



UNEP

**United Nations
Environment
Programme**

Distr. LIMITED

UNEP (DEPI)/CAR WG.33/INF.5/Rev 1
18 April, 2012

Original: ENGLISH

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

Punta Cana, Dominican Republic, 24 October, 2012

Report of the Interim Working Group on Environmental Monitoring and Assessment

For reasons of economy and the environment, Delegates are kindly requested to bring their copies of the Working and Information documents to the Meeting, and not to request additional copies.

*This document has been reproduced without formal editing.

Contents

Introduction	2
Priority Areas	3
Outline of a Framework for the State of the Convention Area Report	9
Annexes	22
Annex 1: Terms of Reference of the Interim Working Group	22
Annex 2: Minutes of the Teleconference Meetings of the Interim Working Group on Environmental Monitoring and Assessment	26
Annex 3: Tools for Document Collaboration	71

INTRODUCTION

Decision XI of the 14th IGM on the Action Plan for the Caribbean Environment Programme and 11th COP to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, stated: (a) recognizing the efforts by the Secretariat and by RAC CIMAB to produce the final draft report of the update of Caribbean Environment Programme Technical Report No.33; (b) acknowledging the significant contributions from member Governments to enable the completion of the update; and (c) noting the continued efforts by the Secretariat to strengthen its information and data management capacity and its proposed hosting of clearing house and information dissemination mechanisms. Decided to: Establish an Interim Working Group to continue work related to monitoring and assessment that could use Technical Report No. 33 as a baseline document; with the goal to improve effluent reporting and assessment of water quality conditions throughout the Convention Area, under the LBS Protocol (Decision 3), and; Request the Secretariat to identify resources for convening regional technical meetings as part of the 2010-2011 Work plan in support of the work (Decision 4).

In response to Decision XI the Secretariat requested country nominations from all Contracting Parties of the Cartagena Convention for participation in the Interim Working Group. Nominations were received from the Governments of Bahamas, Barbados, Columbia, France, Jamaica, Mexico, Trinidad and Tobago and the United States of America. The LBS Regional Activity Centers RAC- Cimab (Cuba) and the RAC-IMA (Trinidad and Tobago) also participated in the work of the group to provide technical advice.

Jamaica was selected as the chair of the Interim Working Group, and Terms of Reference for the Working Group (annexed to this report) were developed and adopted during the 1st Teleconference call. Since the establishment of the Interim Working Group there have been a total of seven (7) Teleconference Meetings that were held in June 2011, July 2011, August, 2011, November 2011, January 2012 March, 2012, and August 2012. There was one (1) face to face Regional Workshop that was held 26-30 September, 2011. The minutes of the teleconference meetings are annexed to this report.

This report was presented to the 1st LBS STAC in June 2012. The LBS STAC made recommendations for the consideration of the 1st LBS COP. These recommendations noted that:

1. The Interim Working Group on Monitoring and Assessment continue its work through one form or another and provide on-going advice and support to the STAC and COP.
2. The existing Interim Working Group continue to work on the outline of the proposed State of Convention Area Report and to: (a) update this document based on discussions at the 1st LBS STAC meeting; (2) give specific consideration to the presentation of data in the relevant tables in the report and (3) present this report to the 1st LBS COP and then to the 15th IGM and 12th COP of the Cartagena Convention.

On the recommendation of the 1st LBS STAC an additional Teleconference Meeting of the Interim Working Group was convened in August 2012. From this meeting it was agreed that: 1.) Goals and Objectives be developed for the SOCAR outline 2.) Research be done into the use of a Wiki Website to

allow for information and document sharing for SOCAR .3) To contact countries to request current information on environmental parameters being monitored and existing limits. The first two recommendations have been incorporated into this report. Due to time constraints it was further agreed that actions in response to the last recommendation (3) would commence after the convening of the 1st LBS COP and pending any further guidance of the Meeting.

The results of the work of the Interim Working Group are summarized in this document. Thank you.

PRIORITY AREAS- INTERIM WORKING GROUP

Background

Following the convening of the regional assessment and monitoring workshop held in September 2011 in Montego Bay, Jamaica, the Interim Working Group on Environmental Monitoring and Assessment completed a review of the workshop recommendations and highlighted the following priority recommendations for further consideration by the 1st LBS STAC and as appropriate the 1st LBS COP.

1.0 LBS Protocol – Case Studies and Best Management Practices

The Secretariat should:

- Evaluate existing LBS information products and the mechanisms used for dissemination so as to improve understanding by the wider society of pollution-related issues and design and implement campaigns to promote further ratification of the LBS Protocol in the region.
- Assess the status of ratification of the LBS Protocol in each Contracting Party as a means of determining the specific type of support each country may require to assist them in their ratification process.
- Compile and disseminate case studies and best practices and promote their greater implementation in the Wider Caribbean region.
- Facilitate sharing of technical information including the translation of existing training materials into other working languages of the Wider Caribbean Region.
- Enhance the use of the CEP web site as a clearing house mechanism for technical implementation relating to the implementation of the LBS Protocol including for sharing information on monitoring and assessment models.

Member States should:

- Develop specific demonstration projects in upper water shed areas utilizing best management practices (possibly as part of larger GEF Projects or as pilot case studies).
- Research for improvements of the LBS Protocol and impact of pollution on Parties and potential Parties.

- Provide the Secretariat with models, guidelines and other technical resources for further dissemination within the Wider Caribbean region.
- Provide the Secretariat with updates concerning their LBS ratification status and identify specific areas where support may be required to assist national efforts at ratification.

2.0 State of the Convention Area Report

The Secretariat should:

- Develop Guidelines for preparing regional State of the Convention Area Reports (SOCAR) so the scope and format for presenting the information is standardized. Guidelines should define the frequency and format for the SOCAR.
- Identify possible sources of funding for the preparation of the SOCAR under the LBS Protocol.

Member States should:

- Select indicators for reporting in their SOCAR information that reflects availability of resources including regionally agreed comparative values or cut values based on biogeography, laboratory infrastructure, and monitoring and assessment capabilities to ensure comparability of data.

3.0 National Monitoring Programmes

The Secretariat should:

- Compile standardized methodologies for handling data, and documenting the methods used in regional projects.
- Develop a draft protocol for information management and sharing of regional monitoring data for further consideration by the Parties.
- Conduct Research on the use of deep wells for treating effluent discharges with a view to compiling best practices.

Member States should:

- Evaluate existing methodologies for bacteriological analyses and implement new methodologies as appropriate.
- Include the following water quality parameters in national monitoring programmes:
 - Conductivity
 - pH
 - Salinity

- Temperature
- Transmissivity or water clarity [Proposed as an additional parameter by the US]

- Fats, grease and oils
- Nitrogen, ammonia
- Nitrogen, total;
- Oxygen, 5-day biochemical demand,
- Oxygen, dissolved oxygen,
- Phosphorus, total
- Suspended solids, total

- In the case of fecal indicators, depending on laboratory conditions and ecosystems under study it is proposed to determine:
 - *Enterococcus* spp.,
 - *Escherichia coli* or fecal coliforms

- Existing programmes should be expanded, where appropriate, to increase and/or enhance the coverage, scope, frequency and the systems used for water quality data management.

- When regional monitoring programs obtain the needed capacity to conduct more sophisticated environmental assessments, implement monitoring programmes that include biota and sediment analyses, especially in national pollution hot spots. Monitoring hypotheses should be evaluated and a cost estimate for biota and sediment analytical protocols and assessment procedures should be evaluated before such programs are implemented.

- Consider incorporation of community based monitoring to ensure sustainability of existing and/or planned national monitoring programmes

- Conduct monitoring to document the success of best management practices implemented

4.0 Capacity Building & Financing for Improving Laboratory Capacity

The Secretariat should:

- Complete and disseminate the lab inventory.

- Seek additional financing for developing and/or improving laboratory capacity in the WCR for field and lab analysis, data assessment, and development of monitoring programs;

- Promote the use of existing regional labs including RACs/RAN as a network to provide services within the region and to facilitate implementation of relevant components of regional projects, or to train national laboratories and improve their capacity.

Member States should:

- Encourage certification, where appropriate, of national analytical laboratories.

5.0 GEF Projects – IWCAM, REPCar & CReW

The Secretariat should:

- Identify opportunities for the development of mechanisms for sustainable financing of environmental interventions such as the one to be developed and tested under the GEF CReW project focusing on wastewater management.
- Provide Parties with updates on the status of the development of follow up projects to GEF IWCAM and GEF REPCar at the 1st LBS STAC.

6.0 New Projects and Activities

The Secretariat should:

- Assist Member countries to develop Projects, Plans, and Programmes for reducing contamination of the Convection Area through best management practices, nutrient control or removal techniques, pathogen control or disinfection technologies, industrial pretreatment techniques, technology transfer initiatives, and implementation of ISO 14001.
- Expand partnerships with the private sector, especially industries that pollute watersheds and coastal area at the national and regional levels, so they become more engaged in pollution prevention projects and activities.
- Work with Member States to advance the classification of waters according to the LBS Protocol. RACs and laboratories can assist by providing support to countries that do not have the necessary facilities or capacity.
- Support Member countries in identifying appropriate, financially sustainable solutions for urban wastewater that is discharged into the Convention area, with emphasis on vulnerable SIDS and coastal areas. These solutions must be consistent with socioeconomic characteristics of countries and should be designed to meet the Millennium Development Goals. Implementation of these solutions could further support countries in their efforts to ratify and implement the LBS Protocol.
- Identify funding sources and projects that support the development of the State of the Convention Area Report and the necessary environmental assessment techniques, implementation strategies for best management practices to reduce impaired watersheds and coastal areas, and capacity building for field and laboratory monitoring programs to document that selected BMPs were successful.

Member States should:

- Develop and implement projects and activities for improving watershed management including monitoring of conventional pollutants and water quality parameters, and improving land management and land use practices, through the implementation of best management practices, which will result in the prevention, reduction, or control of nutrient, pathogen, and sediment in the Convention area.
- Develop and implement Projects on Economic Evaluation to show the positive relationship between environmental protection activities and sustainable socio economic development.
- According to their capacities Contracting Parties may conduct periodic assessment and monitoring of industrial liquid wastes that are currently discharged to waters of the Caribbean without treatment or inadequate treatment so as to assess risk to human health and the environment. If significant impacts to human health and environmental resources are detected, work with the industrial plant owners and managers to implement best management practices to prevent, reduce, or control pollution from the industrial facilities.

Outline of a Framework for the State of the Convention Area Report (SOCAR) under Article XII of the Land Based Sources (LBS) Protocol

Purpose

The UNEP CEP Interim Working Group on Monitoring and Assessment decided to develop a recommendation for an outline for the State of the Convention Area Report. Article XII on Reporting under the LBS Protocol, requires that Contracting Parties produce a periodic State of the Convention Area Report (SOCAR). The Contracting Parties need to determine the content of the SOCAR and the frequency of reporting (on the order of every 5-10 years or 4-6 years (to coincide with the UNEP CEP Biennium) – to be decided). The UNEP CEP Interim Working Group on Monitoring and Assessment (including Jamaica as the chair, Bahamas, Barbados, Colombia, Cuba, France, Mexico, Trinidad & Tobago, the United States of America, RAC-Cimab (Cuba) and RAC-IMA (Trinidad and Tobago) and the UNEP CEP Secretariat met in Montego Bay, Jamaica in September 2011 to discuss assessment and monitoring issues. The recommendations from that meeting and subsequent discussions was used to advise the First Meeting of the Scientific Technical and Advisory Committee (STAC) for the LBS Protocol on monitoring and assessment issues. The LBS STAC meeting took place 5-7 June 2012. The Interim Working Group is planning to provide recommendations on the format and timing of the SOCAR. The STAC will provide recommendations on the SOCAR, and possible continuation of the Interim Working Group, to the First Meeting of the Contracting Parties to the LBS Protocol (1st LBS COP), October, 2012.

The Interim Working Group requested that a smaller working group provide an initial recommendation on an outline for the format of the SOCAR so the other members would have a plan to discuss. Jamaica (Chair) and the US worked together to prepare this draft outline for review. Developing an outline for the SOCAR is the first step in our efforts to move beyond earlier pollutant loading reports to evaluate environmental conditions of the Convention area based on issues defined in the LBS Protocol. We appreciate your willingness to assist in developing this important outline for the SOCAR.

Draft Goal and Objectives for Outline Framework for the State of the Convention Areas Report (SOCAR)

Draft Goal:

To develop a standardized reporting format that would assist contracting parties/countries in reporting on the State of the Convention Area and assist in the development of a regional report on the State of the Convention Area as required under Article XII of the LBS Protocol.

Draft Objectives:

- To provide guidance to the Contracting Parties on reporting information for measures adopted, results obtained and difficulties experienced in the implementation of the LBS Protocol.
- To provide guidance on reporting for the State of Convention Area so that the scope and format for presenting the information is standardized.
- To use the data and information contained in national reports to prepare regional reports on the implementation of the LBS Protocol and the State of the Convention Area.
- To advise on programmes in place to conduct assessments relevant to the LBS Protocol and to compile and make available to the Contracting Parties reports and studies which may be required or useful for the implementation of the LBS Protocol.
- To provide guidance on measures and methodologies (including models) to assess concentrations in the Convention area, and to ensure regional compatibility in data.
- To advise on the formulation of common [assessment ranges] [assessment values] [evaluation ranges] or [evaluation values] to be used as guidelines for the prevention, reduction and control of pollution of the Convention Area from land-based sources and activities.

[[NOTE: “assessment ranges or values” or “evaluation ranges or values” can be used to replace the term “cut value” that may not be a familiar term in the WCR.]]

A. Who is Involved in the SOCAR (LBS Protocol Article XII – Reporting)?

- Contracting Parties to LBS Protocol – required participation (Antigua & Barbuda, Bahamas, Belize, France, Grenada, Guyana, Panama, Saint Lucia, Trinidad & Tobago, and the United States)
- Contracting Parties to the Cartagena Convention – voluntary participation.
- UNEP Caribbean Regional Coordinating Unit in Kingston (CAR/RCU), Regional Activity Center in Cuba (RAC CIMAB), Regional Activity Center in Trinidad (RAC IMA) – report preparation, assistance, and coordination.
- The development of the SOCAR will replace two previous compilations regarding pollutant loadings in the Wider Caribbean Region:
 - 1994 UNEP CAR/RCU Technical Report No. 33 (<http://www.cep.unep.org/publications-and-resources/technical-reports/tr33en.pdf>)

- 2010 UNEP CAR/RCU Update of Technical Report No. 33 ([http://www.cep.unep.org/publications-and-resources/technical-reports/Update%20TR%2033%20 Ingles%20%20FINAL.pdf](http://www.cep.unep.org/publications-and-resources/technical-reports/Update%20TR%2033%20Ingles%20%20FINAL.pdf))

B. Programs in Place to Conduct Assessments

- Existing coastal zone management programs and national plans of action for each country (a list of these plans and website references should be compiled)
- Integrating Watershed and Coastal Area Management (IWCAM) Project Results for Small Island Developing States (SIDS) (<http://iwcam.org/http://iwcam.org/>)
- Caribbean Regional Fund for Wastewater Management (CREW) (<http://www.gefcrew.org/>)
- UNEP Global Program of Action and National Plans of Action for selected countries in the Wider Caribbean Region (<http://nosinternational.noaa.gov/gpa/npa/npaprogram.html>)
- US National Coastal Condition Assessment (<http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm>)
- Heavily Contaminated Bays and Harbours Project(http://www.cep.unep.org/meetings-events/5th-lbs-istac/5th_lbs_istac_documents/Information%20Documents/Workshop%20Report%20Bays%20CReW_%20Final_ENG.pdf)
- UNEP CAR/RCU Monitoring of Regional Hot Spots. Regional Network in Marine Science and Technology for the Caribbean: The Know Why Network (http://www.cep.unep.org/publications-and-resources/technical-reports/FINAL_REPORT_MONITORING_KWN%20final.pdf)
- UNEP Ecosystem Management Project (Norway Partnership). “Ecosystem Management for the integrated land and seascape of northern Trinidad” (<http://www.ima.gov.tt/home/about-ima/the-organization/technical-advisory-services/101-ecosystem-management-for-integrated-land-and-seascape.html>)
- Baseline analysis on domestic wastewater management in the Wider Caribbean Region <http://www.cep.unep.org/meetings-events/lbs-regional-experts-workshop/baseline-domestic-wastewater.pdf/view>
- Others? [QUESTION FOR REVIEWERS: Please help us develop a list of projects that could be used to develop the SOCAR based on your experience in your country or the Wider Caribbean Region.]

C. Recommended Outline for the State of the Convention Area Report for the Wider Caribbean Region under Article XII of the LBS Protocol

1. Executive Summary

- a. Minimum number of pages to characterize the overall state of the Convention area for the countries reporting information.
- b. Prepare this section to provide information to governmental ministers, the media, and the general public.

2. Introduction to the State of the Convention Area Report

- a. Describe the LBS Protocol and the scope of the SOCAR.
- b. Provide information on the purpose of the SOCAR, its importance, what is it attempting to do, and how it can be used.
- c. Description of the socio-economical features (population, GDP, agricultural, industrial, tourism, fishing) and associated human pressures to the environment in Wider Caribbean Region countries.

3. Geographic Coverage

- a. The Convention Area as defined in Article 2 of the Cartagena Convention.
- b. Include information to describing countries according to geographic features, similar to the discussion provided in UNEP CEP Technical Report No. 52 such as main oceanographic currents, precipitation and meteorology, major rivers, and discharges, and other essential geographic information to characterize the Wider Caribbean Region.
- c. On page 27 of Technical Report No. 33 (1994), the Wider Caribbean Region was divided into six sub-regions – Gulf of Mexico (I), Western Caribbean (II), Northeastern and Central Caribbean (III) Eastern Caribbean (IV), Southern Caribbean (V), and Equatorial Atlantic North West (VI). Other possible Sub-division is as used in TR 52 (Updated TR 33) page 11- the Wider Caribbean Region was divided into five sub-regions *Sub-region I Gulf of Mexico*- includes USA and Mexico; *Sub- region II; Western Caribbean*- comprising the countries of Central America with coasts on the Caribbean Sea, Belize, Guatemala, Honduras, Nicaragua, Costa Rica and Panama; *Sub-region III, Southern Caribbean* -comprises the countries of the South American Continent: Colombia, Venezuela, Guyana, French Guyana, Suriname, Aruba and Netherlands Antilles; *Sub-region IV Eastern Caribbean*- islands including Anguilla, Antigua and Barbuda, Barbados, British Virgin Islands, Dominica, Grenada, Guadeloupe, Martinique, Montserrat, St. Lucia, St. Martin, St. Barthelemy, St. Kitts and Nevis, Saint Vincent and the Grenadines, U.S. Virgin Islands and Trinidad and Tobago; **Sub-region V Northeast and Central Caribbean**- includes Bahamas, Cayman Islands, Cuba, Dominican Republic, Haiti, Jamaica, Puerto Rico and Turks and Caicos. **[QUESTION FOR REVIEWERS: Are these sub-regions acceptable for the SOCAR? – Basis for sub-groupings should be inserted here. The working group should decide on the acceptability of the selection criteria used for the determination of the sub-groups.]** TR52 sub-regions are more in line with current economic activities in the countries of the WCR

- d. The target coverage should be the full ocean area out to the EEZ. It must be stated however that the initial focus should be the coastal areas with a projection to achieve the target for each sub-group

4. Background Information

- a. Summary of main land-based activities and sources of pollution.
- b. What types of data exist now in the region?
- c. What programs are in place to conduct assessments (e.g. IWCAM, country-specific programs, Caribbean-wide, etc), and what policies and legislations are in place or is being implemented at the Country level aimed at achieving the LBS's objectives.
- d. What challenges do countries face in addressing LBS pollution?
- e. Historical pattern and trends in data, if available

5. Condition of Caribbean Watersheds and Coastal Areas

- a. Report "...information on measures adopted, results obtained and any difficulties experienced in implementation of the LBS Protocol" (Article XII.1 – Reporting).
- b. Use LBS Protocol Article VI – Monitoring and Assessment Programs and guidance from the LBS Protocol's Scientific, Technical, and Advisory Committee to assess conditions.
- c. Use a system similar to the U.S. National Coastal Condition Assessment Program that shows Good Area as green, Fair Areas as yellow, and Poor Area as red or could use the classification of coastal areas in Class I and II according to the LBS Protocol. Or it could be a system of green, yellow and red for Class I waters and a different one for Class II waters.
- d. Member States could also report, where possible, on information and findings obtained from current scientific studies similar to what was done in the NOWPAP POMRAC report (<http://pomrac.nowpap.org/>). This report included information such as occurrences of fish kills, harm full algal blooms (HABs), oil spills, and other sources of pollutants in the marine environment not assessed by the proposed indicators.

6. Description of National Watersheds, Coastal Areas, and Marine Areas throughout the Region

Use GIS information where available to show:

- a. watershed boundaries,
- b. land use,
- c. sources of land-based pollution,

- d. rivers, streams, gullies, wetlands,
- e. nesting sites, seagrass beds, mangroves, coral reefs and fish sanctuaries,
- f. discharge points and areas,
- g. bathymetry,
- h. monitoring sites,
- i. hazardous waste, recycling, waste disposal and contaminated sites and areas,
- j. human use areas including growth centres,
- k. sensitive biological areas, including fisheries and
- l. other similar data layers.(Shipping lanes, mining activity and oil exploration both on-shore and off shore)

7. Analysis and Comparison of Current Environmental Information on Watersheds and Coastal Area Conditions Compared to Cut Values and Previous Environmental Information

- a. Support to the use of monitoring parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.
- b. Determine cut values (see Annex 1) based on a system similar to the one used by the U.S. National Coastal Condition Report (<http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm>).
- c. Identify field sampling and monitoring methods and laboratory analytical methods for each selected parameter.

8. Best Management Practices to Prevent, Reduce and Control Pollution of the Convention Area

- a. Identify current, proposed, and suggested BMPs to improve impaired watershed or coastal area conditions.
- b. Where possible, discuss results from any previously implemented BMPs and monitoring results to document the success of the selected BMPs.

9. Challenges for Implementing LBS Protocol

- a. Policies
- b. Technical
- c. Information gathering (including information on the regional capabilities)

10. Emerging Issues

This section would highlight efforts like CReW, IWCAM II, and anything else countries can say to show how they are implementing the LBS Protocol and making positive changes to reduce LBS pollution. This section could include the research focus of the region and deal with other impacts to the marine environment related to LBS pollution that may include physical alteration and destruction of coastal habitats (PADH), marine litter, climate change issues, e-waste, or any conditions affecting the marine environment in member states.

Annex 1

DRAFT Cut Values to Evaluate Monitoring Data from Coastal Segments

NOTES:

- (1) The cut values should not be considered as criteria, standards, or regulatory values. The cut values are to be used to evaluate monitoring results so environmental conditions in the Wider Caribbean Region can be assessed.
- (2) Many of the cut values need to be defined, see gray highlighted units.
- (3) Methods and detection levels for field and/or laboratory analyses need to be defined.
- (4) Consider Class I and Class II cut values for coastal and marine waters.

Monitoring Parameters: Physical Condition¹	Continental Coastal Segments	Island Coastal Segments
1. Conductivity	<p>Good Less than ??.0 mS/cm</p> <p>Fair ??.0 mS/cm to ??.0 mS/cm</p> <p>Poor Greater than ??.0 mS/cm</p>	<p>Good Less than ??.0 mS/cm</p> <p>Fair ??.0 mS/cm to ??.0 mS/cm</p> <p>Poor Greater than ??.0 mS/cm</p>
2. pH** (see Annex III.C.1-2)	<p>Good ??.0 to ??.0 pH units</p> <p>Fair Less than ??.0 or greater than ??.0 pH units</p> <p>Poor Less than 5.0 or greater than 10.0 pH units.</p>	<p>Good ??.0 to ??.0 pH units</p> <p>Fair Less than ??.0 or greater than ??.0 pH units</p> <p>Poor Less than 5.0 or greater than 10.0 pH units.</p>
3. Salinity	<p>Good ??.0 ppt to ??.0 ppt</p> <p>Fair Less than ??.0 ppt or greater than ??.0 ppt</p> <p>Poor Less than ??.0 ppt or greater than ??.0 ppt</p>	<p>Good ??.0 ppt to ??.0 ppt</p> <p>Fair Less than ??.0 ppt or greater than ??.0 ppt</p> <p>Poor Less than ??.0 ppt or greater than ??.0 ppt</p>
4. Temperature	Good ??.0 °C to ??.0 °C	Good ??.0 °C to ??.0 °C

¹ Parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.

Monitoring Parameters: Physical Condition ¹	Continental Coastal Segments	Island Coastal Segments
	Fair Less than ??.0 °C or greater than ??.0 °C Poor Less than ??.0 °C or greater than ??.0 °C	Fair Less than ??.0 °C or greater than ??.0 °C Poor Less than ??.0 °C or greater than ??.0 °C
5. Transmissivity (water clarity) ²	Good Greater than ??.0 m Fair ??.0 m to ??.0 m Poor Less than ??.0 m	Good Greater than ??.0 m Fair ??.0 m to ??.0 m Poor Less than ??.0 m
6. Turbidity ³	Good Greater than ??.0 m Fair ??.0 m to ??.0 m Poor Less than ??.0 m	Good Greater than ??.0 m Fair ??.0 m to ??.0 m Poor Less than ??.0 m

Gray highlighted values need to be determined.

* = Cut values obtained from the U.S. National Coastal Condition Report III (2008);

<http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm>.

** = Poor values obtained from the table for Discharges into Class I Waters in Annex III of the LBS Protocol.

² Additional field monitoring parameter proposed by the US.

³ Additional field monitoring parameter proposed by Trinidad and Tobago.

Monitoring Parameter: Water Quality Tests ⁴	Continental Coastal Segments	Island Coastal Segments
1. Chlorophyll (a) ⁵	Good Less than 5.0 µg/L Fair 5.0 µg/L to 20.0 µg/L Poor Greater than 20.0 µg/L	Good Less than 0.5 µg/L Fair 0.5 µg/L to 1.0 µg/L Poor Greater than 1.0 µg/L
2. Fats, oil and grease (see Annex III.C.1-2) ⁶	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L
3. Nitrogen, ammonia	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L
4. Nitrogen, total (nitrate + nitrite, OR nitrate + nitrite + ammonia)*	Good Less than 0.1 mg/L Fair 0.1 to 0.5 mg/L Poor Greater than 0.5 mg/L	Good Less than 0.05 mg/L Fair 0.05 to 0.1 mg/L Poor Greater than 0.1 mg/L
5. Oxygen, biochemical demand (5-day) (see Annex III.C.1-2)	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L
7. Oxygen, dissolved*	Good Greater than 5.0 mg/L Fair 5.0 to 2.0 mg/L Poor Less than 2.0 mg/L	Good Greater than 5.0 mg/L Fair 5.0 to 2.0 mg/L Poor Less than 2.0 mg/L
6. Phosphorus, total*	Good Less than 0.01 mg/L Fair 0.01 to 0.05 mg/L Poor Greater than 0.05 mg/L	Good Less than 0.005 mg/L Fair 0.005 to 0.01 mg/L Poor Greater than 0.01 mg/L
7. Suspended solids, total (see Annex III.C.1-2)	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L	Good Less than ?0 mg/L Fair ?0 to ?0 mg/L Poor Greater than ?0 mg/L

Gray highlighted values need to be determined.

* = Cut values obtained from the U.S. National Coastal Condition Report III (2008);

<http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm>.

** = Poor values obtained from the table for Discharges into Class I Waters in Annex III of the LBS Protocol.

⁴ Parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.

⁵ Additional water quality test proposed by Trinidad and Tobago and AMEP/CIMAB.

⁶ Fourier transform infrared spectroscopy (FT-IR) or dissolve and dispersed petroleum hydrocarbons (DDPH) proposed as analytical methods.

Monitoring Parameter: Bacteriological Tests ⁷	Continental Coastal Segments	Island Coastal Segments
1. <i>Enterococcus</i> spp.** (see Annex III.C.2)	<p>Good Less than ? MPN/100ml monthly average</p> <p>Fair ? to 35 MPN/100 ml monthly average</p> <p>Poor Greater than 35 MPN/100ml monthly average</p>	<p>Good Less than ? MPN/100ml monthly average</p> <p>Fair ? to 35 MPN/100 ml monthly average</p> <p>Poor Greater than 35 MPN/100ml monthly average</p>
2. <i>Escherichia coli</i> ** (see Annex III.C.2)	<p>Good Less than ? MPN/100ml monthly average</p> <p>Fair ? to 126 MPN/100 ml monthly average</p> <p>Poor Greater than 126 MPN/100ml monthly average</p>	<p>Good Less than ? MPN/100ml monthly average</p> <p>Fair ? to 126 MPN/100 ml monthly average</p> <p>Poor Greater than 126 MPN/100ml monthly average</p>

Gray highlighted values need to be determined.

** = Poor values obtained from the table for Discharges into Class I Waters in Annex III of the LBS Protocol.

⁷ Parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.

Cut Values for Water Quality Monitoring Parameters in Each Coastal Segment*

Good Less than 10% of the coastal segment is in poor condition and more than 50% of the coastal segment is in good condition.

Fair 10% to 25% of the coastal segment is in poor condition, or more than 50% of the coastal segment is in combined poor and fair condition.

Poor More than 25% of the coastal segment is in poor condition.

* = Cut values are similar to those defined in the U.S. National Coastal Condition Report III (2008); <http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm>.

Cut Values for Water Quality Index by Country or a Specific Region of a Country*

Good Less than 10% of the coastal segments for a country or a specific region of a country's coast are in poor condition, and more than 50% of the coastal segments for a country or a specific region of a country's coast are in good condition.

Fair 10% to 20% of the coastal segments of a country or a specific region of a country's coast is in poor condition, or more than 50% of the coastal segments of a country or a specific region of a country's coast is in combined fair and poor condition.

Poor More than 20% of the coastal segments of a country or a specific region of a country's coast is in poor condition.

* = Cut values are similar to those defined in the U.S. National Coastal Condition Report III (2008); <http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm>.

Alternate consideration for table (proposed by RAC-Cimab)

Monitoring Parameters: Physical Condition⁸	Water Segments Marine and Coastal Class I	Water Segments Marine and Coastal Class II
1. Conductivity		
2. pH** (see Annex III.C.1-2)		
3. Salinity		
4. Temperature		
5. Transmissivity (water clarity) ⁹		
6. Turbidity ¹⁰		

Monitoring Parameter: Water Quality Tests¹¹	Water Segments Marine and Coastal Class I	Water Segments Marine and Coastal Class II
1. Fats, oil and grease (see Annex III.C.1-2)		
2. Nitrogen, ammonia		
3. Nitrogen, total*		
4. Oxygen, biochemical demand (5-day) (see Annex III.C.1-2)		
8. Oxygen, dissolved*		
5. Phosphorus, total*		
6. Suspended solids, total (see Annex III.C.1-2)		

Monitoring Parameter: Bacteriological Tests¹²	Water Segments Marine and Coastal Class I	Water Segments Marine and Coastal Class II
1. <i>Enterococcus</i> spp.** (see Annex III.C.2)		
2. <i>Escherichia coli</i> ** (see Annex III.C.2)		

⁸ Parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.

⁹ Additional field monitoring parameter proposed by the US delegation at the 26-30 September 2011 Workshop.

¹⁰ Additional field monitoring parameter proposed by Trinidad and Tobago.

¹¹ Parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.

¹² Parameters proposed at the 26-30 September 2011 UNEP CEP Workshop on Monitoring and Assessment.

Annexes

Annex 1

Terms of Reference

Interim Working-Group on Monitoring and Assessment

1.0 Purpose

These Terms of Reference (TORs) are intended to provide the background and scope of work for the Interim Working-Group on Monitoring and Assessment (the Interim Working Group) being established to support the further development and implementation of the obligations of the Protocol Concerning Pollution from Land-Based sources (LBS Protocol) of the Cartagena Convention. Continuation of the Interim Working Group's activities and any recommendations developed by the Interim Working Group are subject to the approval of the 1st Meeting of the Contracting Parties to the LBS Protocol, based on a review and evaluation by the Contracting Parties at the 1st Meeting of the LBS Protocol's Scientific Technical and Advisory Committee.

2.0 Background

The 14th Intergovernmental Meeting (IGM) on the Action Plan for the Caribbean Environment Programme and the 11th Meeting of the Contracting Parties (COP) to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region took place in October 2010. Decision XI of the 14th IGM/11th COP stated that the Parties: (a) recognized the efforts by the Secretariat and by RAC CIMAB to produce the final draft report of the update of Caribbean Environment Programme Technical Report No.33; (b) acknowledged the significant contributions from member Governments to enable the completion of the update; and (c) noted the continued efforts by the Secretariat to strengthen its information and data management capacity and its proposed hosting of clearing house and information dissemination mechanisms. Decision XI included the following two decisions by the 14th IGM/11th COP: (a) establish an Interim Working Group to continue work related to monitoring and assessment that could use Technical Report No. 33 as a baseline document; with the goal to improve effluent reporting and assessment of water quality conditions throughout the Convention Area, under the LBS Protocol, and (b) request the Secretariat to identify resources for convening regional technical meetings as part of the 2010-2011 Work plan in support of the work."

3.0 Scope of Work

Under Article XIV (Scientific, Technical and Advisory Committee) of the LBS Protocol,

3. The Committee shall be responsible for reporting to and advising the Contracting Parties regarding the implementation of this Protocol. To carry out this function the Committee shall: ...

- (d) provide guidance to the Contracting Parties:*
 - (i) on measures and methodologies to assess pollutant loads in the Convention area, and to ensure regional compatibility in data; and*

- (ii) *on the development of plans, programmes and measures for the implementation of this Protocol.*
- (e) *advise on the formulation of common criteria, guidelines and standards for the prevention, reduction and control of pollution of the Convention area from land-based sources and activities.*
- (f) *propose priority measures for scientific and technical research and management of pollution from land-based sources and activities as well as for control, management practices and monitoring programmes, bearing in mind regional trends and conditions and any information available.*

Based on the designated activities under Article XIV, the Interim Working Group would:

- Provide technical input and guidance to allow the Secretariat to prepare a technical brief on national and/or regional monitoring and assessment studies for discussion at the 1st Meeting of the LBS Protocol's Scientific Technical, and Advisory Committee (STAC). This should take into account the outputs and recommendations of: (a) recent regional monitoring and assessment programmes, (b) projects and activities including work on the update of CEP Technical Report 33, (c) SIDA funded Know Why Network Project, (d) National Programmes of Action, (e) regional baseline wastewater survey and analysis, and (f) any other information or recommendations deemed appropriate by the Interim Working Group;
- Review and provide recommendations on effluent monitoring and assessments and other information that may be used to develop the State of the Convention Area report referred to in Articles XII and XIV of the LBS Protocol, including reporting requirements of the LBS Protocol since its entry into force;
- Provide input to the agenda for the First Meeting of the STAC to the LBS Protocol to be convened in the first half of 2012;
- Provide technical input or recommendations on the adequacy of current measures and methodologies; plan and programmes; and common criteria, standards and/or guidelines within the LBS Protocol, on national and regional capacity building opportunities, regional laboratory capacity for water quality parameter measurements, and, as appropriate, other issues relating to the prevention, reduction and control of pollution in the Wider Caribbean Region in accordance with the obligations of the LBS Protocol;
- Develop the agenda and identify appropriate experts for attending the regional technical workshop scheduled for the last week of September 2011 in Montego Bay, Jamaica. This workshop should consider, *inter alia*, recommendations for improving the State of the Convention Area report, as well as any barriers and constraints to the ratification and the implementation of the LBS Protocol.

4.0 Membership of the Committee

The membership of the Interim Working Group consists of representatives from the Governments of any Contracting Parties to the Convention that express interest in participating in the Interim Working Group (at this time including the Bahamas, Barbados, Colombia, France, Jamaica, Mexico, Trinidad and Tobago and the United States of America). The LBS Regional Activity Center (RAC) at CIMAB (Cuba) and the

RAC at IMA (Trinidad and Tobago) may provide technical advice to the members of the Interim Working Group. The Secretariat should coordinate and administer activities of the Interim Working Group, and at the request of the chair of Interim Working Group may also take part in discussions, as appropriate.

The Officers of the Interim Working Group include a Chairman, a Technical Secretary, and a Recording Secretary. The Chairman and Officers should be selected by consensus of the Interim Working Group members. These officers are expected to serve the Interim Working Group until a formal working group is considered and approved by the Contracting Parties to the LBS Protocol at their first meeting.

The group may wish to request national and/or regional experts as appropriate to provide specific input and advice on any issue being discussed.

5.0 Function of Officers

The function of each Officer is as follows:

Chairman

The Chairman should chair each meeting, except as otherwise decided by the group, and should monitor the operation of all activities of the Interim Working Group and the Technical Secretary. The chairman determines the agenda for meetings, should endeavor to ensure that the recommendations are made and assigned tasks are completed by the Interim Working Group in a timely manner, and should coordinate the arrangements for meetings in collaboration with the Secretariat.

Recording Secretary

The Recording Secretary should prepare and circulate notices for meetings three weeks prior and no later than two weeks prior to the meetings; and should circulate reminders for each meeting, and prepare the minutes and relevant action sheets generated from each meeting within one week of same.

Technical Secretary

In collaboration with the Chair, the Technical Secretary should receive, vet where necessary, and circulate technical documents and reports to the participants of the working group and should also assist with the preparation of technical reports as required.

5.1 Mode of Meetings

The group is expected to participate in Teleconference Calls and E mail discussions facilitated by the Secretariat.

The members of the Interim Working Group are expected to participate in a 3-4 day regional workshop scheduled to take place in Montego Bay, Jamaica at the end of September 2011. Additional national and regional experts and agencies may be invited to this workshop.

5.2 Language

Discussions of the Interim Working Group are to be conducted in English, but the Secretariat should make efforts to have important background technical documents available in English, Spanish and French.

5.3 Meeting Schedule

The first teleconference call is being planned for the week of June 20, 2011. The purpose of this call is to decide upon the terms of reference, decide on an approach for the group's work including schedule of calls, and decide on the main issues to be discussed leading up to the regional workshop for the group.

Month	Start Time (Time in Kingston Jamaica)	Estimated Duration	Tentative Dates
June	9:30am	1hr:45 mins	June 21, 2011
July	9:30am	1hr:15 mins	July 26, 2011
August	9:30am	1hr:15 mins	August 23, 2011
September	9:30am	1hr:15 mins	September 13, 2011

6.0 Recommendations

The Interim Working Group may only make recommendations. Recommendations made by the Interim Working Group within their mandate should be made through a quorum consisting of half of the country representative membership of the Interim Working Group plus one, not including the RACs. All Interim Working Group recommendations are to be referred to the first meeting of the LBS Protocol's STAC for review and evaluation before being forwarded to the first meeting of the LBS Protocol Contracting Parties for their consideration. The Interim Working Group should attempt to decide on recommendations by consensus. However, in the event that consensus cannot be reached, a recommendation should be reported to the LBS STAC showing opinions for and against the recommendation. In the event that decisions on recommendations are needed at meetings and a quorum is not present, the Recording Secretary should submit written notices to all member countries of the Interim Working Group for a recommendation by consensus or, if consensus cannot be reached, include information for and against the proposed recommendation, which may be via electronic mail or other written communication.

All reports of the Interim Working Group should be submitted to the Secretariat of the Cartagena Convention for the attention of the Programme Officer responsible for the Assessment and Management of Environmental Pollution (AMEP) Sub-Programme.

7.0 Duration of the Interim Working Group

The Interim Working Group may conduct its activities until the 1st Meeting of the LBS Protocol's STAC. At the 1st LBS STAC meeting, the Parties should determine whether to recommend to the 1st Meeting of the Parties to the LBS Protocol to continue the work of the Interim Working Group under an LBS STAC Working Group consisting of representatives from Contracting Parties, including the possibility of inviting participation by observer countries that are Party to the Cartagena Convention and the RACs. If the Working Group is approved, new Terms of Reference should be prepared by the LBS STAC for approval by the Contracting Parties to the LBS Protocol.

Annex 2

Minutes of the Teleconference Meetings of the Interim Working Group on Environmental Monitoring and Assessment



Minutes of Meeting

Teleconference

Interim Working Group on Monitoring and Assessment

TUESDAY, JUNE 21, 2011

Chair: Country Jamaica - Paulette Kolbusch and Anthony McKenzie (alternately)

Participants: *Jamaica* -Anthony McKenzie, Paulette Kolbusch, *Bahamas* -Richard Cant, *Barbados*- Anthony Headley, *Columbia*- Carlos Arturo Álvarez Monsalve, *Mexico*- María del Carmen Porras-Pérez, *U.S.A* -Patrick Cotter, Steve Morrison, and Sherry Sykes , *RAC-CIMAB (Cuba)*-Antonio Villasol Núñez, *RAC-IMA (Trinidad & Tobago)*-Darryl Banjoo, *CEP Secretariat*- Christopher Corbin, Nadia-Deen Ferguson , Sanya Wedemier, and Chrishane Williams.

Apologies: Claudia Nava Ramirez sent her apologies for being unable to participate in the conference call due to prior commitments.

Rapporteur: CEP Secretariat

Purpose:

- 1) To review and approve the Draft Terms of Reference (TORs) for the Interim Working Group
- 2) To develop a road map of activities in preparation for the Regional Workshop (September 2011) and the first STAC LBS in early 2012

Meeting Date and Time: Tuesday 21th June 2011, 9:30 am – 11:30am (2 hrs.)

Agenda Item 1: Opening and Welcome

	Mr. Christopher Corbin -Programme Officer for AMEP welcomed the group on behalf of the Secretariat. The Chair of the meeting – Jamaica, took responsibility for the conduct of the teleconference in accordance with the Agenda following the welcome remarks.
Decision or Recommendations:	The decision was made to adopt the Agenda. Motion proposed by Anthony Headley (Barbados) Seconded by Patrick Cotter (U.S.A)
Agenda Item 2:	Introduction of participants
	Introduction of members was led by the Chair, Mr. Anthony McKenzie. All conference call participants gave a brief introduction of themselves to the group.
Agenda Item 3:	Terms of Reference for the Interim Working Group
Points Raised:	<p>Chair- Paulette Kolbusch</p> <p>Comments were invited for the first page of the TORs starting with paragraph 1.0.</p> <ul style="list-style-type: none"> • Regarding Paragraph 3.0. -Scope of Work- USA advised that text inserted be quoted from the text of the LBS protocol.(Article XIV) Anthony Headley (Barbados) expressed agreement with this approach • Paragraph 4.0. - U.S.A -Patrick Cotter raised the point that all countries who wanted to participate in the Interim Working Group be allowed to do so. The presence of RAC CIMAB & RAC IMA and their involvement as technical support to the Group was noted. • Christopher Corbin clarified that invitations for membership to the interim working group were sent to all LBS and National focal points and gave thanks to all countries who indicated their willingness to participate. Chris advised that the group remains open to other countries who may want to participate. National and regional experts may also be invited to join based on recommendations of the working group. Information on the establishment of the Interim Working Group has also been highlighted in the AMEP Quarterly Newsletter. • Darryl Banjoo -RAC –IMA (Trinidad & Tobago) confirmed that RAC-IMA was participating in the group both as the LBS Regional Activity Centre and the representative for the Government of Trinidad and Tobago since RAC- IMA is the LBS focal point for Trinidad and Tobago. • Antonio Villasol Núñez -RAC-CIMAB (Cuba)- clarified that he was representing RAC CIMAB , and not the Government of Cuba although discussions were now taking place concerning the possible representation of the Cuba in the future.

Decision or Recommendations:	<ul style="list-style-type: none"> • Decision was made to accept the changes from the U.S.A. for paragraphs 1.0, 2.0 and 3.0., as well as other comments/changes made to the Draft TORs. • Recommendation from Steve Morrison (U.S.A) to expand the Article XIV as in the TORs to include sections a, b, and c. While the Secretariat had no objection to the suggestion made, other members of the group noted that not having it expanded would allow for more focus on standards and methodology. It was agreed that the scope remain as presented. • Recommendation from RAC-IMA (Trinidad & Tobago) - Darryl Banjoo, to include a-c in the Scope of Work later on as the group makes progress with its work. • María del Carmen Porras-Pérez (Mexico) recommended a change in text- (Bullet 4; page 2) instead of “<i>Coordinate the preparation of the...</i>” this should be changed to “... <i>Provide technical input or recommendations on</i>”... This was accepted. • Paragraph 5.3 Meeting Schedule- María del Carmen Porras-Pérez (Mexico) recommended that a table with the times and dates for the meetings be inserted within the TORs. This was accepted. • It was agreed that meetings will be scheduled on a monthly basis and therefore three more meetings of the Interim Working Group are anticipated prior to the workshop in September 2011.
Agenda Item 4: Nomination of Interim Working Group (IWG) Officers	
Points Raised:	<ul style="list-style-type: none"> • Jamaica was identified and confirmed to be the Chair for the Interim Working Group. • Invitation for nominations for Technical and Recording Secretary (self or by the group); No nominations or indications of interest were received.
Decision or Recommendations:	<ul style="list-style-type: none"> • Further dialogue will take place after the first teleconference to determine the positions of Technical and Recording Secretary. • Positions will be finalized at the next conference call- this will be an Agenda item for the next teleconference- to finalize the positions of

	<p>Technical and Recording Secretary.</p> <ul style="list-style-type: none"> • Chair may engage in bilateral discussions with members of the Group who have a particular interest in these positions.
Agenda Item 5: Organization and Prioritization of Tasks for the IWG	
Points Raised:	<ul style="list-style-type: none"> • Actions- Key areas to be discussed in context of the Decision of last IGM, comparability of monitoring data, adequacy of current measures. • Item B (Adequacy of current measures and methodologies) was identified to be most important. • Request was made for the Laboratory Capacity Survey to be circulated prior to the next teleconference meeting. • Request was made that a summary be made of the problems encountered with methodologies utilized for Technical Report # 33(TR 33) - It was agreed that RAC-CIMAB could compile this information. • RAC- CIMAB indicated that one of the difficulties was that countries used different methodologies and the data was also dispersed among different institutions making compilation very difficult. • The suggestion was made that a summary of the recommended indicators and methodologies for monitoring could be compiled. This could be used as a basis for standardizing the indicators used at the regional level in the WCR, both for monitoring and reporting, in accordance with the obligations of the LBS Protocol.
Decision or Recommendations:	<ul style="list-style-type: none"> • Maria del Carmen Porras-Pérez -Mexico recommended that we invite technical experts on specific topics when required. • The decision was made that the results and questionnaire of the laboratory capacity survey would be circulated by the Secretariat.
Agenda Item 6: Any Other Business	
Points Raised:	<ul style="list-style-type: none"> • Updated Technical Report 33 should be reviewed by all members of the working group in preparation for the next meeting. Countries should indicate if they agree on the country information provided in the Technical Report.

	<ul style="list-style-type: none"> Darryl Banjoo- RAC-IMA (Trinidad & Tobago) agreed to the importance of monitoring and standards and suggested that there be the development of Tropical Marine Environmental Quality Standards/Criteria for the protection of aquatic life in the Wider Caribbean Region. The standards should be used so that marine environmental quality between countries can then be compared. For the Know-Why Network project, different environmental quality standards were used for comparison between countries. He suggested that information from CEP Technical Report # 8, be consulted. 	
Decision or Recommendations:	<ul style="list-style-type: none"> Patrick Cotter- U.S.A advised that the group should consider a subset of environmental parameters that can be tested by countries, and that can give an idea of the state of the environment. He also mentioned that there was the need to consider guidelines, criteria and parameters to be recommended at the first LBS STAC. Lessons Learnt from the monitoring activities of the GEF REPCar and GEF IWCAM projects as well as recommendations from other regional workshops could also be used to identify a matrix of monitoring parameters including monitoring for new substances that could have health implications such as endocrine disruptors. 	
Agenda Item 7:	Time & Date of Next Meeting	
Points Raised:	Suggestions were made for the third or fourth week of July.	
Decision or Recommendations:	Decision was made for Tuesday, July 26, 2011 for the next Teleconference for the Interim Working Group on Monitoring and Assessment, subject to clarification on whether this is a public holiday in Cuba.	
Agenda Item 8:	Adjournment	
	The meeting was adjourned at 11:30 am.	
Additional recommendation e-mailed by Columbia who was disconnected from the call		
1) Section 5 - Recording Secretary. Set dates for meetings with three (3) weeks in advance.		
2) Numeral 5.2 - Language. Ensure translations for the different sessions and documents are handled in the three (3) official languages.		
3) Numeral 6 - Decisions. When there is no Quorum and voting is done electronically or in writing, the decision should be majority.		
Action Items		
Task to be done	Person Responsible	Due Date
Circulation of Lab Capacity Survey	CEP Secretariat	25 July 2011

Circulation of Draft Minutes of Meeting	Chair	1 st July 2011
Circulation of Amended TORs	Chair	1 st July 2011
Follow up with RAC-CIMAB regarding Monitoring Parameters	CEP Secretariat	1 st July 2011

Date of Next Meeting: 26 July, 2011



Minutes of Meeting
2nd Teleconference
Interim Working Group on Monitoring and Assessment
TUESDAY, JULY 26, 2011

Chair: Country - Jamaica - Anthony McKenzie and Paulette Kolbusch (alternately)

Participants: *Jamaica* -Anthony McKenzie, Paulette Kolbusch, *Bahamas* -Richard Cant, *Colombia*- Carlos Arturo Álvarez Monsalve, Martha Liliana Gómez García, *Mexico* -María del Carmen Porrás-Pérez, *U.S.A* -Patrick Cotter, Steve Morrison, *RAC-IMA/(Trinidad & Tobago)* -Darryl Banjoo, *France* -Bernard Moutou, *CEP Secretariat* -Christopher Corbin, Nadia-Deen Ferguson , Sanya Wedemier, and Chishane Williams.

Apologies: Anthony Headley (Barbados) was unable to participate as he had a previous work commitment. Antonio Villasol (RAC-Cimab, Cuba) was unable to participate as it was a public holiday in Cuba.

Rapporteur: CEP Secretariat

- Purpose:**
- 1) To review and adopt the recommended Draft Terms of Reference (TORs) for the Interim Working Group and to continue work related to monitoring and assessment of water quality conditions in the Convention Area as described in these Terms of Reference.
 - 2) To develop a road map of activities in preparation for the Regional Workshop (September 2011).

Meeting Date and Time: Tuesday 26th July 2011, 9:30 am – 11:00am, Jamaica time (1hr 30 mins)

Agenda Item 1:	Opening and Welcome
	Welcome and opening was done by Mr. Anthony McKenzie. Special welcome was extended to Mr. Bernard Moutou (France).
Agenda Item 2:	Minutes of Meeting from the meeting of June 21, 2011

	Comments were requested for the minutes of the last meeting. No additional comments were received.
Decision or Recommendation	The decision was made to adopt the minutes. This was confirmed by Steve Morrison (U.S.A.) and seconded by Richard Cant (Bahamas).
Agenda Item 3: Matters arising from the meeting of June 21, 2011	
Points Raised:	<ul style="list-style-type: none"> • Additional comments were invited on the Amended Draft TORs for the Interim Working Group on Monitoring and Assessment. No additional comments were received. • Nominations were requested for the positions of Technical Secretary and Recording Secretary. None were received. • Further clarification was requested for the position of Technical Secretary- it was clarified that the person would provide technical support in review of documents developed/compiled by the group, and assist in technical matters as they arise.
Decision or Recommendations:	<ul style="list-style-type: none"> • Decision was made to adopt the TORs. • Decision was made that AMEP Secretariat would continue to act as the recording secretary for the Interim Working Group until a separate recording secretary was deemed necessary by the Working Group. • Suggestion was made by Chris Corbin that instead of using one person for the position of technical secretary, depending on the specific topic under discussion, one or two persons from the group could be co-opted to serve in this capacity. External technical experts could also be consulted if a particular expertise did not reside within the Working Group. • Patrick Cotter (U.S.A) endorsed the suggested approach and indicated that the U.S. would be willing to assist the Chair in the manner recommended by Chris Corbin.
Agenda Item 4: Organization and Prioritization of Tasks for the IWG	
Points Raised:	<ul style="list-style-type: none"> • It was acknowledged that documents relating to Quality Indicators were provided by RAC-Cimab. • Patrick Cotter (U.S.A.) advised that he and colleagues are comparing LBS limits, with indicators listed in the Know-why Network report and U.S. National Coastal Assessment Programme with the view towards preparing a position paper for consideration by the Working Group. He highlighted the benefit of looking at coastal conditions as part of a more complete assessment process.

- Looking at existing standards in the LBS protocol - point was raised as to whether there would be a need to refine criteria in any way.
- Existing UNEP Publications on water quality guidelines should be reviewed. Documents were sent to the various countries but to date there has been no decision to adopt guidelines
- Clarification was sought as to whether it was a role of the group to prepare and develop documents.
- Chris Corbin - clarified that the role of the group is not really to prepare documents, but to bring attention to and make recommendations on documents for consideration by the STAC and/or COP. To facilitate review of any such documents, they could be made available through the CEP website.
- A list of the documents compiled will be circulated and the secretariat will resend the link to where documents relating to the work of the Interim Working Group are located on our website.
- Anthony McKenzie (Jamaica) - expressed that he thought that standards and criteria for indicators to be used would come from the TR33.
- It was noted that we needed to look at broader indicators for watersheds that contribute to water quality and include those as well in the review process.
- It was noted that there are Regional Agencies that have been involved at the project level and it was identified that there is limited knowledge of existing monitoring capacity of the region. Through the IWCAM project and REPCar project, some resources were provided to labs for environmental monitoring and support was also provided to strengthening the LBS RACs.
- Funding of capacity building- partnership with International Atomic Energy Agency (IAEA) who had done similar work.
- Question was raised by Paulette Kolbusch as to how to strengthen information exchange and capacities of existing laboratories and networks
- Patrick Cotter (U.S.A) noted that there are EPA training materials that support Coastal Monitoring that could be provided to the group. He further suggested that the Interim Working Group could look at

	<p>training opportunities to develop laboratories for Monitoring and Assessment of the Convention Area.</p> <ul style="list-style-type: none"> • Nadia-Deen Ferguson (Secretariat) indicated that there are other regional projects (e.g., GEF-IWCAM, UNU-INWEH (United Nations University Institute for Water, Environment and Health) that completed laboratory capacity reports and needs assessments that could also be used to help steer the group in the right direction. She added that the CEP- AMEP is conducting a Regional laboratory capacity survey and invited the group to further disseminate this survey to other laboratory facilities within the region. • Richard Cant (Bahamas) acknowledged that the Laboratory Assessment Survey was received and supporting information from the GEF IWCAM Project Bahamas Lab Capacity resent to the Secretariat. • Chris Corbin highlighted events that may be of interest to the working group on the issue of pollution prevention. (1) Global Programme of Action (GPA) Intergovernmental Meeting 2012. (2) RIO + 20 Conference preparatory meeting to discuss oceans pollution prevention and ways in which ocean management can be given an increased profile at RIO + 20. • There will be continued efforts to encourage countries to ratify the LBS protocol
<p>Decision or Recommendations:</p>	<ul style="list-style-type: none"> • Darryl Banjoo (RAC-IMA Trinidad and Tobago) suggested that water quality criteria, standards or guidelines to be established for use in the LBS protocol are in categories of (1) Recreational Water Quality (2) Water Quality for the Protection of Aquatic Life and (3) Point or Effluent Discharges. CEP Technical Report # 8 should be consulted in which work was already done to establish these criteria for the Wider Caribbean Region. • Darryl Banjoo (RAC-IMA Trinidad and Tobago) recommended that in order to minimize pollution, we need to also consider Integrated Coastal Zone Management Approaches and to ensure that Industries become ISO 14001 certified and use best management practices • Patrick Cotter (U.S.A.) was in support of the suggestion from Daryl Banjoo, and added that we develop recommendations and guidelines, and that it would be good to have a range of best management practices.

	<ul style="list-style-type: none"> • Carlos Alvarez (Colombia) suggested that there should be a definition for criteria. He also mentioned that emission limits, interactive ecosystems, and laboratory capacity could be included in criteria and guidelines. • EPA training material will be provided by the U.S.A. • Email will be sent to the members of the Interim Working Group regarding the current status of the CEP- AMEP Regional Laboratory Capacity Survey.
Agenda Item 5: Update on plans for Regional Workshop (September 2011)	
Points Raised:	<ul style="list-style-type: none"> • The first face to face meeting of the Interim Working Group on Monitoring and Assessment will take place during the last week in September. It will be held September 26-30, 2011. It will also be used to showcase the results of the IWCAM hotspot diagnostic assessment in selected SIDS; and to present prizes to the winners of the Regional LBS Collage Competition. A Draft Agenda for the workshop will be developed and finalized during the next teleconference meeting in August 2011. • Workshop will be funded through the AMEP Secretariat with additional support from the GEF IWCAM Project. It will not only be for countries that have ratified LBS Protocol but all members of the Interim Working Group as well as additional experts that the group recommends.
Decision or Recommendations:	<ul style="list-style-type: none"> • The following members indicated their willingness to assist with preparing the draft agenda for the face to face meeting of the Interim Working Group in September: Anthony McKenzie (Jamaica) Patrick Cotter (U.S.A.) Paulette Kolbusch (Jamaica) Darryl Banjoo (RAC-IMA Trinidad & Tobago)
Agenda Item 6: Agenda items for the Regional Workshop (September 2011)	
Points Raised:	<ul style="list-style-type: none"> • Updated Technical Report 33 was adopted at the 14th IGM and 11th COP. • The updated TR 33 will be produced as a New Technical Report available in English, Spanish and French. • Chris Corbin will follow up with RAC-Cimab and Antonio Villasol, concerning which types of assessments need to be done and what

	would be the most appropriate type of regional assessment.
Decision or Recommendations:	<ul style="list-style-type: none"> • Patrick Cotter (U.S.A) - Ratification of LBS Protocol is something that the Interim Working Group should have on the agenda for the September meeting. • Patrick Cotter- (U.S.A.) –Group should look at the reporting requirements of the LBS Protocol, and have discussions on the state of the convention area; it is open to the group to recommend on whether future reports will follow the same format as the updated TR33. • Pollutant loadings should be a topic for discussion at the meeting in September. RAC Cimab could discuss and share the difficulties encountered in compiling information for the update of TR 33 and in the Know Why Network Project with the members of the Interim Working Group. We could then determine the most effective way in looking at the state of the convention area. • It was recommended by Carlos Alvarez (Colombia) that the meeting logistics should be finalized within short order; advanced notification and official invitations which will be necessary for their delegates to attend the September meeting. At minimum a month in advance is necessary to get the required permission and documents in order to attend
Agenda Item 7:	Any Other Business
Points Raised:	Paulette Kolbusch (Jamaica) indicated that the Bureau of Standards of Jamaica is seeking advice on suitable standards for detergents. NEPA is to provide a paper of resource documents within the next 2- 3 weeks. Any guidance on standards for detergents is welcomed from the members of the Interim Working Group.
Agenda Item 8:	Time and Date of Next Meeting
	The next teleconference meeting of the Interim Working Group on Monitoring and Assessment will be August 23, 2011 at 9:30am (Jamaican Time).
	Adjournment
	The meeting was adjourned at 11:05 am.

Action Items		
Task to be done	Person Responsible	Due Date
Circulation of Update on the Lab Capacity Survey	CEP Secretariat	22 nd August 2011
Circulation of Draft Minutes of Meeting	Chair/CEP Secretariat	15 th August 2011
Draft participants list for the meeting in September	CEP Secretariat	22 th August 2011
Draft Agenda for Meeting of Interim Working Group on Monitoring and Assessment 26-30 September 2011	CEP Secretariat	22 st August 2011

Date of Next Meeting: 23 August, 2011



Minutes of Meeting
3rd Teleconference
Interim Working Group on Monitoring and Assessment
TUESDAY, AUGUST 23, 2011

Chair: Country - Jamaica - Anthony McKenzie and Paulette Kolbusch (alternately)

Participants: *Jamaica* -Anthony McKenzie, Paulette Kolbusch; *Barbados*- Anthony Headley; *Colombia*- Carlos Arturo Álvarez Monsalve, Martha Liliana Gómez García; *RAC-Cimab, Cuba*- Antonio Villasol ; *Mexico* -María del Carmen Porrás-Pérez; *U.S.A* - Patrick Cotter, Sherry Sykes; *RAC-IMA/(Trinidad & Tobago)* -Darryl Banjoo; *France* -Bernard Moutou; *CEP Secretariat* -Christopher Corbin, Nadia-Deen Ferguson, Sanya Wedemier, and Chrishane Williams.

Apologies: *U.S.A* -Steve Morrison was unable to participate as he was out of office, *Bahamas* - Richard Cant, was unable to participate because of a hurricane threat to the island.

Rapporteur: CEP Secretariat

- Purpose:**
1. To review the Draft Agenda and Provisional List of Participants for the Technical Experts Workshop on Environmental Monitoring and Assessment, September 26-30, 2011.
 2. To continue discussions related to monitoring and assessment of water quality conditions in the Convention Area.

Meeting Date and Time: Tuesday 23rd , August 2011, 9:30 am – 10:55am, Jamaica time (1hr 25 mins)

Agenda Item 1:	Opening and Welcome
	<ul style="list-style-type: none"> • Welcome was done by Mr. Anthony McKenzie- Jamaica
Agenda Item 2:	Minutes of Meeting from the meeting of July 26, 2011
	<ul style="list-style-type: none"> • Comments were requested for the minutes of the last meeting. No additional comments were received.
Decision or Recommendation	<ul style="list-style-type: none"> • Minutes were adopted. This was confirmed by Darryl Banjoo-RAC-IMA/Trinidad and Tobago and seconded by María del Carmen Porrás-Pérez-Mexico

Agenda Item 3:	Review of Draft Agenda for Regional, Technical Workshop Sep 26-30, 2011
Points Raised:	<ul style="list-style-type: none"> • Christopher Corbin highlighted Agenda Items for Day 1 through to Day 5 of the workshop. • <u>Day 1</u>-Focus will be on work done on TR 33 and Know-Why Network and will look at some of the challenges in the collection and reporting of monitoring data. Will look at what countries are working on in terms of coastal and marine programmes, areas of weaknesses and areas for strengthening. • <u>Day 2</u>-Will focus on Water Quality Standards, looking at National Country Standards for effluent, and differences between these standards. Will look at projects/case studies in 3 small islands .Christopher Corbin noted that work on many of these projects are ongoing and it would be good to hear about the findings from these studies. Will look also at laboratory capacity, and what is required to strengthen monitoring programmes at the national and regional levels. There will be smaller working group sessions on indicators. • <u>Day 3</u>- Will look at the reporting requirements of the LBS protocol, the LBS reporting template and the sharing of best management practices. • <u>Day 4</u>-Will focus on the results of national demonstration projects under the GEF-IWCAM Project and will showcase lessons learned from the Integrated Management of National Hot Spots. <p><u>Day 5</u></p> <ul style="list-style-type: none"> • LBS Collage Competition and Judging • General discussion on LBS Protocol • Recommendations for Technical Agenda Items that could be considered during the 1st LBS STAC scheduled for the first half of 2012 • The group was invited to comment on all of the sessions as well as the possibility of conducting a field trip on the afternoon of the final day. <p><u>Comments from IWG for Day 1</u></p> <ul style="list-style-type: none"> • Antonio Villasol (RAC-Cimab) suggested that for the case studies it would be best to have 2-3 case studies rather than having all countries present.

- Anthony Headley (Barbados) made the suggestion that there should be the 2-3 case studies as well as a brief summary for all countries. These could be available to the group for reference.
- Chris Corbin noted the suggestions and was in agreement for 2-3 presentations on monitoring and assessment and brief summaries of the scope and type of parameters being monitored in each country.
- María del Carmen Porras-Pérez (Mexico) - suggested a guideline or template that could be used to guide the required summaries.
- Christopher Corbin- suggested that in choosing the countries to present, they should be representative of the different capacities in the region but all should possess well developed monitoring programmes appropriate to their needs;
- Patrick Cotter- (U.S.A.) - was in agreement with the suggestion from Antonio Villasol (RAC-Cimab) and Anthony Headley (Barbados).
- Patrick Cotter indicated that he could speak on the National Coastal Assessment Programme.
- Anthony Headley (Barbados) indicated that he could highlight work on Recreational Water, Coastal Monitoring and Assessment within the Reef Assessment Programme.
- Carlos Arturo Álvarez Monsalve – (Colombia) indicated that they know INVEMAR has a good programme of Monitoring for the Colombian Coast.
- Day 1- in relation to the 3:30-4:30 slot- Summary of results of related projects- It was noted that UNU-INWEH works on pesticide levels in Biota, the question was raised as to relevance of the noted projects and comments were requested from the group.
- Chris Corbin- noted that in regards to results from the studies of the various projects, the Secretariat would provide copies of any interim and/or final reports as soon as they became available .These will be made available on the CEP website and on a thumb drive, to be provided to all workshop participants.

Comments from IWG for Day 2

- Patrick Cotter – (U.S.A) raised a question with regards to discharge in class 1 waters, limits and how they are evaluated. He indicated

that we need to find out how these limits are addressed in the field.

- Darryl Banjoo (RAC-IMA Trinidad) was in agreement with Patrick Cotter. He suggested that the group should look at Environmental Quality instead of Water Quality in the Convention Area. He indicated that the group should look at sampling plans and designs that will take into consideration location, mixing and parameters on environmental quality so that more accurate comparisons can be made.
- Christopher Corbin - noted that the suggestions from Patrick Cotter (U.S.A) and Darryl Banjoo (RAC-IMA Trinidad) be considered for discussions in the smaller working group sessions at the workshop.

Comments from IWG for Day 3

- María del Carmen Porras-Pérez (Mexico), requested clarification regarding the session on the LBS protocol; the purpose of the discussion, whether it would be to identify obligations or to discuss the ratification of the Protocol. She noted that in the capacity of a technical member she is not in the position to discuss ratification of the LBS protocol.
- Christopher Corbin indicated that the session will look at technical issues and not on the political status related to ratification of the LBS Protocol. Experts could discuss the technical challenges and barriers to the ratification of the LBS Protocol, and make recommendations to the Secretariat on what could be done to help with the ratification process at the national level.
- Anthony Headley (Barbados) noted that the 14th IGM discussed how to make reporting easier- the need for a management system. We need to decide how to make the template and reporting easier in the future.
- Patrick Cotter (U.S.A.) noted that reporting requirements are more of a legal issue than a technical issue. We could make it an item for discussion at the 1st LBS COP.
- Christopher Corbin noted-that the technical working group could make recommendations to the 1st LBS STAC and 1st COP on areas of reporting on implementation of the LBS Protocol that could be streamlined from a technical perspective.
- Patrick Cotter (U.S.A.) indicated that the idea from Christopher Corbin was a good one and streamlining would make reporting

better for all countries.

Comments from IWG for Day 4

- Christopher Corbin -made a suggestion to Patrick Cotter on possibility of the U.S.A. doing a presentation on the process of the U.S. Hot Spot Diagnosis. Christopher Corbin noted that it was a challenge for some countries in applying formal literature in doing a Hot Spot Diagnosis, and have had to take an integrated approach to Hot Spot Assessments. We would be interested in seeing how it is done in other countries
- Patrick Cotter mentioned the Impaired Water Bodies Programme and indicated that he could prepare something on this for the group.
- Anthony Headley (Barbados) enquired about information on monitoring of pollutant loads and total maximum daily loads.
- Patrick Cotter noted that based on the US experience, this was quite complex and may be difficult for countries to undertake at this time. However, if there was a way to get an idea of improvements in general pollutant loading, that could be a first step in establishing a programme for pollution reduction in the region.
- Nadia-Deen Ferguson indicated that Patrick Cotter's presentation could be scheduled for Day 4 within HSDA presentations.

Comments for Day 5

- LBS award ceremony- award presentations will include discussion on types of outreach. The competition targets youth in schools.
- There will be brainstorming sessions on the ratification of the LBS Protocol. The objective is for technical understanding of some of the technical challenges being faced.
- Christopher Corbin suggested the working group could look at agenda items for the 1st STAC meeting of the LBS Protocol, which would take place in early 2012.
- Christopher Corbin inquired about the interest of the Working Group in having a field trip on the final day.
- Patrick Cotter U.S.A. indicated that a field trip would be a good idea.
- Anthony McKenzie, Chair, suggested the sewage system for Montego Bay, and waste stabilization system that discharges into the Montego Bay Marine Park as possible site visits. He also suggested some privately run systems where treated sewage from hotels is used for irrigation.

	<ul style="list-style-type: none"> • Anthony Headley (Barbados) made mention of the project involving UTECH which could serve as an option for a field trip.
Decision or Recommendations:	<ul style="list-style-type: none"> • Comments and suggestions from the working group on the draft agenda will be incorporated. The revised draft agenda will be sent out to members of the working group, nominated workshop participants and invited agencies. • NEPA (Jamaica) will assist the Secretariat in making arrangements for the field trip.
Agenda Item 4: Review of Provisional List of Participants and Presenters	
Points Raised:	<ul style="list-style-type: none"> • Additional experts will be invited from RAC-Cimab to provide input. E.g. on the Know-why Network project and TR. 33 Report • Experts were identified from the GEF IWCAM and GEF REPCar projects for participation in the workshop. • Members of the Interim Working Group are to confirm their participation as soon as possible after receiving invitations. • Invitations will be sent out to selected technical agencies. • Patrick Cotter noted the representation from GEF Projects in the region on the participants list and noted that there should also be a representative from the GEF - CReW project. • Chris Corbin advised that while the Project Manager for the GEF CReW project was now on board, UNEP CAR/RCU in its capacity as Executing Agency for the Project would be able to respond to any questions concerning activities of the Project which is now in its pre-inception phase. Patrick Cotter indicated that the U.S.A. may want to bring a third person, whose cost would also be covered and that would be confirmed in due course.
Decision or Recommendations:	<ul style="list-style-type: none"> • The Secretariat will provide information on the GEF- CReW project, if required.
Agenda Item 5: Update on plans for Regional Workshop (September 2011)	
Points Raised:	<ul style="list-style-type: none"> • Regional Workshop will be held at the Ritz Carlton Hotel in Montego Bay, arrangements regarding accommodation will be made by the Secretariat
Decision or Recommendations:	<ul style="list-style-type: none"> • CEP Secretariat will visit hotel to ensure suitability and provide all participants with relevant contact details for the hotel.

Agenda Item 6:	Adequacy of current measures and methodologies
Points Raised:	<ul style="list-style-type: none"> Christopher Corbin highlighted documents that were provided by Patrick Cotter. He provided a listing of ranking criteria used in the U.S.A. and a comparison table of LBS limits and monitoring parameters
Decision or Recommendations:	<ul style="list-style-type: none"> The documents provided would form key documents for discussion or smaller sessions. Christopher Corbin encouraged persons who have national monitoring programmes (e.g. Mexico, or Colombia) to also provide documents for discussion (and also include in their national summaries). This would enable a more comprehensive assessment of indicators that could be used to provide information on the environmental quality of the Convention area.
Agenda Item 7:	Any Other Business
Points Raised & Decisions :	<ul style="list-style-type: none"> Jackets and ties will not be required for the Workshop in September as it will be a technical meeting and there will be no need to follow inter-governmental formalities. Anthony Headley -Barbados enquired about the 11:00 - 11:30 session on day two of the agenda- that indicated a presentation from Barbados. Christopher Corbin advised that it would be a presentation from the GEF IWCAM CEHP-AML project. The Secretariat would provide information on this project to Mr. Headley.
Agenda Item 8:	Time and Date of Next Meeting
	<ul style="list-style-type: none"> Due to the progress made during the teleconference and in order to enable preparation for the workshop in September, it was decided that the next teleconference meeting should be deferred until October.
Decision or Recommendations:	<ul style="list-style-type: none"> It was suggested by María del Carmen Porras-Pérez (Mexico), that the date of the next teleconference call could be determined during the workshop in September. This recommendation was adopted.
	Adjournment
	The meeting was adjourned at 10:55 am (Jamaican time).
Action Items	
Task to be done	Person Responsible
	Due Date

Follow up regarding Travel Arrangements	CEP Secretariat/Invited Participants	All nominees to be received no later than 9 th September. Travel arrangements to be completed no later than 16 th September
Circulation of Draft Minutes of Meeting	Chair/CEP Secretariat	7 th September 2011
Draft participants list for the meeting in September	CEP Secretariat	5 th September, 2011
Draft Agenda for Meeting of Interim Working Group on Monitoring and Assessment 26-30 September 2011	CEP Secretariat	5 th September 2011
Guidelines for preparation of national submissions relating to standards and monitoring and assessment programmes	CEP Secretariat	9 th September

Date of Next Meeting: October 2011. Specific date to be determined at the September Workshop



Minutes of Meeting
Teleconference
Interim Working Group on Monitoring and Assessment
Tuesday, November 29, 2011

Chair: Country Jamaica - Paulette Kolbusch

Participants: *Jamaica* - Paulette Kolbusch, *Bahamas* -Richard Cant, John Bowleg, *Barbados*- Anthony Headley *Columbia*- Jorge Augusto Acosta Rivera, *U.S.A* -Patrick Cotter, Annie Hillary, Stephanie Adrian, *RAC-IMA* /(Trinidad & Tobago)-Darryl Banjoo, , *CEP Secretariat*- Christopher Corbin, Sanya Wedemier, and Chrishane Williams.

Apologies: Anthony McKenzie (Jamaica) Bernard Moutou (France) Antonio Villasol (RAC-Cimab)
 Steve Morrison (U.S.A), Maria del Carmen Porras-Perez (Mexico).

Rapporteur: CEP Secretariat

Purpose:

- To review and adopt the Workshop Summary Report of the Regional Experts Workshop on Environmental Monitoring and Assessment
- To discuss next steps for 2012

Meeting Date and Time: Tuesday 29th November 2011, 9:30 am – 11:30am (2 hrs.)

Agenda Item 1:	Opening and Welcome
	Opening and Welcome was done by Ms. Paulette Kolbusch Introduction was made of Ms. Stephanie Adrian of the U.S.A.
Agenda Item 2:	Meeting Summary Report- Regional Experts Workshop on Environmental Monitoring and Assessment
Points Raised:	<ul style="list-style-type: none"> • Jamaica has initiated activities based on the discussions and recommendations of the Workshop: • The specific recommendations of national interest included the substitution of Mussels for White Grunt as an indicator, the choice of monitoring parameters and indicators as well as the

format for future monitoring and assessment reports. These are all being considered for adoption in Jamaica.

- Chris Corbin outlined that the workshop report provided guidance on the selection of priority areas for future monitoring and assessment activities and highlighted key issues that could be further developed for discussions at the 1st LBS Scientific Technical Advisory Committee (STAC) and 1st LBS COP. He cautioned of the importance to agree on a small number of priorities that would allow for defining realistic objectives.
- Patrick Cotter reminded the group that they had until Dec 12 to submit comments on the final workshop report. He noted that the Workshop was one of the best he had attended and that it was good that we now have a list of proposed ambient parameters for future monitoring efforts. He further recognized that the U.S. had committed to a few deliverables including providing website addresses with selected technical resources. He further suggested that with regard to the Workshop recommendations on the State of the Convention Area Report, the Working Group should consider also providing guidelines for National State of the Environment Reports and not just on the state of pollutant loading.
- Anthony Headley highlighted the importance of developing both National and Regional State of the Environment Reports, the need to enhance mechanisms for engaging Caribbean Communities in pollution reduction activities e.g. through activities such as the LBS collage competition. He further recommended that activities such as the Collage Competition should be repeated.
- Following a question from Paulette Kolbusch as to whether State of Convention Area Reports would be available on the Secretariat's website, Chris Corbin confirmed that all measures would be taken to ensure wide dissemination.
- Patrick Cotter suggested the need to conduct Country Assessments and compile a list of Best Management Practices. This could be reported in the State of the Environment Report. Similarly, results of assessments and monitoring carried out under projects such as GEF IWCAM and GEF REPCar and from national and regional activities of the Global Programme of Action GPA, should be widely disseminated and included in future State of the Environment Reports. There is a further need

to obtain and make available information on potential funding sources for new projects; Funding would also be required to prepare the State of Convention Area Report.

- Chris Corbin summarized the various outputs from the GEF IWCAM and GEF REPCar projects that would be available and could support LBS Protocol implementation. These include Case Studies, Lessons Learnt, Best Practices, Coastal Monitoring report and a GIS Atlas. The Secretariat has mobilized a small amount of resources (USD 15,000-20,000) to support activities at the country level. Efforts will also be made to strengthen collaboration with the International Atomic Energy Agency (IAEA) following the conclusion of their recent regional project on pollutant loading,
- Information Technology Resources at the Secretariat have been strengthened with the hiring of a new IT assistant and further enhancement is expected of the web site and information dissemination mechanisms at the Secretariat.
- Discussion was held on the status of the proposed follow up projects to IWCAM and REPCar and on the new GEF CREW Project. Group members suggested a range of activities that could be included. These included: (1) Financing for monitoring and assessment; (2) Database management including quality assurance and control; (3) Focus on LBS implementation.; (4) Engagement of private sector such as the Tourism sector; (5) Linking to Trade issues; and (5) Showcasing and replicating best management practices such as the Water Information Management System developed under the IWCAM project.
- The Secretariat reiterated how important mobilizing co-financing was for new GEF Projects which now require between 4:1 and 5:1 levels of co-financing.
- Richard Cant emphasized the importance of involving NGOs in future monitoring and assessment work.
- It was agreed that for the agreed priority areas, the Secretariat with support of the Working Group would prepare 1-2 page technical discussion papers for presentation to the 1st LBS STAC.
- It was suggested that it was important to showcase concrete results from project interventions including improvements in the quality of the coastal and marine environment and use of

	<p>more appropriate technologies and best practices.</p> <ul style="list-style-type: none"> • The Secretariat advised that it received communication that Grenada would be submitting its documents for ascension to the LBS protocol to the depository in Columbia.
Decisions and/or Recommendations:	Members of working group to submit all comments on the report by Dec 12. The Secretariat will work with Chair to summarize these for discussion at the January 2012 teleconference.
Agenda Item 3:	Next Steps for 2012
Points Raised:	<ul style="list-style-type: none"> • The Secretariat outlined the timing for upcoming Intergovernmental Meetings and other related regional workshops. In response to a question posed on the website, the Secretariat confirmed that improvements were ongoing and should be completed within the next few months. This should make the web site more user-friendly and information more readily available. • Jorge Augusto Acosta -Columbia- In order to promote information sharing , need to continue to make documents available and to develop methodological guidelines in three areas ; classification of water bodies; hydrodynamic modeling and monitoring and evaluation. Acknowledging that there are differences in local conditions for the implementation of various aspects of the Protocol. The methodological guide can assist the process. The need for modeling to evaluate the effects of discharges; can be supported in the evaluation of hydrodynamic aspects. This comment was supported by other group members. • The group discussed the pros and cons of including Bio-monitoring in routine monitoring programmes and while its value was recognized, it may be too expensive for many countries. Other indicators such as Chlorophyll could be used to start with. However, efforts should be taken to build the capacity in the region for enhanced bio-monitoring • Darryl Banjoo- emphasized the importance of having a clear definition of environmental quality and what is meant by the proposed criteria. • The Secretariat suggested that some of these technical

	challenges should be on the Agenda for the 1 st LBS STAC.	
Decisions and/or Recommendations:	IWG will submit list of their priority issues which will be summarized by the Secretariat for further discussion during the teleconference in January. There would represent key thematic areas that could be developed into information documents for consideration by the 1st LBS STAC. The information documents should be completed no later than March 2012 to allow for translation into the working languages of the Secretariat.	
Agenda Item 4:	Any Other Business	
Points Raised:	<ul style="list-style-type: none"> • Anthony Headley suggested the importance of reflecting in the report the tremendous contribution of LBS Regional Activity Centres (RACs) and associated Regional Activity Network (RAN) to the work of the Programme and the ongoing collaboration among various regional institutions. . • Chris Corbin agreed that this should be reflected in the report and took the opportunity to inform the group that Dr. Amoy Lum Kong was recently appointed as the new Director of LBS RAC IMA in Trinidad and Tobago. He mentioned further that the Secretariat was committed to use the LBS RACs as collaborating agencies when developing and implementing new projects especially GEF Projects. • The group was also informed that Mr. Sweeney, former Regional Project Manager for the GEF IWCAM Project had been appointed as the new Coordinator for the Global Programme of Action, Coordination Office and that at the upcoming Third Intergovernmental Review Meeting at the end of January 2012 in Manila, Philippines, countries will be given an opportunity to inform the work of the GPA for the next five years. 	
Agenda Item 5:	Time and Date of Next Meeting January 17 at 9:30am	
	Adjournment The meeting was adjourned at 11:30am.	
Action Items		
Tasks	Responsibility	Due Date
Submission of Priority Areas	Working Group Members	December 12, 2011
Compilation of Recommendations	Secretariat	January – February 2012



Minutes of Meeting
Teleconference
Interim Working Group on Monitoring and Assessment
Wednesday, January 18, 2012

Chair: Country Jamaica - Paulette Kolbusch

Participants: *Jamaica* - Paulette Kolbusch, *Bahamas* - John Bowleg, *Barbados*- Anthony Headley *Columbia*- Jorge Augusto Acosta Rivera, *U.S.A* -Patrick Cotter, Marianne Bailey, Nathan Bland, Stephanie Adrian, *Mexico*- Maria del Carmen Porras-Perez *RAC-Cimab* - Antonio Villasol , *RAC-IMA /Trinidad & Tobago*- Darryl Banjoo , *CEP Secretariat*- Christopher Corbin, Sanya Wedemier-Graham, and Chrishane Williams.

Apologies: Anthony McKenzie (Jamaica), Bernard Moutou (France), Steve Morrison (U.S.A), Richard Cant (Bahamas)

Rapporteur: CEP Secretariat

Purpose:

1) To discuss priority issues in Environmental Monitoring and Assessment in the WCR.

Meeting Date and Time: Wednesday 18th January 2012, 2:15am – 3:30pm (1:15 hrs.)

Agenda Item 1:	Opening and Welcome
	Opening and Welcome was done by Ms. Paulette Kolbusch
Decision or Recommendation s:	
Agenda Item :	Priority Areas

<p>Points Raised:</p>	<ul style="list-style-type: none"> • Christopher Corbin highlighted the departure of Ms. Nadia Deen Ferguson, Assistant Programme Officer for AMEP • Christopher Corbin noted that a Technical Brief for 1st LBS STAC would be prepared based on the recommendations and priorities of the Interim Working Group (IWG). • Christopher Corbin raised the question as to how we could further promote the LBS Protocol. One option that was identified was the hiring of a communications assistant/consultant • Patrick Cotter- inquired which countries are close to ratification, as the U.S.A may be able to assist with their ratification process. • Christopher Corbin noted that the Secretariat does have a sense from most member countries. Various consultations and meetings have taken place and a priority list where further interventions are required could be prepared. • Christopher Corbin identified that one area where working group could look at is the review of relevant regional guidelines and technical reports. • Christopher Corbin -suggested that the Interim Working Group can develop an outline for the State of the Convention Area Report(SOCAR) • Patrick Cotter indicated that an outline for the SOCAR would be very useful • Christopher Corbin- asked members of the group who are interested in providing input to the development of such an outline to indicate this to the Secretariat. AMEP Secretariat and Chair will work along with IWG members who indicate interest to develop a framework for the SOCAR • Paulette Kolbusch- Jamaica indicated willingness to provide assistance. • Patrick Cotter U.S.A. – volunteered to assist with the process of the development of the framework for SOCAR. • Christopher Corbin indicated that- anyone else who is interested can e-mail the Secretariat.
-----------------------	---

- Christopher Corbin- highlighted the need for resource mobilization for LBS Protocol implementation and indicated that this needs to be discussed at the first LBS STAC. He further inquired as to whether the members of the IWG were aware of any available funding, or could suggest additional strategic approaches to obtaining additional funding for projects and activities.
- Patrick Cotter- indicated that the U.S.A had reviewed the PIF for the GEF IWCAM follow up project and noted the need to include colleagues/partners from Central and South America countries.
- Patrick Cotter suggested that the London Convention could be used as a guide as to what we should include in the framework for the SOCAR, as for information, will see what can be found, and ask people to compile. Acknowledged difficulties experienced with the revision of Technical Report # (TR 33).
- Antonio Villasol highlighted difficulties in compiling methodologies used in TR 33, as methodologies varied within different laboratories
- Christopher Corbin acknowledged the challenges experienced by RAC-Cimab and noted Patrick Cotter's recommendation to try to get feedback from countries on what methodologies they are using, and on data management. He noted that we can look at how to improve methodologies being used.
- Maria del Carmen Porras Perez added that maybe, while the countries were compiling data for TR33, there was minimal information that countries can provide. She suggested that maybe there is a standard format that already exists
- Christopher Corbin noted that we can try to compile a brief summary on how data was collected.
- Paulette Kolbusch highlighted the paper on deep well injection that was sent to the members of the working group and inquired as to whether there were experiences in utilizing deep wells.
- John Bowleg -Bahamas- noted use of deep wells. Indicated that he would welcome information on research on the use of deep well injectors as a wastewater treatment method.
- Anthony Headley- noted that deep well injection is not popular in

Barbados.

- Patrick Cotter indicated that there is some deep well injection taking place in the Florida Keys and would check on that information for the Bahamas. On January 24, the US sent seven papers and two website references to the Bahamas on deep well injection projects in Florida. Copies were also provided to other members of the Interim Working Group.
- Christopher Corbin- indicated that we could consider use of deep wells as type of wastewater treatment and that under the GEF CReW Project, a compilation of appropriate wastewater treatment technologies and Best Practices would be developed. He further outlined that there were already CEP Technical Reports with some of this information.
- Concerning lab capacity in the region, Mr. Corbin indicated the commitment of UNU -INWEH to assist in providing information that will help the Secretariat complete the regional Lab Capacity inventory
- Christopher Corbin- provided an update on GEF IWCAM follow up project. He noted that the GEF-IWCAM project is to be officially completed by the end of June; the new follow up project for Caribbean SIDS has been prepared for submission to the GEF Secretariat.
- Maria del Carmen Porras Perez - Mexico indicated that she would like a copy of the information relating to this new project.
- Christopher Corbin advised that the GEF CReW launch and seminar will be held from 7-8 of February and the first Project Steering Committee Meeting on February 9. UNEP CAR/RCU through the AMEP sub-programme will be responsible for capacity building including improving policy and legislative frameworks for countries that have endorsed. He further noted that there are additional countries that have interest in CReW and efforts will be made to include these countries in capacity building efforts using other financial resources.
- Patrick Cotter indicated that he would like to have the Secretariat make links available on the CEP website to sources of information available through the US EPA and other technical agencies. He will make contact with colleagues from the U.S. Department of Agriculture and will also be compiling a list of models. A preliminary list of watershed, water quality and agricultural nonpoint source models, as well as EPA on-line training

course websites, was distributed to the members of the Interim Working Group on March 5, 2012.

- Christopher Corbin- advised that the Secretariat have strengthened it's internal IT support and welcomed such information that could be made available through the AMEP section of the CEP website.
- Patrick Cotter - noted that at the Meeting of the Interim Working Group in Montego Bay that the delegation from Columbia indicated willingness to assist with translation of existing models. He indicated that this was an important deliverable for U.S.A., and they could work with colleagues from France for French translation, and Aruba for Dutch translation. Mr. Cotter has been in contact with EPA colleagues regarding which on-line training classes should be selected for translation. He will report to the Interim Working Group on the next conference call about his findings.
- Maria del Carmen Porras Perez - enquired if the models were available online to facilitate online training
- Patrick Cotter- indicated that the models were online and further added that they also have in house training, where staff could assist other countries.
- Paulette Kolbusch enquired about the training provided and the associated cost. Patrick Cotter-advised that country receiving training would need to cover costs of travel and accommodation etc. He also added that at the end of the training that student would get a formal certificate. .
- Paulette Kolbusch indicated the need for central point for co-coordinating these online courses.
- Christopher Corbin- noted that the Secretariat will look at how to strengthen capacity for online training. Indicated that this may be done through the GEF CREW Project and could support online training in the future. .
- Christopher Corbin -indicated that Secretariat would fine tune the final workshop report and complete the priority recommendations that would serve as an information document for the 1st LBS STAC.
- Maria del Carmen Porras Perez -Mexico requested additional time to provide comments on priority areas. Christopher Corbin advised that will

	<p>allow 2 weeks for further comments on priority areas</p> <ul style="list-style-type: none"> • Patrick Cotter- suggested the need for a delivery date for the framework for the Report: • Christopher Corbin noted that the Secretariat will be preparing working, information and reference documents for the 1st LBS STAC, and noted that by the end of February there should be some advances in document preparation. • Christopher Corbin noted high priority for hiring a communication consultant 	
Decision or Recommendation	The framework for the SOCAR should be finalized by February 28, in order to facilitate circulation and allow for review by working group members prior to next the teleconference meeting.	
Agenda Item 4:	Any Other Business	
Points Raised:	The Working Group will need to discuss any other areas leading up to IGM for consideration of Mandate of Group and what outputs to provide to the IGM	
Agenda Item 5:	Time and Date of Next Meeting	
	Tuesday March 6, 2012 - time to be communicated	
	Adjournment	
	The meeting was adjourned at 3:30 p.m.	
Action Items		
Task to be done	Person Responsible	Due Date
Development of framework for the SOCAR	Working Group Members	February 28, 2012
Circulation of Framework for review	CEP Secretariat	March 5, 2012
Submission of Minutes of Teleconference and Revised Priority Recommendations from Interim Working Group	CEP Secretariat	February 24
Finalization and Circulation of Final Workshop Report	CEP Secretariat	February 28, 2012



Minutes of Meeting

Teleconference

Interim Working Group on Monitoring and Assessment

Tuesday, 6 March, 2012

Chair: Country- Jamaica - Anthony McKenzie

Participants: *Jamaica* – Anthony McKenzie, *Bahamas* -Richard Cant, John Bowleg, *Barbados*- Anthony Headley *Colombia*- Jorge Augusto Acosta Rivera, *U.S.A* - Patrick Cotter, Steve Morrison, Anne Hillary., *RAC-IMA* -Darryl Banjoo , *CEP Secretariat*- Christopher Corbin, Sanya Wedemier-Graham, and Chrishane Williams.

Apologies: Paulette Kolbusch (Jamaica), Francois Lengrand (France), Antonio Villasol (RAC-Cimab), Maria del Carmen Porras-Perez (Mexico).

Rapporteur: CEP Secretariat

Purpose: To review and discuss the Draft Framework for the State of the Convention Area Report (SOCAR)

Meeting Date and Time: Tuesday 6th March 2012, 9:30am – 11:00am (1:30 hrs)

Agenda Item 1: Opening and Welcome

Opening and Welcome was done by Mr. Anthony McKenzie.

Agenda Item : Review and Adoption of Minutes

Points Raised:

Mr. Anthony McKenzie-chair of the Working Group requested comments or amendments to the minutes of the teleconference meeting on January 18, 2012.

Decision or Recommendation

Mr. Patrick Cotter advised that he would send/email his comments/amendments.

Agenda Item 3: Presentation & Discussion of Draft Framework for the State of the Convention Area Report(SOCAR)

Points Raised:	<ul style="list-style-type: none"> • Patrick Cotter was asked to lead the group through the Draft Framework for the State of the Convention Area Report (SOCAR). He noted that the STAC would populate the table with appropriate values. He also added that the parameters listed are the ones that were agreed to at the Regional Workshop on Environmental Monitoring and Assessment. He noted comments received by email from Antonio Villasol, and stated that the parameters and values open for discussion and consideration. • Darryl Banjoo questioned whether the parameters would include those for fresh water. He noted that Annex 1 of the draft Framework for the State of the Convention Area Report refers to Coastal Water only, and inquired whether inland water was or should be included. • Patrick Cotter noted that he thought it would be best to focus on coastal / marine waters. • Christopher Corbin- thanked U.S.A. and Jamaica for their work to start the process towards the development of the framework for the State of the Convention Area Report. He informed that feedback was received from Regional Seas Programmes who had prepared a State of the Marine Environment Report. • Anthony Headley suggested consideration of initial data on fish stock or changes in land use. • Patrick Cotter noted that fish stock data would be a good link and it could be linked to the progress of the project. • A question was raised to members of working group about possible contact with research vessels. Bahamas noted that they were conducting surveys on coral reefs and have a lot of vessels on the seas doing some specific, itemized studies. Bahamas will have to investigate further. • Patrick Cotter highlighted that in order to engage scientific cooperation throughout the region; we needed to find out if there are other associations in Central America. • It was noted that information is needed not only on coral reefs but

on fish stock and harvesting.

- Anthony Headley noted that Project Managers from the CLME project could be contacted. It was also suggested that Laverne Walker, now a Programme Officer based in the CLME project, could aid in establishing stronger synergies.
- Christopher Corbin noted that the group could look at the type of invited technical presentations which could help the group, and we could budget for these presenters and include such presentations in the Agenda for the 1st LBS STAC.
- Darryl Banjoo suggested consideration of sediment transport.
- Anthony Headley noted that chlorophyll should be added to the list of monitoring parameters.
- Anthony McKenzie mentioned a Caribbean Atlas, with information on Marine Species etc.
- Patrick Cotter inquired whether there was anything that CATHALAC or INVEMAR could assist with.

Christopher Corbin noted that particular agencies such as CATHALAC and CEHI could provide additional input and support as part of the Regional Activity Network (RAN).

- Chris Corbin indicated that to further develop the report, good face to face discussion should allow the group to finalize the report during the first LBS STAC. Similar reports prepared by other Regional Seas Programmes could be a useful guide.
- Patrick Cotter mentioned the issue of Laboratory Capacity, and how that process could be funded. He enquired if it would be possible through CReW and the new upcoming follow up project to IWCAM.
- Anthony McKenzie noted that Jamaica will continue to receive comments on the working draft of the framework for the State of the Convention Area Report up until the first STAC meeting so we can have a substantive draft for discussion.
- Christopher Corbin highlighted the need for this and other documents to be translated, and requested a deadline of the end of

	March for receipt of additional comments.
Decision or Recommendations:	It was agreed that all additional comments on documents for presentation to the 1 st LBS STAC should be sent by March 30, 2012, to allow timely translation into Spanish and French.
Agenda Item 4:	Format for Presenting Working Group Findings to 1st LBS STAC/COP/IGM
Points Raised:	<ul style="list-style-type: none"> • The Chair of Working Group will present the work of the working group since its establishment including the SOCAR Outline and the Group's main recommendations/priority areas. • Christopher Corbin noted that he had sent the revised priority areas. It has specific recommendations for the Secretariat and countries. The draft outline/framework for the SOCAR will form apart of the complied document. The complied document will form the basis on which the 1st LBS STAC will make further recommendations. • Patrick Cotter- with regards to the bullet contained in paragraph 1.0 of the revised priority areas that stated “<i>Provide recommendations for future amendments to the LBS Protocol for consideration at future COPs and IGMs of the Cartagena Convention</i>”, Patrick expressed that he was concerned about making changes to the LBS Protocol considering it just entered into force. He pointed out that we need to see how the Protocol’s, Contracting Parties can work together to see how we can use current annexes. • Christopher Corbin suggested that we could develop more reasonable text/wording. Chris further noted that the source of the criteria and standard feedback is that many local/national standards were stricter than the LBS protocol. Consider recommendation for strengthening of LBS depending on government ability. • Patrick Cotter questioned if that option would be given to parties e.g. Guyana, who do not have an adequate wastewater system. He noted that Suriname, Honduras, Haiti are not parties to the Convention and LBS Protocol. He noted that we do not want to have standards that will isolate some countries; standards may be too difficult for some countries. • Anthony Headley noted that it could be dangerous for ratification if

	<p>the standards were too strict.</p> <ul style="list-style-type: none"> • Anthony Headley noted that the paragraph could be re-phrased to “<i>Research for improvements of LBS protocol and impact of pollution on parties and potential parties.</i>” • Patrick Cotter was in agreement with that suggestion. • Anthony Headley noted that the Priority Area document and SOCAR outline would be circulated to focal points. • Patrick Cotter noted that they had sent out list of models. • Anthony McKenzie acknowledged receipt of list of models, and questioned whether this could be part of the report to STAC. • Christopher Corbin advised yes- reference could be provided and circulated to the participants. It could also be highlighted in the AMEP quarterly and a link established on the CEP website. • Patrick Cotter agreed to the idea. He indicated he would follow up on online training to make available to a wider audience. • Chris noted that as many documents as possible would be translated and would be subject to availability of funds.
<p>Decision or Recommendations:</p>	<p>Paragraph 1.0 of the revised priority areas that stated “<i>Provide recommendations for future amendments to the LBS Protocol for consideration at future COPs and IGMs of the Cartagena Convention;</i>” is to be rephrased.</p>
<p>Agenda Item 5:</p>	<p>Information on Regular Process</p>
<p>Points Raised</p>	<ul style="list-style-type: none"> • Christopher Corbin requested feedback on the regular process. He pointed out that as a Secretariat we are asked to collaborate with Regional Seas and IOC. A Regional workshop is expected to take place in the Caribbean in summer, so we can ensure regional work is reflected in this activity.

Decision or Recommendations	Christopher Corbin advised that he would keep the group informed on the process.
Agenda Item 6:	Future activities of Interim Working Group
Points Raised	<ul style="list-style-type: none"> Christopher Corbin noted that March will see a pause to the teleconference meetings of the Interim Working Group. Written feedback will be required on the two areas we want to focus on. The Interim Working Group was established at the IGM and will provide report to STAC and IGM.
Decision or Recommendations	This will be the last official conference call of the working group until the 1 st LBS STAC in June. The group will continue to provide input into the priority areas, and draft SOCAR.
Agenda Item 7:	Any Other Business
	<ul style="list-style-type: none"> Anthony McKenzie requested an update on the launch of GEF CReW and on the GEF IWCAM follow up project. Christopher Corbin advised that launch of CReW took place February 7-9, 2012; some members of the IWG were able to participate. There is significant activity within the CReW project. There will be a follow-up meeting in Panama and CEF in May, and CWWA- Bahamas. He noted efforts towards ratification of the LBS Protocol by Jamaica. In the process of finalization of IWCAM II PIF for submission to GEF. Christopher Corbin thanked the Working Group and advised the chair that they would be asked to give a presentation at the STAC meeting.
	Time and Date of Next Meeting & Adjournment
	Next Meeting will be after the 1st LBS STAC The meeting was adjourned at 11:00 am.

Action Items

Task to be done	Person Responsible	Due Date
Finalization of framework for State of the Convention Area Report	Chair/USA/Secretariat	March 30
Compilation of IWG Documents for presentation to 1 st LBS STAC	Secretariat	April 26



Draft Minutes of Meeting

Teleconference

Interim Working Group on Monitoring and Assessment

Wednesday, August 29, 2012

Chair: Country Jamaica - Paulette Kolbusch

Participants: *Jamaica* - Paulette Kolbusch, *Bahamas* - Richard Cant, *U.S.A* -Patrick Cotter, *Mexico*- Maria del Carmen Porras-Perez, *RAC-Cimab* - Antonio Villasol , *RAC-IMA /Trinidad & Tobago*-Darryl Banjoo , *CEP Secretariat*- Christopher Corbin, Sanya Wedemier-Graham, and Chrishane Williams.

Apologies: Anthony McKenzie (Jamaica), François Lengrand (France), Anthony Headley (Barbados)

Rapporteur: CEP Secretariat

Purpose:

1. The review the relevant recommendations from the 1st LBS STAC Meeting relating to the Interim Working Group (IWG) and the State of the Convention Area Report (SOCAR) Outline.
2. To agree/decide on further work of the Interim Working Group to refine the SOCAR Outline for presentation to the 1st LBS COP and 15th IGM.

Meeting Date and Time: Wednesday 29th August 2012, 9:30am

Agenda Item 1:	Opening and Welcome
	Opening and Welcome was done by Ms. Paulette Kolbusch. Apologies were noted by Mr. Corbin and Ms. Kolbusch
Agenda Item2 :	Review of Recommendations of the 1 st LBS STAC

Points Raised:	<ul style="list-style-type: none"> • Mr. Christopher Corbin noted for the advantage of members of the Interim Working Group who were not present at the 1st LBS STAC that the report of the interim working group was presented to the 1st LBS STAC by the chair Jamaica. • He further noted that one key recommendation was to establish a Working Group such as the Interim Working Group on Monitoring and Assessment. He also noted that there were recommendations for improving the Report and the Outline for State of the Convention Areas Report (SOCAR). He noted that the group will need to decide what should be done to refine the document presented to 1st LBS STAC for presentation to the 1st LBS COP. • The recommendation III from the LBS STAC report pertaining to the Interim Working Group and the SOCAR report was read to the group by Ms. Wedemier- Graham as requested by Mr. Corbin
Decision or Recommendation	
Agenda Item 3:	Decisions on further work of the IWG to refine the SOCAR Outline
Points Raised:	<ul style="list-style-type: none"> • Ms. Kolbusch led the group through the Report of the Interim Working Group that was presented at the 1st LBS STAC. • Mr. Cotter noted that would be good if the group could develop goals and objectives for the Interim Working Group. He noted that this could help to guide the work of the working group and could be used to recommend the continuation of the work of the working group and work on the State of the Convention Area Report. He noted a document produced for Africa that he would share that could be used as a guide to develop the goals and objectives. • Mr. Corbin noted that this was a good suggestion and that it would put into perspective what we want to achieve within the framework of the LBS Protocol. • Mr. Cant also noted that he was in agreement with the proposed idea. • Ms. Kolbusch led the discussion on the State of the Convention Area Report , she questioned as to whether all countries will have resources as per section 2.0 of the State of the Convention Areas Report that noted that “Member States should: Select indicators for reporting in their SOCAR information that reflects availability of resources including regionally agreed comparative values or cut values based on biogeography, laboratory infrastructure, and monitoring and assessment capabilities to ensure comparability of data.

- Mr. Corbin noted that one issue is for us to get support and funding to support the acquisition of LBS data.
- Ms. Kolbusch noted that a survey could be done every 5-10 years. This could be suggested to the countries. This could be a decision for 1st LBS COP.
- Mr. Cotter suggested the possible use of a wiki website for information to be uploaded. He suggested that CEP could look further into this suggestion and to whether there would be funds in the Biennial Work plan which could support this.
- Mr. Corbin advised that we will discuss with our IT staff member to determine what possibilities exist.
- Mr. Cotter advised that he would discuss further with colleagues as to what wiki sites are available and that this would be a good recommendation to consider so that we can keep track on how the data is populated over time.
- Mr. Corbin noted discussion with Paul and noted that Secretariat will engage to see how to collaborate
- Ms. Kolbusch raised discussion on Geographical coverage and Sub Regions. Chris Corbin noted that when TR33 was first written the WCR was divided into sub-regions (6), and Technical report 52(update of TR33) divided the WCR into 5 sub-regions. Chris questioned whether there were any other sub-regional approach that may be available, noted one done by Mexico under LME project.
- Ms. Maria del Carmen Porrás-Pérez question as to how often the SOCAR report would be updated. Mr. Corbin noted every 5 years.
- Mr. Cotter suggested that the update be an even number of years so as to coincide with the CEP Biennium.
- Mr. Corbin noted that 4-6 yrs would be appropriate to coincide with Biennium
- Ms. Maria del Carmen Porrás-Pérez questioned if it would be continuous update as some information would not change very often.
- Mr. Corbin noted yes and that one recommendation from the last IGM was how we can make an online reporting template for the convention. Scientific information from scientific monitoring would feed into a report every 4-6 yrs to develop a comprehensive report.
- Mr. Cotter noted that was a good idea.
- Ms. Kolbusch noted that the outline could shape how member countries do reporting.
- Mr. Corbin noted that the outline could help support national reporting by the countries.
- Ms. Paulette Kolbusch raised paragraph 5 of the SOCAR outline “Condition of Caribbean Watershed and Coastal Areas”.
- Dr. Banjoo noted that a summary report on overall conditions could provide more detailed information
- Mr. Corbin noted reports could be done from national reports that are

already available, noted that national data or information generated at the national level could be used.

- Ms. Kolbusch raised issue of cut values and parameters.
- Ms. Maria del Carmen Porras-Perez noted that the parameters are standard , she noted that it would be difficult to have cut values for some parameters. She added that Mexico has cut values for BOD and TSS , but not for conductivity and chlorophyll . She suggested keeping it simple with the least parameters possible i.e reducing the number parameters
- Mr. Cotter though it was a good idea to reduce the number of parameters as we look at the data that are available. He noted that initially, if countries start to report we could determine what information/data is available.
- Dr. Banjoo was in agreement and noted that when we have the monitoring data we could then derive the cut values. He also noted that we could look at ambient monitoring to derive the values. If countries have data, could have countries provide the data/information .Mentioned that Columbia has a lot of data for monitoring.
- Mr. Cotter was in agreement and noted that we could generate cut values later.
- Mr. Cotter noted that parameters such as chlorophyll can be determined by remote sensing . He mentioned making use of facilities within the Caribbean e.g Catalac.
- Mr. Corbin noted that we can gather data from countries that do regular monitoring. So we can have an idea what is being monitored. He mentioned that at the Regional Workshop chlorophyll was identified as a good indicator to be used.
- Mr. Cotter noted that we need to look at Nitrogen, Ammonia or Total Nitrogen. Mentioned maybe we would include total nitrogen. He noted that other parameters that may be combined is oxygen and dissolved oxygen.
- Mr. Corbin noted that the decision to combine will depend on SOCAR report. He noted that some of the parameters will be very critical for monitoring, more for national monitoring but not necessary for SOCAR report, can indicate that one is just as indicative as the other.
- Dr. Villasol noted that he was in agreement with the parameters.
- Ms. Kolbusch noted that we need to determine which parameters can be done by remote sensing. In terms of values we could look at data for the values and improve over time. Can have basic parameters as a start.
- Ms. Maria del Carmen Porras-Perez questioned if USA had cut values that could be used and to give an idea of what countries use.
- Ms. Cotter noted that the USA provided info in the table where they had available. He noted that if anyone had any suggestion and if

	<p>anything develops in the USA they will update and provide information.</p> <ul style="list-style-type: none"> • Mr. Corbin noted that this could be a specific activity for the group to work on the cut values, so even if we cannot make a decision, we can compile information that may be possible, we could highlight where cut values are constant between countries. Propose in September to gather that information to fine tune the table to present to LBS COP. • Mr. Cotter noted that he wanted to ensure that the term “cut values” gets translated correctly into Spanish and French. Maybe could decide on a descriptive term for cut values so that it translates correctly, maybe in footnote could describe what is meant by cut values • Ms. Maria del Carmen Porrás-Perez noted that in Mexico the word criteria is used • Ms. Kolbusch noted that more discussion would be needed on the table of Monitoring parameters and the classification based on Continental Coastal Segments and Island Coastal Segments. It was noted that some countries have class 1 and 2 classifications and other countries have an equivalent classification but titled differently. • Mr. Cotter noted that could look at regional or sub-regional break out to define the terms • Dr. Banjoo noted that we needed to explain the purpose behind the classification into Continental and Island segments. • Mr. Corbin noted that methodology (sampling-data collection and analysis) is something that we could work on post LBS COP. • Ms. Kolbusch noted that when we decide on methodology, this could be added to the table as recommended methodology. • Mr. Corbin was in agreement, for each parameter the methodology could be noted in the table. • Mr. Cotter noted that he would send information on wiki website • Mr. Corbin noted that the group will work during September with exchanges of email that will allow for the update of the report to be presented to the 1st LBS COP in October. Mr. Corbin thanked the group for their support.
Decision or Recommendation	<p>Goal and Objectives to be Developed Research into use of Wiki website Socar Report to be done 4-6 yrs to coincide with CEP Biennium</p>
Agenda Item 4:	Any other business
Agenda Item 5:	Adjournment
	The meeting was adjourned at 11:10 a.m.

Action Items		
Task to be done	Person Responsible	Due Date
Development of Goals and Objectives	Working Group Members	September 28, 2012
Research into use of Wiki website	CEP Secretariat & USA	September 30, 2012

Annex 3

Tools for Document Collaboration

In this document, three web based document collaboration tools will be reviewed. This is not to say that there are no other tools available. The rationale for selecting these systems is based on popularity, ease of use and cost of implementation or ownership.

Google Docs

Google docs is a solution offered by Google as a free web based alternative to Microsoft Office. It is the most feature rich of all three reviewed. It does not carry all the bells and whistles offered by Microsoft Office, however it has everything needed to compose a document, spreadsheet or presentation. Collaboration is done in real time so as one user is typing, the change is seen almost immediately on other users screens.

Pros

- Changes are seen immediately and do not require the user to refresh, or log out then in.
- View and edit permissions can be managed easily.
- Carries most of the tools needed for document creation
- Carries a good revision system allowing rollbacks and identifying user contribution.
- Free for google or google app users
- Minimal or no setup required.

Cons

- Not available to users with emails outside of google and google apps.
- More suited for documents in draft state and is not to be used to a permanent place to publish content.

Wiki

Wiki is a web based content editing tool which allows multiple users to work on a single item but not all at once. Once a user is editing content, all other users should wait until changes have been saved before attempting to edit. Wikis carry a strong revision system which allows a user to compare different revision of content. A Wiki system can be setup on almost any web hosting system which makes the cost of ownership low. There are free Wikis available in public sites however, if greater control is needed over editing rights, a hosted solution should be considered.

Pros

- Strong revision system which allows comparison.
- Lower requirement allowing setup on almost any hosting service.

- Low cost of ownership.
- Can be setup to allow users from any email domain to edit.

Cons

- Users have to wait turn to edit.

Etherpad

Etherpad is a system originally developed by AppJet Inc. but now owned by Google. It is a document (word processor only) system similar to Google Docs which allows real time collaboration on documents. Changes being made by the user shows up immediately and are colour coded to facilitate easy identification of user contributions. A chat window can also be added to the editing screen giving users the ability to engage in text based conversations. The system has been released open source so anyone may now have their own Etherpad system, however, the system requirements restrict it from being deployed on cheaper shared hosted solutions.

Pros

- Changes are seen immediately and do not require the user to refresh or log out then in.
- Carries a good revision system allowing rollbacks and identifying user contribution.
- Users are not restricted by email domain

Cons

- More suited for documents in draft state and not to be used to a permanent place to publish content.
- Editing does not allow adding of images