endemism; restricted access to freshwater resources; and highly varied geological and geomorphological attributes. Within island States, individual islands are often isolated and are very

⁵ This project is a continuation of a project developed under the 1998-1999 AMEP workplan as a project in the GEF International Waters Focal Area. Completion of the Project Development Fund phase of this project is envisaged for 2001. As a result of project development, a project brief will be developed and submitted to the GEF Council for approval in 2001.

vulnerable to natural and anthropogenic disasters, climate change and variability. The resource limitations of small island developing States make the sustainable management of these resources extremely important.

38. Opportunities for economic development in small island developing States are often limited and the economic dependence on international tourism is unusually high. Tourism is generally the most important source of external revenue, and the greatest single contributor to gross domestic product (GDP). Tourism is based on the high quality and diversity of island ecosystems — terrestrial, freshwater and coastal. These ecosystems are, in turn, dependent upon the presence of clean potable freshwater and healthy marine waters.

39. Despite the importance of managing these resources, problems often arise, owing to jurisdictional, institutional or technical issues. Often, laws and institutions are designed to deal with either freshwater or marine water and not the two in an integrated way. Proper and adequate management of water resources requires an integrated and comprehensive approach, particularly in small island developing States, where water resources are generally limited and dependence upon them is high.

Objectives

40. The main provisions of the LBS Protocol addressed through this project are in Article III, General obligations, where Parties are requested to use integrated coastal area management in developing national programmes and measures to prevent, reduce and control marine pollution from land-based sources and activities. Additionally, the subregional nature of the project and its consideration of the special characteristics of Caribbean small island developing States, also work towards Article V of the Protocol on Cooperation and Assistance. The main objective of this project is to improve management of water resources by integrating the management of watersheds and coastal areas. As part of the Project Development Fund, each of the 13 small island developing States of the Wider Caribbean Region will develop a national report that examines water resources management in their countries with particular attention to the issues of integrating freshwater and coastal area management. These 13 reports will identify the problems in their individual countries and propose recommendations and actions to solve them. If approved by GEF, this project

will provide funding for the implementation of the recommended actions at the national and regional level.

Activities

41. The activities are to be defined through the completion of the Project Development Fund phase and will be agreed to by the participating countries and listed in the project brief to be presented to GEF.

42. Activities are expected to include both national and regional components and involve all small island developing States in the Wider Caribbean Region interested in participating in the project. National reports will give effect to specific national needs at the legislative, institutional, or technical level and should include demonstration projects, training and other capacity-building activities.

43. CEP expects to continue its partnership (established in the Project Development Fund phase) with the Caribbean Environmental Health Institute in the execution of this project and will work closely with other regional entities and national institutions that will have the primary responsibility at the national level.

(e) Training for Rehabilitation of Contaminated Bays

Background

44. Following preliminary work done by CEP in the early 1990s, the United Nations Development Programme (UNDP) received a Project Development Fund grant from GEF to develop pre-feasibility studies for the rehabilitation of four heavily contaminated bays. The studies conducted under the Project Development Fund showed heavy contamination of both bays from nutrients, biochemical oxygen demand and suspended solids — mostly from inadequately treated domestic sewage. Following the submission of its final report and project brief to the GEF secretariat, funding was approved to implement projects for rehabilitation of two of the four bays: Kingston Harbour and Havana Bay. The project will be implemented over five years, beginning in 2001, with national and regional components. The first workshop on nutrient removal technologies will be completed in the biennium 2000-2001.

Objectives

45. This project is directly linked to Annex III to the Protocol on Domestic Wastewater and accomplishes its objectives through Article XI of the Protocol on Education and Awareness, which calls for the training of individuals involved in the prevention, reduction and control of pollution from land-based sources and activities. The objective of the GEF project is to provide co-financing to the two countries to design and construct appropriate wastewater treatment facilities and nutrient control. Discharges from any facilities designed and constructed under this project are to comply with the provisions of the LBS Protocol.

46. UNDP will manage most of the bilateral (national) aspects of the project with Cuba and Jamaica. CAR/RCU, however, has been asked by UNDP and the GEF secretariat to provide regional coordination and knowledge sharing of the project for the entire Wider Caribbean Region.

47. The regional activities are included to ensure coordination of effort between the two countries and compliance with the Cartagena Convention and its protocols relevant to the project areas. In addition, the secretariat identified other opportunities for regional participation that were also approved by the GEF secretariat for funding. Regional workshops will be convened in coordination with UNEP-CAR/RCU to discuss technical exchange and cooperation throughout the life of the project. In addition, technology exchange and lessons learned from this project should have greater regional benefits. This will be accomplished through technical and information exchange between the two project countries and other countries of the Wider Caribbean Region through regional meetings and workshops during project development and at completion.

Activities

48. *Regional training workshop.* UNEP-CAR/RCU will conduct a five-day regional training workshop on technologies and practices for sewage sludge utilization. The workshop will be open to participation of all countries of the Wider Caribbean Region to review available options for sludge utilization relevant to the technological, climatic, economic, institutional, and social and cultural conditions of the Wider Caribbean Region. The proceedings from the workshop will be printed and put online for regional dissemination.

49. *Final regional workshop.* Following the completion of the Havana and Kingston projects, a regional workshop will be convened by UNEP-CAR/RCU in coordination with the two participating national agencies to review lessons learned from the treatment technologies employed at the two sites. This three-day workshop will have regional implications for technology transfer for future activities in the region.

(f) Second Regional Overview of Land-based Sources and Activities in the Wider Caribbean Region

Background

50. In 1994, CEP concluded the first Regional Overview of Land-based Point Sources in the Wider Caribbean Region. The overview, which is presented in CEP Technical Report No. 33, was the first of its kind and, although it did not include all data from the entire region, it enabled the Contracting Parties to focus their attention on several key pollutant sources and contaminant types during the negotiations of the LBS Protocol. Although 23 countries submitted information on point sources, the lack of a reliable method for measuring non-point source contributions prevented those sources from being included in the overview.

51. Although the first regional overview was concluded in 1994, much of the data was obtained between 1990-1993 or earlier. As such, much of the overview data is more than ten years old and is approaching the end of its usefulness to CEP as a current information source.

Objectives

52. This project aims to implement three key articles of the Protocol, namely, Articles VI, VIII, and XII, on Monitoring and Assessment Programmes, Development of Information Systems and Reporting, respectively. The objective of the project is to provide a baseline of information of all point and non-point source discharges into or impacting, the Convention area (as established by the Cartagena Convention and LBS Protocol). In addition to providing critical information for CEPNET work on the state of the marine environment, the second overview will establish a new baseline from which to measure progress under the LBS Protocol.

53. The second overview will confirm or reconfirm priority sources and pollutants in the Wider Caribbean through the identification of source categories and their discharges. Descriptions of source categories will be detailed, as well as new or emerging sources of concern, including urban run-off, solid waste and leachate from solid and hazardous waste landfills. Although the project will, for financial purposes, utilize existing information, the most current data will be sought for the project.

Activities

54. *Developing the assessment methodology.* The former methodology used for the point source inventory in the first regional overview will be assessed for necessary modifications as well as a review of other potential assessment methods that could be utilized. The 2000-2001 workplan of the AMEP programme calls for the development of a methodology and assessment of non-point sources, although at the time this workplan was developed, no funding was yet available. Should this work be concluded prior to the biennium 2002-2003, it will be incorporated. If not it will become part of this same project. Overall, the methodology most appropriate for the circumstances of the Wider Caribbean Region will be developed in consultation with Regional experts in the area of pollutant load assessment and will be presented to the CEP countries for review and comment.

55. *Data collection.* Using the developed methodology, data will be collected in consultation with LBS focal points in the region, as well as other regional or global organizations. Data will be compiled and displayed spatially, as well as in other formats, as appropriate.

56. *Expert review and consultation.* Following the collection of data and its presentation in a draft report, an expert consultation meeting will be convened to discuss the presentation of data and provide comments for its improvement.

57. *Development of final report.* Comments from the expert consultation will be incorporated into the final document and published in the CEP Technical Report series. The data will be made available from the CEP web site in a searchable format and linked to the GPA clearing house.

(g) Sewage collection and treatment: implementing Annex III

Background

58. The prevention, reduction, and control of pollution of the Convention area from domestic wastewater were determined by the Contracting Parties of the Cartagena Convention to be a priority need. As such, Annex III of the LBS Protocol was designed to meet this need. Meeting the provisions of Annex III requires substantial planning and has financial considerations as well. In support of regional priorities and national needs, the secretariat proposes to undertake a two-tiered approach to support this regional priority through the progressive development national plans and subsequent assistance in the funding of these plans.

59. The AMEP workplan for 2000-2001 calls for development of a sewage treatment needs assessment guidance and piloting the guidance through the development of national plans in four countries of the Wider Caribbean Region. At the time this workplan was drafted, a guidance document was under development to assist countries in their plans to implement Annex III of the LBS Protocol. This document will inter alia present regional guidance on the classification of waterbodies under Annex III, assist in the planning for the upgrading of existing systems and priority setting for new systems including future needs based on planned development and population growth projections. The Governments of Belize, Colombia, Saint Lucia and Venezuela indicated interest in this project and will begin national plans for implementation/compliance with Annex III in 2001 with an expectation of completion in late 2001 or early 2002.

Objectives

60. As the title of the project suggests, this project is designed to assist countries in their implementation of Annex III on Domestic Wastewater. The new project proposed here in the 2002-2003 workplan will take place in two distinct activities. First, it would take this planning process, developed under the 2000-2001 workplan, into four or more new countries. Countries will be selected based on expressed interest in the implementation of Annex III, efforts to ratify the LBS Protocol and those making a financial or in-kind contribution to the planning process.

61. In addition, to the development of plans in new participating countries, funding assistance will be sought for the countries with plans completed according to the Annex III guidance. Project participation will not be limited to the four original countries, but for any country having developed a national plan in accordance with the regionally developed guidance and Annex III to the Protocol. The financial strategy for LBS Protocol implementation (to be developed under the 2000-2001 workplan) will be utilized to identify funding sources and opportunities.

Activities

62. *National planning.* National plans, based on guidance developed in the 2000-2001 workplan will be used to implement sewage treatment needs assessments in four or more countries of the Wider Caribbean Region. The countries themselves will implement these projects such that local priorities are taken into consideration along with the regional priorities as identified in the provisions of the LBS Protocol and in particular Annex III.

63. *Development of a Global Environment Facility project proposal.* A GEF project proposal will be developed to provide financial support to begin implementation of the plans for participating countries (i.e., those with Annex III plans developed according to the guidance). As GEF funds are to provide the incremental amounts necessary for the protection of international waters, participating countries will be required to endorse the project and provide counterpart funding from national budgets (utilizing the innovative financing mechanisms as identified by CEP guidance) or other donors. The secretariat will assist in the identification of suitable donors.

64. *Implementation of Sewage Treatment Plans.* For those countries approved in the GEF project, CEP will assist as necessary in the implementation of the national plans and coordinate any regional component as may be identified in the GEF project.

(h) Pilot Projects to Implement Annex IV — Best Management Practices for Agriculture

Background

65. Annex IV to the LBS Protocol, on agricultural non-point sources, calls for the development of national plans that include education, training and

awareness programmes for agricultural workers on “structural and non-structural best management practices”. The activities already completed or under way by CEP include CEP Technical Report No. 41, which surveyed best management practices currently in use in the region and the GEF project (described above) on reducing pesticide run-off. Nonetheless, as land-based pollution from agricultural non-point sources constitutes a significant threat to the marine environment of the Wider Caribbean, the First Meeting of LBS/ISTAC identified the need for additional activities to address their prevention, reduction and control.

Objectives

66. This project is designed to implement Annex IV to the LBS Protocol, on Agricultural non-point sources. In addition to the pilot projects to be implemented under the GEF project on reducing pesticide run-off, the project will implement small-scale demonstration activities on the appropriate use of fertilizers, alternative crop cultivation methods and environmentally friendly livestock management techniques. The objective of such demonstration activities will be to pilot innovative practices through practical application and disseminate the results to other countries and localities of the Wider Caribbean. Under this project, AMEP proposes to operate a small grants programme (maximum amount of US\$ 5,000) to assist in the development of a demonstration area. Participants will be expected to provide a counterpart contribution (in-kind or cash) and provide a project outline and summary for regional dissemination. At the end of the project period, a summary document will be prepared and the results will be available via the CEP/GPA Clearing house node.

Activities

67. Development of project selection criteria is envisaged, as well as development and dissemination of a request for proposals (for distribution via the CEP web site and other means).

68. There will be a review of project proposals and signature of agreements with project implementing agencies, following which, implementing agencies will proceed to develop their projects according to the agreed workplans.

69. Project summaries and results will be submitted by implementing agencies.

70. Results will be compiled and disseminated.

B. Specially Protected Areas and Wildlife

1. Background

71. In 1990, the Governments of the region adopted the Protocol on Specially Protected Areas and Wildlife (SPA) and, in 1991, its Annexes of species requiring protection. The Protocol entered into force on 18 June 2000 and to date, nine Governments are Contracting Parties (Colombia, Cuba, Dominican Republic, Netherlands, Panama, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, Venezuela). The Protocol also contains detailed provisions addressing the establishment of protected areas and buffer zones for in situ conservation of wildlife, both national and regional cooperative measures for the protection of wild flora and fauna, the introduction of non-native or genetically altered species, environmental impact assessment, research, education, and other topics.

72. Since the adoption of the Protocol, Governments have developed and implemented activities under the framework of CEP to meet and support the objectives of the SPA Protocol. Therefore, the regional programme of SPA is an integral component of CEP and as such, its activities and budget are developed within a two-year workplan and within the context and realities of the Wider Caribbean Region and relevant initiatives.

2. Projects and activities

(a) Programme coordination

Objectives

73. The objectives of the coordination of the SPA programme are:

(a) To promote the SPA Protocol as appropriate to ensure its ratification and gain support for the programme;

(b) To ensure that the formulation and implementation of the programme activities satisfy the requirements and needs of the SPA Protocol;

(c) To develop coordination, collaboration and communication with organizations relevant to SPA objectives;

(d) To oversee the day-to-day activities and general coordination of the various projects.

Activities

74. A Programme Officer at CAR/RCU, supported temporarily by an Associate Programme Officer (L-2) shared with AMEP, will continue to provide the day-to-day coordination and backstopping to the implementation of the programme activities. Emphasis will continue to be placed on coordinating with other programmes (e.g. the Action Plan of the UNEP ROLAC, the Organization of Eastern Caribbean States/Natural Resources Management Unit, the Association of Caribbean States, the Caribbean Tourism Organization (CTO), the Caribbean Hotel Association/Caribbean Action for Sustainable Tourism (CHA/CAST), the Central American Commission for Environment and Development etc., and with existing and emerging regional or global initiatives relevant to SPA, such as the International Coral Reef Initiative (ICRI), the Programme of Action for the Sustainable Development of Small Island Developing States, the Marine Mammal Action Plan of UNEP, the Mesoamerican Barrier Reef Initiative, etc.

75. Fund-raising efforts for the programme will be continued in consultation with the Coordinator of CAR/RCU and in coordination with relevant Governments, donors and partner organizations.

76. Development, in consultation with the Parties to the SPA Protocol and other Governments, of the SPA workplan and budget for the biennium 2004-2005 in keeping with the objectives of the Protocol and within the context of CEP.

77. Development of the joint programming of activities with the SPA Regional Activity Centre (SPA-RAC) in Guadeloupe and coordination during implementation of activities.

78. Under the framework of the existing memoranda of cooperation, the development of collaboration with the secretariat to CBD will be continued, in particular on activities in response to the Jakarta Mandate, as well as strengthening of communication and collaboration with the Convention on Wetlands of International Importance (Ramsar). Further

coordination and communication will also be sought with other relevant treaties, such as CITES and CMS, in order to maximize efforts and resources.

79. As per the ISTAC recommendation, the legal analysis of the obligations of the CITES and SPAW, and ways and means to achieve further harmonization, will continue as a joint collaboration between interested Governments, both secretariats and relevant organizations.

80. The secretariat will continue to further promote SPAW and its objectives through presentations at relevant forums, communications with Governments, public awareness etc., including use and dissemination of the brochure on the SPAW Protocol and its supporting programme developed during 2001.

81. Improved communications will be promoted between SPAW focal points and the secretariat and vice versa, in particular through the maintenance of the existing list serve, and by Governments developing more effective communication mechanisms among their focal points to CEP, SPAW, GEF, Ramsar, CBD, CITES, etc.

82. With the entering into force of the SPAW Protocol and as a priority if funds become available, the activity on assistance to Governments will be continued, with the formulation of national legislation to implement the Protocol, as per the recommendations of the Workshop to Assist with the Formulation of National Legislation to Implement the SPAW Protocol in the Common Law Countries of the Wider Caribbean Region, held in Ocho Rios, Jamaica, from 6 to 9 December 1993 (see UNEP(OCA)/CAR WG. 13/5). As the LBS Protocol enters into force, it will be utilized as a tool for fulfilling SPAW objectives, especially in view of the importance of the protection of sensitive ecosystems from land-based sources of marine pollution.

83. Development in collaboration with the STAC of an improved evaluation method for the SPAW programme to focus on more direct measurement of programme impacts at the national level and with the active and regular feedback that must be provided by Governments and their focal points, will be sought.

(b) Strengthening of the Parks and Protected Areas Network for the Wider Caribbean Region and Promotion of Guidelines for Protected Area Management

Objectives

84. The objectives of the project are:

(a) To strengthen the management of parks and protected areas of the Wider Caribbean, including the communication between parks and protected areas within the region;

(b) To assist Governments with the identification and establishment of protected areas as appropriate;

(c) To sensitize Governments about the need and importance of financing protected areas, and promote the development of funding mechanisms and strategies for successful park and protected area management;

(d) To promote protected areas in the context of conservation of important natural resources necessary for the sustainable development of the region;

(e) To promote and assist with the implementation of the guidelines on protected area establishment and management developed under the framework of SPAW.

Activities

85. Following the entering into force of the SPAW Protocol, the secretariat will initiate the development of draft guidelines for the evaluation of protected areas to assist with their listing under the SPAW Protocol as requested by the First Meeting of ISTAC (Kingston, 4-8 May 1992). Governments will be invited to nominate protected areas of regional concern to be included in the list of protected areas following the common guidelines developed for this purpose. If funding becomes available, a small workshop to assist with the development of those guidelines will be convened in collaboration with the STAC, relevant Governments and the SPAW-RAC.

86. The secretariat will continue to promote the regional network of marine protected areas (MPAs) (CaMPAM) and provide technical assistance to strengthen MPA management in the region. Specific activities will include:

(a) Continue implementation of the small grant fund to provide direct assistance to MPAs granting up to US\$ 8,000 per area, based upon request and priority needs, and in keeping with the relevant criteria developed for this purpose. This assistance will include small equipment, development or updating of management plans, development of a financial plan, implementation of education and outreach activities, interpretation, trails, monitoring, specific training, documentation, implementation of sustainable community projects, personnel exchange, etc.;

(b) Continuation of the updating and improvement of the MPA database through the CEP web page and include the mapping of areas and their critical ecosystems, such as coral reefs, seagrass beds and mangroves to gain knowledge on ecosystems still requiring protection;

(c) Continuation of the publication of information relevant to MPAs and CaMPAM in existing newsletters such as CEPNews and those of other relevant programmes;

(d) Development of a brochure or pamphlet on CaMPAM for wide dissemination among MPAs of the region;

(e) Continue the regular updating of the CaMPAM list server to serve as an effective tool for MPA managers to communicate among themselves, exchange information and experiences, and to seek advice and help with problem-solving;

(f) Promotion of the use of CaMPAM towards “twinning” and mentoring between MPAs in the region, as well as towards developing general guidelines for sharing databases and technical studies;

(g) Preparation and convening of a meeting of MPA managers to assist with reactivation of the network, furthering contacts and for identification of areas of priority. It is expected that countries will ensure that issues and concerns of managers of protected areas in the watersheds affecting MPAs will also be considered at this workshop. As a cost-saving measure, the workshop could also be used for the development of the guidelines for the protected areas evaluation mentioned above.

87. Under the four-year global UNEP project “International Coral Reef Action Network: A Global Partnership for Coral Reefs” (ICRAN) (UNEP(DEC)/CAR IG.19/Inf.5) recently approved by the United

Nations Foundation, several activities will be implemented in the Wider Caribbean in support of MPAs in collaboration with global partners such as the Global Coral Reef Monitoring (GCRMN) of ICRI, the World Fish Centre (ICLARM), the UNEP-World Conservation Monitoring Centre (WCMC), the Coral Reef Alliance (CORAL) and the World Resources Institute (WRI). Additionally, activities will be undertaken in coordination with the CaMPAM network, other regional initiatives and networks such as CAST and the Caribbean Fisheries Resource Management Programme (CFRAMP), relevant Governments, regional partners such as the World Conservation Union (IUCN), The Nature Conservancy (TNC) and local non-governmental organizations.

88. The primary objective of the ICRAN activities in the Wider Caribbean is to build capacity on the ground for the sustainable management of coral reefs, emphasizing the role of MPAs, local communities and the tourism sector. To this end, a number of regional and local activities will be implemented, including:

(a) Promotion of best practices within and around MPAs that will enhance management objectives while promoting sustainability (e.g. co-management, long-term funding strategies; community participation and alternative livelihoods, etc.);

(b) Training, coral reef monitoring and assessments (including socio-economic assessment of coral reefs) within and outside MPAs (see activities (c) and (d), paras. 97-101, below);

(c) Mapping of MPAs and their habitats, and public awareness targeted mostly to decision makers and developers with emphasis on the economic value of coral reefs (see activity (c), paras. 97-99, below).

89. In an effort to maximize results and sustainability, a major component of the ICRAN project in the region is the establishment of MPAs as demonstration sites which will be used to promote best practices at selected target sites, not only through the life of the project, but after its completion on a continuous basis. “Demonstration sites” will be selected on agreed criteria and on the basis of successful “best practice(s)” being implemented by such sites. These sites will also be provided with the necessary technical assistance to address current weaknesses and facilitate their functioning as “demonstration sites”. It is expected that, through the project, an effective network of demonstration sites

will be developed, furthering the objectives of CaMPAM. The following areas have been identified as preliminary demonstration (based on particular features they have to offer) and target sites (based on critical needs that must be addressed).

90. Preliminary demonstration sites are the Soufriere Marine Management Area (SMMA) in Saint Lucia; the Hol Chan Marine Park in Belize; the Bonaire Marine Park in the Netherlands Antilles; and the Si'an Kaan Biosphere Reserve in Mexico.

91. Preliminary target sites with relevant communities are Portland Bight and Negril, Jamaica; Parque del Este, Dominican Republic; Los Roques, Venezuela; Providencia National Park, Colombia; Bucoo Marine Park, Tobago; and Punta Frances, Cuba.

92. The secretariat will continue the development of the Block-B proposal to GEF to strengthen MPAs in the Caribbean as a joint collaborative effort with UNEP/ROLAC, UNDP, IUCN and TNC. It is expected that the proposal will be approved by GEF in 2002. The proposal seeks to address current gaps in coastal and marine conservation in the Central Caribbean, with emphasis on MPA establishment and management as it is closely linked to the CaMPAM and ICRAN objectives. The project will include various activities such as relevant assessment and research, monitoring, training, targeted awareness campaigns, promotion of best practices with the participation of all relevant stakeholders. The proposal directly responds to needs highlighted in the Programme of Action for the Sustainable Development of Small Island Developing States and complements another GEF project under development with similar objectives for the OECS countries.

93. Following the adoption and publication of the guidelines on revenue generation in 2001, the secretariat will also seek to provide access on a regional basis to training and technical assistance to protected areas for the application of the guidelines to generate funding for their management.

94. In keeping with previous decisions of the Fourth Meeting of ISTAC and of the Ninth Intergovernmental Meeting, the secretariat will seek funds to assess, through case studies and review, the effectiveness of collaborative management arrangements for marine and coastal protected areas throughout the region, particularly in those countries where existing co-management agreements are in place. There is an

increasing trend in the region towards collaborative arrangements between governments, non-governmental organizations, community organizations, the private sector, etc. for the management of marine and coastal protected areas. The belief that such arrangements are more efficient and can result in improved management is widely held, but concrete evidence is lacking. This activity could address the following:

(a) How effectively are protected areas and species being managed under co-management arrangements?;

(b) Are these arrangements resulting in reduced costs and more efficient use of human resources?;

(c) What are the impacts (positive and negative) of these arrangements on the local communities, natural resources and on the agencies and organizations involved in them?

95. The above-mentioned activity will result in a series of documented case studies and guidelines on the effective implementation of co-management arrangements for marine and coastal protected areas and could include a review workshop. This will be done in cooperation with relevant regional organizations, such as the Caribbean Natural Resources Institute, and the relevant organizations in each country.

96. If funding becomes available, activities in marine zoning, in particular for the conservation of biodiversity and sustainable fisheries, and to address the impacts of land-based sources of marine pollution on MPAs, will be developed. Specific activities include:

(a) Creation of an inventory of no-take areas in the region, closed fisheries seasons, their effectiveness and linkages to the MPA database;

(b) Development of guidelines for assessing socio-economic impacts of no-take reserves based on regional experiences, including a small workshop;

(c) Promotion of the expansion of dialogue between fisheries, fishers and MPA managers through the CaMPAM network.

(c) Training in Protected Areas and Wildlife Management

Objectives

97. The objectives of the project are:

(a) To make training opportunities available for managers of marine and coastal protected areas and wildlife;

(b) To implement the training component of the ICRAN project;

(c) To develop a cadre of MPA managers in the region duly trained in the subject matter and with skills to train others within the local context.

Activities

98. A major activity for the biennium will be the continuation of the implementation of the Training of Trainers Programme initiated in 1999 for MPAs under the ICRAN project. This will include:

(a) Compilation by Governments of their national training programmes relevant to protected areas and wildlife to assist the secretariat in identifying existing resources and potential technical support;

(b) Implementation of two additional training of trainers regional courses for English-speaking (2002) and Spanish-speaking (2003) MPA managers;

(c) Implementation of local training activities by trainees following the regional courses for which nominal financial support will be provided;

(d) Identification of "best practices" MPAs to be selected as sites for future training and "internships" within the region;

(e) An assessment of the impact of the training programme to evaluate its effectiveness and to provide direction for future courses.

99. Another major activity will be to continue and enhance coordination with relevant organizations, such as the secretariats of the Convention for International Trade of Endangered Species and the Convention on the Conservation of Migratory Species of Wild Animals, IUCN, Wider Caribbean Sea Turtle Recovery Network (WIDECAST) and national agencies such as United States Fish and Wildlife Service, to develop collaboration on training activities in wildlife management of relevance to the region.

(d) Conservation of Threatened and Endangered Species and Development and Promotion of Regional Guidelines for Wildlife Management

Objectives

100. The objectives of the project are:

(a) To build consensus in the region on priorities for the management of endangered migratory species;

(b) To implement priority activities of existing species recovery and management plans developed under the framework of SPAW;

(c) To develop, as appropriate, adequate management plans and programmes for priority species of regional concern, including those of economic importance for the region.

Activities

101. A number of activities are being planned based on priorities already identified by Governments during previous meetings and follow-up to past or ongoing activities. These include:

(a) Updating, maintenance and dissemination of the SPAW species database through the CEP web page in collaboration with Monitor International and UNEP-WCMC;

(b) Selection and implementation of priority actions contained in the national sea turtle recovery plans for interested and committed countries;

(c) Preparation of two additional recovery plans for sea turtles in interested and committed countries in collaboration with relevant organizations such as WIDECAST;

(d) Continued implementation of the regional manatee management plan; preparation of two national recovery plans for manatees in interested and committed countries and in collaboration with relevant organizations;

(e) Follow-up as appropriate, to the recommendations of the Regional Sea Turtle Consultation (Santo Domingo, 16-18 November 1999) and the First Convention for International Trade of Endangered Species Wider Caribbean Hawksbill Turtle Dialogue (Mexico, 15-17 May 2001), including finalization of the regional sea turtle management

guidelines and support for their application, in particular in the area of alternative economic activities such as ecotourism;

(f) Coordination with CFRAMP and the Caribbean Fisheries Management Council on the development of the regional management plans for queen conch and spiny lobster for the region, and identification of activities for support;

(g) Collaboration with Governments and relevant organizations, such as the International Fund for Animal Welfare (IFAW), the Marine Education and Research (MER) Centre and the Eastern Caribbean Cetacean Network (ECCN) on the development of the regional action plan and conservation programme for marine mammals, with emphasis on information gathering and education;

(h) Continued preparation and publication of educational materials on conservation of priority species in collaboration with partner organizations, such as the Caribbean Conservation Association (CCA), ECCN, IFAW, the MER Centre, WIDECAS, etc.;

(i) Initiation of the collection of information on spawning areas with the assistance of relevant organizations such as CFRAMP and the Gulf and Caribbean Fisheries Institute and based on availability of funding.

(e) Conservation and Sustainable Use of Major Ecosystems in the Wider Caribbean Region

Objectives

102. The objectives of the project are:

(a) To assist with the management of the coastal and marine ecosystems of the region on a sustainable basis, particularly through sustainable practices;

(b) To mobilize the political will and actions of Governments and other partners for the conservation and sustainable use of coral reefs and associated ecosystems such as mangroves and seagrass beds and within the framework of ICRI.

Activities

103. A major component of this SPAW activity will be the implementation of the Caribbean component of the

global ICRAN project (UNEP(DEC)/CAR IG.19/Inf.5), which seeks to reverse the decline of coral reefs. ICRAN consists of a set of inter-linked, complementary activities designed to assist with the implementation of the ICRI Framework for Action, and to facilitate the proliferation of good practices for coral reef management and conservation. ICRAN activities directly relevant to MPAs were described under activities (b) and (c) above (paras. 84-99). The following activities of ICRAN relate specifically to coral reefs in the Wider Caribbean and include:

(a) Collection and analysis of data and information on status, condition and protection of coral reefs and their threats in the region, including relationships between human activities and reef condition and production of the Reefs at Risk materials (in collaboration with WRI);

(b) Assessment of ecological and socio-economic impacts of coastal activities and watershed practices on coral reef ecosystems, including coral reef valuation and analysis of policy instruments, through relevant monitoring and studies by Reefs at Risk, GCRMN and ICLARM. This will include relevant socio-economic assessments of corals, including a training workshop on socio-economic assessment of coral reefs;

(c) Review of existing management practices on MPAs and World Conservation International sites with coral reefs, case studies and promotion of best practices in particular those related to tourism and fisheries (case studies results will be packaged and widely disseminated within and outside the region as appropriate through the information component of ICRAN managed by CORAL);

(d) Low cost, standardized coral reef monitoring among all participating ICM sites and MPAs to include participation in GCRMN/ReefBase, the Caribbean Coastal Marine Productivity programme (CARICOMP) and ReefCheck.

104. The objective of the Reefs at Risk Caribbean study funded under ICRAN is to develop an integrated base of information as the first step towards better identification of the causes of reef degradation. Although information is available for some locations on changes in coral reef condition and the causes of these changes, the majority of sites are not well studied. The majority of the Caribbean's coral reefs have not been surveyed or consistently monitored over

time. In addition, much of the data from monitoring has not been compiled or made publicly available. Although information from both scientific and volunteer surveys is increasing, this information is typically not well integrated with information on human activities that have the potential to contribute to the degradation of coral reefs. The Reefs at Risk approach uses the power of geographical information systems (GIS) to model risk factors and generate a threat-based indicator of coral reefs. It does this by identifying and applying decision rules. The detailed GIS-based modelling proposed under this project will result in a systematic and consistent data base of threats to coral reefs and an estimation of what is at stake if these threats are not reduced. The Regional Reefs at Risk in the Caribbean has four primary goals, as follows:

(a) Collect and integrate information to improve the base of information available for examining threats to, status of, and protection of coral reefs within the Wider Caribbean;

(b) Evaluate and model the relationships between human activities and reef condition. Like the global Reefs at Risk analysis, this will allow for extrapolation about threats to (and likely condition of) the many reefs for which survey information is not available;

(c) Develop a GIS-based tool for more local-level evaluation of development scenarios and related implications for coral reef health and economic value;

(d) Raise awareness through wide dissemination of integrated data sets, model results, economic valuations, a published report, an educational poster, and the GIS planning tool.

105. Currently, the value of coral reefs and related ecosystems in the Caribbean is not well quantified. Although rough global estimates of the value of coral reef, mangrove and seagrass resources have been performed, these estimates are not of sufficient quality or detail to justify changes in management practices. For several countries in the region, an analysis of the value of coastal resources in both healthy and degraded states will be undertaken, taking into account the threats from coastal development, pollution, sedimentation, and overfishing, in conjunction with the potential for tourism, fishing and other economic activities within coastal areas. These analyses will provide explicit justification for improved management

and protection of coastal resources. The threat modelling and economic valuation analysis are the central components of the project products.

106. Reefs at Risk in the Caribbean intends to provide information and tools to a wide audience. Targeted groups include international lending and development institutions; national marine protection officials, policy makers, resource managers; trade and tourism ministers; the scientific community; non-governmental organizations and the general public. All project results will be made available over the Internet. The published report and poster will be widely distributed within the region. The GIS planning tool and data sets, in addition to being available over the Internet, will be shared with local partners on CD-ROM.

107. Support to subregional coral reef monitoring groups organized in 1999 to function as GCRMN nodes will continue (see UNEP(DEC)/CAR IG.19/5), including group or on-site training, technical assistance, data management etc. The GCRMN was established to tackle the problems of deterioration of coral reefs and to provide valid management data. Under SPAW nodes have been functioning effectively for the eastern and southern Caribbean. An additional node for the northern Caribbean will be established at the Centre for Marine Sciences of the University of the West Indies in collaboration with the initiative to follow-up the Organization of American States/GEF Caribbean Climate Change Adaptation Project. Under the framework of the World Bank's Mesoamerican Barrier Reef Initiative project, another node for the western Caribbean is expected to be established during the biennium. The coordinators of the nodes will closely communicate with UNEP-CAR/RCU, as well as with ReefCheck and with the CARICOMP Data Centre. Any method of choice will be valid for the monitoring, such as CARICOMP, ReefCheck, and Atlantic and Gulf Rapid Reef Assessment methods depending on the needs and capabilities of the countries. The data emanating from the nodes will be provided to the CARICOMP Data Centre and to the global ReefBase, and will be used to produce the Status of Coral Reefs of the World report every two years, which will be a composite of country and regional reports.

108. In keeping with its functions as the ICRI regional contact, the secretariat will continue collaborating with the ICRI secretariat, in particular on preparations for the Coordinating and Planning Committee meetings of

2002 and 2003 and for the convening of the second regional ICRI workshop tentatively scheduled for June or July 2002 in Jamaica. Partial funding to facilitate the convening of that meeting has been secured under the ICRAN project.

109. Additionally, and in keeping with decisions of the Ninth Intergovernmental Meeting (February 2000), the following activities not yet implemented will be developed in the forthcoming biennium if funding becomes available:

(a) Facilitation of the integration of national STACs within the framework of GCRMN and ICRI;

(b) Reprinting and wide dissemination of National Oceanic and Atmospheric Administration (NOAA) and Health Ecological and Economic Dimensions (HEED)/NOAA coral reef diseases identification cards;

(c) In the light of the importance of land-based impacts on coral reefs, preparation of a review paper on successful examples of co-management of land, for presentation to policy and decision makers;

(d) Promotion of activities relating to the conservation and sustainable use of mangroves, including a general diagnosis based on existing information on the state of mangroves in the region and their management.

110. The secretariat will continue the promotion of sustainable tourism practices and will expand from the achievements and shortcomings of the Caribbean Environment Network (CEN) project as appropriate. This will include:

(a) Development of carrying capacity assessment instrument for Caribbean coastal environments. This will provide developers, architects, engineers, building regulators and others responsible for the design and implementation of tourism developments, with a tool to guide the design and development process towards greener facilities. A simplified quantitative carrying capacity assessment instrument will be designed for estimating the allowable building area on a given site as an easy-to-use tool to support design and engineering activities that are environmentally sustainable. Activities will include data and information gathering to appropriately define parameters used in the quantitative procedures of the carrying capacity instrument; the development of guide booklets as support documentation to users; and

convening of a regional experts' meeting to review implementation procedures for the carrying capacity assessment instrument such that it is ready for field testing and adoption in the region;

(b) Development of standards for sustainable tourism. This will be accomplished by the provision of technical assistance (with partners such as CTO and CHA, and with input from local communities, as appropriate) in the analysis and development of environmental standards for the industry. This will be done through the assessment of existing water quality standards, management of coastal resources and sustainable building guidelines;

(c) Strengthening of human capacities for sustainable tourism to include two additional regional training courses using the training manuals developed from the CEN project; publication in Spanish, of resource materials from the CEN project (particularly the Green Resource Directory, Case Studies in Best Management Practices in Hotels, Sand Dune Management Manual and the Manual for Sewage Treatment Operators); and support to the development of national strategies for sustainable tourism through the preparation of diagnostics of key tourism areas and national consultation processes with stakeholders in three pilot countries where preliminary work was undertaken through CEN (possibly Anguilla, Dominican Republic, and Saint Lucia). Capacity-building for the preparation and implementation of programmes in community-based tourism will be encouraged;

(d) Assisting as feasible CTO, CHA/CAST and CCA with the promotion and coordination of the Blue Flag Campaign in the Wider Caribbean. The Blue Flag Campaign is a voluntary certification scheme for beaches and marinas which has been successfully operating in Europe since the 1970s and which is being promoted by UNEP and other organizations in other regions of the world.

C. Information systems for the management of marine and coastal resources

1. Background

111. CEPNET is the CEP subprogramme which provides overall support to all the activities of CEP by promoting effective information management. A focus is given to the development of mechanism that can facilitate the dissemination of environmental information relevant to the CEP priorities. This includes access to data, information, and network of expertise and knowledge. The development of tools for geographic analysis to support environmental decision making has become a primary field of activity for CEPNET. It has the capacity to implement projects and/or support training programme in GIS, remote sensing, Internet-based applications, such as web-GIS, on-line training and clearing house mechanisms.

112. CEPNET is responsible for the development and maintenance of the CEP web site (<http://www.cep.unep.org>), which has now integrated the CEPNews bulletin into the CEPNews Centre. The CEP web site also offers the CEP Technical Report series, thematic databases, environmental links relevant to the Wider Caribbean Region, and other CEP publications. Increasingly CEPNET relies on the Internet to provide connections for information exchange among those concerned with the conservation and sustainable development of the coastal marine resources of the Wider Caribbean Region. The documents of all CEP meetings are distributed through the CEP web site in English, French and Spanish.

113. The subprogramme is also responsible for the regionalization of global information systems and for assisting in the implementation of global and regional environmental assessments (Global Environment Outlook (GEO), Global International Waters Assessment (GIWA) and others).

114. The primary objectives of the CEPNET subprogramme are:

(a) To strengthen capabilities for coastal and marine resources information management in the Wider Caribbean Region and the CEP countries;

(b) To increase access to marine and coastal resources information through strengthening of networking mechanisms and database development;

(c) To disseminate information resulting from the projects and activities of CEP;

(d) To assist the regional subprogrammes of CEP in matters related to information management.

115. This workplan is the continuation of the projects and activities of the biennium 2000-2001. As explained in the draft status report for the biennium 2000-2001 (UNEP (DEC)/CAR IG.19/5), the CEPNET subprogramme saw an important reduction in human and financial resources after the CEPNET/IDB project in January 2000. The position of Programme Officer was filled on a permanent basis only in November 2001, which affected project development and fund-raising activities. However, this lapse offered the possibility to redefine the CEPNET priorities and the tools and mechanisms that it will support and develop in order to reach its objectives.

116. The following draft workplan thus represents a continuity of the previous efforts and successes and at the same time, a presentation of what the CEP network should build upon in the next biennium and what it should aim at.

117. Some projects presented below are a series of ongoing activities related to CEPNET objectives. The others are either deriving from previous activities or are designed to take advantage of potential partnerships and funding opportunities. All are seen as being adapted to the more accessible and more performing Internet environment and aim at answering the new and changing needs of the CEP community.

2. Projects and activities

(a) Programme coordination

Objectives

118. The role of CEPNET is twofold. It provides internal support to the secretariat's activities and coordinates information management in the Wider Caribbean Region through the CEP network. Thus, it participates in drafting and implementing projects with other CEP subprogrammes, so that data and information are produced in an appropriate manner for further dissemination and utilization in the region. It will also coordinate with other relevant institutions and organizations in project development, implementation and fund-raising.

119. With the Programme Officer in place since November 2000, the tools developed under the CEPNET/Inter-American Development Bank (IDB) Project can be further developed and updated to provide useful services to the CEP network.

Activities

120. The subprogramme will support and counsel the AMEP, SPAW and Education, Training and Awareness (ETA) subprogrammes for the preparation, maintenance and dissemination of their databases.

121. It will coordinate the preparation and dissemination of the CEP products, primarily on the Internet: the Technical Reports series; the CEP brochure (2001); the CEPNews Centre; CEP meeting documents; and other publications, as required. Most of the CEP publications are available in English, French and Spanish.

122. It will be responsible for the preparation and delivery of an in-house training programme to the secretariat personnel for computer and Internet-related applications.

123. It will coordinate responses to requests for information and external surveys on a day-to-day basis.

124. CEPNET will assist the Coordinator and the CEP subprogrammes in the establishment and monitoring of e-groups on subjects relevant to CEP.

125. The subprogramme will coordinate with other UNEP and United Nations agencies, such as GIWA, ROLAC, the Global Ocean Observing System and GPA to develop opportunities and assist the implementation of global programmes.

126. Partnerships will be developed with national, regional or international institutions and organizations for fundraising activities and technical proposals.

(b) Strengthening of the secretariat's information management capabilities

Objectives

127. The subprogramme aims to increase the overall capacity of the secretariat by improving technical resources, related staff knowledge and data accessibility. This improved efficiency in information management should be reflected in the capacity of the

secretariat to design, implement and sustain projects for CEP.

Activities

128. The subprogramme will keep up-to-date and optimized computing and network facilities of the secretariat. A new server, five new desktop computers and two new portable computers are to be added to the existing infrastructure.

129. A computer training room will be installed at the secretariat, using existing equipment.

130. The CEP Experts, Institutions and Focal Points database will be maintained.

131. On an ongoing basis, development of the Intranet will continue; the web site will be populated with more information and databases (including the CEP archives).

132. There will be coordination with the AMEP, SPAW and ETA subprogrammes for database development, training and networking.

(c) Strengthening the Caribbean Environment Programme network and communication mechanisms

Objectives

133. The goal is to provide CEP member States and other relevant institutions and organizations with the most complete information relevant to the protection and development of coastal and marine resources in the most efficient way possible. This should take advantage of the capacities of the Internet, while taking into consideration the limitations and constraints imposed by the large variability in resources availability and in technical capacities in the Wider Caribbean Region. This ongoing concern of the secretariat is probably one of the most important CEP achievements.

Activities

134. The project will continuously update, adapt and improve the dissemination mechanisms of the information hosted on the CEP web site, as follows:

- (a) Populate and monitor the CEPNews Centre;

(b) Integrate the GPA clearing house node (see below) to promote the development of a regional database;

(c) Update the CEPNET/IDB pages with participating interested countries;

(d) Link to the UNEP-WCMC Interactive Map Service;

(e) Update and maintain the CaMPAM databases;

(f) Maintain and update the CEP Technical Reports series;

(g) Add relevant links.

135. A periodic factsheet of the CEPNews Centre and the CEP web site additions and novelties will be distributed electronically, or by other means.

136. The project will coordinate with Monitor International to host the SPAW Species database.

137. Other relevant databases, as requested or identified by the CEP subprogrammes will be organized and maintained.

138. The project will coordinate and link with other regional Internet-based databases (the Caribbean Planning for Adaptation to Global Climate Change, the University of the West Indies Centre for Environment and Development (UWICED) and others as identified).

139. A strategy will be prepared to develop an on-line training courses bank in environmental information management (GIS, remote sensing) with other institutions, such as UWICED, the University of the West Indies Centre for Caribbean Land and Environmental Appraisal Research, and others.

140. Analyses will be done of web site hosting alternatives (currently at the Global Resource Information Database (GRID)- Sioux Falls), including UNEPnet and Mercure, host sharing with other institutions, direct line with local provider, etc.

141. Up-to-date information will be maintained on technological development related to the Internet medium in fields related to networking and database infrastructure.

(d) Spatial Analysis for Decision Making

Objectives

142. The project aims to acquire the resources to develop, with relevant institutions and organizations, the tools and knowledge to increase the use of spatial analysis and modelling in the decision-making process of environment management in the Wider Caribbean Region. The existing experience and knowledge of CEPNET and its partners in the field of GIS, remote sensing and Internet is integrated and developed to take advantage of the evolving World Wide Web environment and to facilitate access to dataset and analytical tools.

Activities

143. The project will update the State of the Coast reports on the CEP web site with interested countries of the CEPNET/IDB project, and make available on the web site the integrated regional report.

144. It will promote the CEPNET Technical Advisory Services for needs and gaps assessments, system design, project implementation, training, dissemination and communication, and strengthen the Experts database available to the Technical Advisory Services.

145. There will be coordination with TNC for a pilot project in the use of remote sensing and web-GIS for the integrated analysis of the degradation of class I waters.

146. The project will update and seek funding for a proposal for training in remote sensing for management of coastal and marine resources.

147. The creation of metadata in every project generating or disseminating spatial environmental information will be promoted.

148. There will be coordination with CEP members to design a regional approach to web-GIS for the management of land-based sources of marine pollution.

149. The UNEP-WCMC Interactive Map Service will be integrated and promoted as a web-GIS instrument for coastal and marine resources management.

150. Coordination with partner agencies will be carried out to update and optimize the CEP clearing house and search mechanism.

(e) Caribbean Environment Programme clearing house mechanisms*Objectives*

151. The objective of the project is to establish the interconnections with global and regional Internet-based clearing house mechanisms to (a) provide to the CEP community an easier and wider access to relevant information; and (b) increase the dissemination of the data and information collected and generated by the CEP community.

Activities

152. The AMEP subprogramme will be supported with the GPA clearing house, which is a referral system through which decision makers at the national and regional levels are provided with access to current sources of information, practical experience and scientific and technical expertise relevant to developing and implementing strategies to deal with the impacts of land-based activities. It consists of three elements: a data directory; an information-delivery mechanism; and the infrastructure.

153. The existing prototype will be updated and modified and tested at CAR/RCU. Information forming the node will be organized according to the GPA templates.

154. After acceptance of the prototype clearing house node, CEP will invite countries with the technical capacity, existing database and interest to participate at developing the decentralized database on land-based sources of marine pollution.

155. Funding for the development of the node will be sought for in conjunction to other CEPNET-related activities, such as web-GIS development.

156. In addition to the GPA clearing house, CEPNET will propose a letter of agreement to the Convention on Biological Diversity to link the CEP and Convention clearing houses. The Convention is becoming a major global source of Internet-based information and can thus provide an important portal for the Wider Caribbean Region.

157. The CEP clearing house needs to be reorganized because of protocol changes at the current host location (GRID- Sioux Falls). CEPNET will coordinate with NOAA and with the United States Federal Geographic

Data Committee to join their clearing house (also linked to GPA).

(f) Coordination with global and Regional Environmental Assessments Initiatives*Objectives*

158. The objective of this project is to facilitate the preparation and dissemination of environmental assessments executed by or with other international organizations to further develop the environmental information made available to the CEP community and to promote the dissemination of information and knowledge owned by the regional individuals and institutions.

Activities

159. There will be active participation in the planning, preparation, reporting and dissemination of the Global Environment Outlook for Latin America and the Caribbean (GEO-LAC). Follow-up to the planning meeting of GEO-LAC in Costa Rica (May 2001) will be carried out by the CEPNET Programme Officer.

160. The GIWA subregional task force for the Caribbean (subregions 3 and 4 of GIWA) will be coordinated. The project involves meetings of experts to implement the GIWA methodology using environmental indicators. The CEPNET Programme Officer will attend the GIWA General Assembly in Sweden in June 2001 and the first and second Caribbean meetings are scheduled for August and November 2001, respectively. The final assessment should be produced in the first quarter of 2002.

161. Elements of the strategic approach on coastal population vulnerability to natural disaster assessment will be implemented. Although outside the main focus of CEP and not in the expertise or main objectives of CEPNET, links to and promotion of global and regional initiatives in risks mapping assessment will be created and maintained on the CEP web site to facilitate the dissemination of information. Specific projects or initiatives that will be promoted are:

(a) The OAS Caribbean Disaster Mitigation Project and the United States Agency for International Development: <http://www.oas.org/en/cdmp>

(b) The European Commission Humanitarian Aid Office: http://www.europa.eu.int/comm/echo/en/index_en.html

(c) The UNEP Project of Risk Evaluation, Information and Early Warning (PREVIEW): <http://www.grid.unep.ch/preview/>

(d) The Centro de Coordinación para la Prevención de los Desastres Naturales en América Central: <http://www.cepredenac.org>

(e) La Comisión Económica para América Latina y el Caribe: <http://www.eclac.cl/analisis/TES53.htm>

D. Education, Training and Awareness⁶

1. Background

162. This subprogramme is responsible for the development of the research, technical and managerial capability of Caribbean States and Territories, to address environmental issues adequately. As there is no Programme Officer for ETA, the tasks are supervised and developed by the Coordinator and the Programme Officers of AMEP, SPAW and CEPNET, where such activities can be integrated into the projects developed under the CEP workplan and budget.

163. The objectives of the ETA programme are:

(a) To transform and improve educational systems for the integration of a consistent and positive behaviour towards the environment, and in particular, an understanding of the value and relevance of marine and coastal resources;

(b) To strengthen training programmes at the national and regional levels, aiming at the improvement of technical and managerial skills of

decision makers responsible for the management of marine and coastal resources;

(c) To support the public awareness efforts of the media, community-based and non-governmental organizations geared towards the economic sectors and the general public for a better understanding of and a positive interaction with marine and coastal resources.

2. Projects and activities

(a) Promoting Awareness and Understanding of the LBS Protocol

Background

164. In 1990, the Group of Experts on the Scientific Aspects of Marine Pollution estimated that 80 to 90 per cent of marine pollution came from land-based sources and activities. In 1995, the Global Programme of Action on Land-based Activities was adopted in Washington, D.C., and in 1999 the Protocol Concerning Pollution from Land-based Sources and Activities (LBS Protocol) to the Cartagena Convention was adopted in Aruba. Despite these significant findings, initiatives and agreements, many policy makers and decision makers in the Wider Caribbean are still unaware of the significant impacts of land-based marine pollution on human, environmental and economic health. Moreover, many of these same decision makers are completely unaware of, or do not fully understand, the international instruments available to address this threat, such as GPA and the LBS Protocol. The First Meeting of LBS/ISTAC identified the need for an awareness campaign to actively promote the LBS Protocol to Wider Caribbean decision makers. Although the decision makers may be the final target audience of such a campaign, the awareness campaign must strike at all Wider Caribbean stakeholders at both the regional and national level.

Objective

165. This project will develop a communications strategy and materials to raise awareness of the LBS Protocol in the region. The ultimate objective of such a strategy is to promote ratification and implementation of the Protocol at the earliest possible date. Although much of the awareness-building at the national level can be facilitated by the LBS Protocol and CEP national focal points, many of the awareness materials

⁶ Consistent with the decision taken by the Eighth Intergovernmental Meeting, the ETA subprogramme is not currently being coordinated separately by a CEP Programme Officer. As such the activities have been incorporated into the other subprogrammes as appropriate and relevant. In decision 11 of the Ninth Intergovernmental Meeting, the secretariat was requested to provide a draft ETA workplan for the biennium 2002-2003 and that the subprogramme be reformulated to provide assistance to the Protocols. Consistent with that decision, the following ETA workplan is presented to the Thirteenth Meeting of the Monitoring Committee for review.

should be developed at the regional level to promote uniformity and comprehensiveness of the message.

Activities

166. *Development of a communications strategy for the LBS Protocol.* The strategy will review materials needed, workshops to be held and other appropriate and relevant means of communication. (The secretariat notes the offer made by the Government of Colombia, during the First Meeting of LBS/ISTAC, to support the development of awareness workshops.)

167. *Development of Awareness Materials.* Materials will include a general brochure on the LBS Protocol, its objectives, and benefits for the region and individual countries and a checklist of policy, legislative and technical requirements of the Protocol to be used as a needs analysis for ratification and accession by the Contracting Parties.

(b) Coordination with the Caribbean Environment Programme and its subprogrammes

Objectives

168. The project will facilitate the design and implementation of collaborative project in environmental education at the national and regional level; promote the development of adapted training programme in every sector of the society; and increase awareness to the protection and development of coastal and marine resources.

Activities

169. The project will gather and prepare ETA materials on CEP and CEP-related themes for dissemination through the Internet or to be distributed by project teams.

170. Liaison with the CEP community and the general public will be maintained by providing indications on information availability regarding the protection and development of coastal and marine resources.

171. The Schools Environment Programme of Jamaica will be assisted in developing training and educational materials through its project "Environmental Education for Sustainable Development". The material should be adapted for replication in other Wider Caribbean Region countries. The secretariat will help in preparing materials and in securing funding for its preparation.

172. The AMEP subprogramme will be given support in the implementation of a training programme within the framework of the projects entitled:

(a) Reducing Pesticide Run-off to the Caribbean Sea;

(b) Planning of Rehabilitation, Environmental Management and Coastal Development in Nicaragua, Honduras and Guatemala in the Wake of Hurricane Mitch;

(c) Rehabilitation of Contaminated Bays (knowledge sharing, nutrient removal technologies, sewage sludge utilization and study tours).

173. Material for the SPAW subprogramme will be gathered and prepared for dissemination through the CEPNews Centre and the "MPA Corner" of the CEP web site.

174. The CEPNET subprogramme will be assisted in a collaborative ETA initiative with UWICED, by preparing on-line training materials for spatial analysis projects.

Annex I

See Spreadsheet file.

Consolidated table

Activity	2002				2003			
	Budgeted CTF	Other Contributions	Total Cost	Required Balance	Budgeted CTF	Other Contributions	Total Cost	Required Balance
Sub-total OCCC	1,329,445	247,700	1,985,805	420,360	1,302,890	254,960	2,189,990	644,100
Sub-total AMEP	124,300	8,756,650	18,412,700	9,531,750	53,250	8,226,000	18,279,000	9,999,750
Sub-total SPAW	180,800	327,700	711,900	203,400	163,850	276,850	621,500	180,800
Sub-total CEPNET	30,510	40,000	389,170	318,660	22,600	0	281,370	258,770
Sub-total ETA	0	0	118,650	118,650	0	0	84,750	84,750
Grand Total	1,665,055	9,372,050	21,618,225	10,592,820	1,542,590	8,757,810	21,456,610	11,168,170

2002-2003 CEP Budget

Activity	2002				2003			
	Budgeted		Total Cost	Required Balance	Budgeted		Total Cost	Required Balance
	CTF	Other Contributions			CTF	Other Contributions		
OCCC								
Professional Salaries	454,000	210,000	1,036,000	372,000	464,000	217,000	1,066,000	385,000
Admin. Salaries	272,000	26,000	298,000	0	275,000	26,000	301,000	0
Consultants & sub-contracts	10,000	0	10,000	0	10,000	0	10,000	0
Travel	100,000	0	100,000	0	108,000	0	108,000	0
Fellowship training	0	0	0	0	0	0	0	0
Meetings	140,000	0	140,000	0	95,000	0	280,000	185,000
Equipment	25,000	0	25,000	0	25,000	0	25,000	0
Rent	72,000	0	72,000	0	72,000	0	72,000	0
Maintenance	15,000	0	15,000	0	15,000	0	15,000	0
Reporting	40,000	0	40,000	0	40,000	0	40,000	0
Sundry	48,500	0	48,500	0	49,000	0	49,000	0
				0				
Sub-total	1,176,500	236,000	1,784,500	372,000	1,153,000	243,000	1,966,000	570,000
Programme Support costs 13% (amount subject to change based on source of funding)								
	152,945	11,700	201,305	48,360	149,890	11,960	223,990	74,100
Sub-total OCCC	1,329,445	247,700	1,985,805	420,360	1,302,890	254,960	2,189,990	644,100

Activity	2002				2003			
	Budgeted		Total Cost	Required Balance	Budgeted		Total Cost	Required Balance
	CTF	Other Contributions			CTF	Other Contributions		
AMEP								
a) Coordination (costs covered in OCCC)	0	0	0	0	0	0	0	0
b) Reducing Pesticide Run-off to the Caribbean Sea (GEF Project Development) *	0	2,500,000	4,500,000	2,000,000	0	2,000,000	4,500,000	2,500,000
c) Planning for Rehabilitation, Environmental Mangement and Coastal Development in the Wake of Hurricane Mitch	0	110,000	110,000	0	0	200,000	200,000	0
d) Integrating Management of Watersheds and Coastal Areas in SIDS of the Caribbean (GEF Project Development) *	0	6,000,000	10,000,000	4,000,000	0	6,000,000	10,000,000	4,000,000
e) Training for Rehabilitation of Contaminated Bays **	0	120,000	120,000	0	0	0	0	0
f) Second Regional Overview of Land-based Sources and Activities in the WCR	25,000	0	120,000	95,000	25,000	0	100,000	75,000
g) Sewage Collection and Treatment -- Implementing Annex III ***	60,000	0	3,060,000	3,000,000	0	0	3,000,000	3,000,000
h) Pilot Projects to Implement Annex IV -- Best Management Practices for Agriculture	25,000	0	75,000	50,000	25,000	0	50,000	25,000
Sub-total	110,000	8,730,000	17,985,000	9,145,000	50,000	8,200,000	17,850,000	9,600,000
Programme Support costs 13% (amount subject to change based on source of funds)	14,300	26,650	427,700	386,750	3,250	26,000	429,000	399,750
Sub-total AMEP	124,300	8,756,650	18,412,700	9,531,750	53,250	8,226,000	18,279,000	9,999,750

* "Other Contributions" are funds expected from GEF

** "Other Contributions" are funds approved by GEF

*** CTF contributions are from earmarked USA funding

Activity	2002				2003			
	Budgeted		Total Cost	Required Balance	Budgeted		Total Cost	Required Balance
	CTF	Other Contributions			CTF	Other Contributions		
SPAW								
a) Co-ordination (salary costs covered by OCCC)								
Consultants	10,000	0	10,000	0	10,000	0	10,000	0
Assist Governments with legislation	20,000	0	20,000	0	30,000	0	30,000	0
b) Strengthening of the parks and protected areas in the Wider Caribbean and promotion of guidelines for protected area management *	50,000	50,000	150,000	50,000	0	0	0	0
c) Training in Protected Areas Management *	10,000	40,000	70,000	20,000	15,000	45,000	80,000	20,000
d) Conservation of Threatened and Endangered Species and Development and Promotion of Regional Guidelines for Wildlife Management	20,000	0	80,000	60,000	20,000	0	80,000	60,000
e) Conservation and Sustainable Use of Major Ecosystems in the Wider Caribbean Region *	50,000	200,000	300,000	50,000	70,000	200,000	350,000	80,000
Sub-total	160,000	290,000	630,000	180,000	145,000	245,000	550,000	160,000
Programme Support costs 13% (amount subject to change based on source of funds)	20,800	37,700	81,900	23,400	18,850	31,850	71,500	20,800
Sub-total SPAW	180,800	327,700	711,900	203,400	163,850	276,850	621,500	180,800

* "Other Contributions" in both years are from ICRAN Action Phase

2002-2003 CEP Budget

Activity	2002				2003			
	Budgeted		Total Cost	Required Balance	Budgeted		Total Cost	Required Balance
	CTF	Other Contributions			CTF	Other Contributions		
CEPNET								
a) Coordination (costs covered in OCCC)	0	0	0	0	0	0	0	0
b) Strengthening of the Secretariat's Information Management Capabilities								0
i) Intranet development	4,000	0	4,000	0	5,000	0	5,000	0
ii) Database development	6,000	0	6,000	0	3,000	0	3,000	0
c) Strengthening of CEP Network and Communication Mechanisms								
i) Database development	7,000	0	7,000	0	5,000	0	12,000	7,000
ii) CEP website development	10,000	0	10,000	0	7,000	0	7,000	0
d) Spatial Analysis for Decision-making								0
i) Update and maintenance of CEPNET/IDB webpage	0	0	10,000	10,000	0	0	5,000	5,000
ii) Remote sensing and web-GIS for Class I Waters (pilot project)	0	0	70,000	70,000	0	0	50,000	50,000
iii) Web-GIS for land-based pollution	0	0	125,000	125,000	0	0	100,000	100,000
e) CEP Clearinghouse Mechanisms				0				0
i) GPA	0	0	35,000	35,000	0	0	35,000	35,000
ii) Other	0	0	15,000	15,000	0	0	10,000	10,000
f) Co-ordination with global and regional environmental assessment initiatives				0				0
i) GEO-LAC co-ordination	0	0	5,000	5,000	0	0	0	0
ii) GIWA co-ordination *	0	40,000	40,000	0	0	0	0	0
iii) Natural disasters vulnerability	0	0	2,000	2,000	0	0	2,000	2,000
iv) Others	0	0	20,000	20,000	0	0	20,000	20,000
Sub-total	27,000	40,000	349,000	282,000	20,000	0	249,000	229,000
Programme Support costs 13% (amount subject to change based on source of funds)	3,510	0	40,170	36,660	2,600	0	32,370	29,770
Sub-total CEPNET	30,510	40,000	389,170	318,660	22,600	0	281,370	258,770

* "Other Contributions" expected from GIWA

2002-2003 CEP Budget

Activity	2002				2003			
	Budgeted		Total Cost	Required Balance	Budgeted		Total Cost	Required Balance
	CTF	Other Contributions			CTF	Other Contributions		
ETA								
a) Promote Awareness and Understanding of the LBS Protocol	0	0	55,000	55,000	0	0	25,000	25,000
b) Co-ordination with CEP Sub-programmes	0	0	50,000	50,000	0	0	50,000	50,000
Sub-total			105,000	105,000	0	0	75,000	75,000
Programme Support costs 13% (amount subject to change based on source of funds)	0	0	13,650	13,650	0	0	9,750	9,750
Sub-total ETA	0	0	118,650	118,650	0	0	84,750	84,750