



Distr. LIMITED

UNEP(DEPI)/CAR WG.41/INF.6/ Rev. 1

22 July 2021

Original: ENGLISH

Fifth Meeting of the Scientific and Technical
Advisory Committee (STAC) to the Protocol
Concerning Pollution from Land-Based Sources
and Activities in the Wider Caribbean.

Virtual

15 to 17 March 2021

**Report on the Ad-Hoc Open-Ended Working Group on
Environmental Monitoring and Assessment**

For reasons of public health and safety associated with the COVID-19 pandemic, this meeting is being convened virtually. Delegates are kindly requested to access all meeting documents electronically for download as necessary.

1st Meeting of the LBS Open-Ended Working Group

Summary Notes

September 25, 2019

10:30am

I. Welcome and introductions

II. Participants

Chris Corbin: UNEP Cartagena Convention Secretariat
Stephanie Adrian: US EPA, Current Chair of Working Group
Eric Salamanca: Turks and Caicos
Lisa Kirkland: Jamaica
Troy Pierce: US EPA
Hugh Sullivan: US EPA
Andrew Horan: US EPA

III. Terms of Reference for this OEWG

- Interim WG was originally to help develop SOCAR;
- Focus now on dissemination and the implementation of SOCAR recommendations;
- Going back to original TOR and make this more of an advisory group for the Secretariat on the Pollution Sub-Programme;
- Need to update with current issues e.g. microplastics, sargassum, nutrients, other emerging issues;
- OEWG members could provide general feedback; overall comments welcomed by 11th October; consider which key areas need to be covered, if more specificity is needed, and if technical topics should be included;
- After TORs finalized, transition to new group with new Chair; Secretariat will ask for nominations or interests for Chair/Vice Chair position.

IV. Review of key COP Decisions related to this OEWG

- Future face-to-face meeting as needed and subject to availability of resources; possibility of expert group meetings – factsheets and policy briefs are being developed from SOCAR report, development of Nutrient Reduction Strategy is ongoing, major focus on marine litter/microplastics;
- A Request for Proposals was sent by US EPA for Gulf States this week; \$5 million in grant funding; Chris will post/share through CEP website; focus is on US Gulf States but results of work will be useful for the Wider Caribbean Region;

- Government of Mexico project through UNEP is on hold; focused on Mexico but partnership will include US States;
- Establishment of sub-groups; could be ad-hoc based on needs of the Secretariat and/or Decisions of Contracting Parties or more long-term such as focusing on core pollution concerns;
- This OEWG is different from others and needs some more explanation for new members especially; it advises on work plan activities and functions in an advisory capacity to the Secretariat; manage expectations for everyone;

V. Status of the SOCAR

- SOCAR report approved at the LBS COP and endorsed by the IGM; available in all 3 languages; two recruitment processes for finalizing are taking place; a formal editor for reading through report and another for final graphics, and layout;
- Some fine tuning needed based on COP discussions but the substantive content of the report can be considered officially endorsed;
- The report is expected to be formally published by the 1st quarter next year (2020) with a final electronic version available by the middle of November this year. Secretariat will review over next few weeks and then CATHALAC will add graphics and do the final layout;
- The review by the Secretariat should be concluded by mid-October;
- Short summary briefs for policy makers and one-pagers of SOCAR findings are under preparation and will form the basis for dissemination of the results of SOCAR at key regional and global fora;
- Upcoming regional workshops and meetings will allow for more formal release e.g. Annual Regional Seas next week, meeting of water ministers at the Caribbean, Water and Wastewater Association Conference in mid-October and the intersessional meeting of Ministers for Latin America and the Caribbean scheduled for Barbados during the first week of November this year;
- The UNEP GEF IWEco project is providing funding for the final editing and layout/graphical design by CATHALAC;
- 1st printed publication by first quarter next year but electronic version by middle of November;
- Linking of SOCAR and CLME+ SOMEE+INVEMAR Caribbean Marine Atlas; all will help visualize environment quality; user friendly way of interacting with pollution data; would like to create situational platform to keep all this information together; UNEP is developing a World Situation Room as part of a revamped UNEP Life and this might be used as a model for visualizing the data from SOCAR;
- Ocean Decade- UNEP Regional Seas connection to other data sources and visual platforms; members should let Secretariat know how to use and harmonize data;
- Consider how to support national action.

VI. Setting up regular calls

- Next call to finalize TORs and other items such as sub-groups;
- Feedback could be via email;
- One more call **end of Oct/beginning of November** for update from Secretariat;
- Try to get as many WG members as possible; work planning session of sorts; Secretariat can get feedback;
- In next call regarding TORs, define roles, expectation, deliverables for the new OEWG as well as possible priorities.

VII. Other

- The Secretariat (Chris) would like feedback on TOR, factsheets, etc;
- Secretariat will make presentations at the First Regional Marine Forum, the Annual Regional Seas Meetings and various global meetings on marine litter over the next two months;
- Share key messages that are important to reflect from a pollution standpoint that Chris can include in presentations e.g. pollution, capacity building, LBS issues;
- Secretariat working to get support from other countries on Trash Free Waters and other marine litter efforts in the region. Some of these activities are expected to take place with the support of the Caribbean Regional Marine Litter Node co-hosted by the Gulf and Caribbean Fisheries Institute.

Action Items:

- Review TORs and provide overall/general feedback to the Secretariat by Friday, 11th October;
- Share key messages on LBS issues including pollution, capacity-building, etc. with Chris ASAP for international discussions that could lead to additional funding from ongoing and/or future projects;
- Accept invitation for next working group call end of October/beginning of November when it comes out;
- Consider nominating someone and/or volunteering for next Chair/Vice Chair of OEWG.

2nd Meeting of the LBS Open-Ended Working Group

Summary Notes

March 26, 2020

9:00 am Jamaica

I. Participants

Chris Corbin: UNEP Cartagena Convention Secretariat
Sancha Foreman: UNEP Cartagena Convention Secretariat
Richard Nelson: Jamaica
Lisa Kirkland: Jamaica
John Knowles: UNDP GEF CLME+ Project
Patrick Debels: UNDP GEF CLME+ Project
Felicia Adams: Guyana
Morten Sorensen: GRID Arendal
Darryl Banjoo: RAC-IMA
Stephanie Adrian: US EPA
Andrew Horan: US EPA

II. Stephanie Adrian, current chair of the OEWG, opened up the call which was the first meeting since the Covid-19 outbreak began. The Secretariat used a trial Zoom Meeting to connect everyone which worked well. Since the time limit for the trial version is only 40 minutes, the call was limited. However, the Secretariat will be exploring more video-conferencing options to allow for more time on future calls.

III. Update on SOCAR

- The Secretariat reminded everyone that the SOCAR was fully endorsed at the last COP and that final editing is being completed. CATHALAC is doing the final formatting and review and helping to provide consistency throughout the document. Secretariat comments are being incorporated and pictures are being added.
- A summary brief for decision makers is also being developed by the Secretariat that can be shared with more senior-level officials.
- The timeline to finish is approximately 1 month.
- The SOCAR is already being used and included in vital planning efforts around the Region:
 - CLME+, which provided funding for the development of the SOCAR, will use the SOCAR as one of the puzzle pieces for the State of the Marine Environment and Associated economies (SOMEE). Other pieces include the State of the Fisheries Report developed by FAO, the State of Marine Habitat report also developed by the Secretariat through the

SPAW protocol, regional strategies and action plans for pollution and marine biodiversity (through the Secretariat) as well as research agendas in pollution, marine biodiversity and fisheries all under CLME+ that will benefit the Region.

- The Secretariat shared that the Gulf and Caribbean Fisheries Institute's (GCFI) research agenda for pollution includes elements from SOCAR and the Secretariat was able to provide comments to the final draft based on discussions of the working group, LBS STACs and LBS COPs..
- The Secretariat shared that the SOCAR is also being used to develop the Regional Nutrients Reduction Strategy with RAC-IMA and RAC CIMAB leading its development.

IV. Strategic follow-up to the SOCAR

- The Secretariat will resend country data to the LBS focal points that included the good-fair-poor designations so countries can start using the information to make decisions on pollution control going forward.
- Once published, the SOCAR can be shared even more broadly and linked to other efforts such as the Interim Coordination Mechanism (ICM) for CLME+ and the Caribbean Marine Atlas. The ocean acidification and sargassum working groups are asking for collaboration.
 - i. Contracting Parties need to take advantage of funds and opportunities available through other projects implemented by the Secretariat which can be used to support among other things the strengthening of national monitoring programs. These projects include:
 - ii. GEF-IWEco
 - iii. GEF-CReW+ - currently in pre-implementation
 - iv. EU Africa, Caribbean, Pacific (ACP) States MEA Project (Phase III)
- The Secretariat expressed a need for a stronger link between the marine pollution reduction efforts, the SOCAR and the private sector. They may explore hiring a consultant to look at how the State of Habitat and SOCAR can be reviewed to develop a Summary for Investors (similar to the Summary for Policy Makers). This could help stimulate investments from the private sector to build on support already being received from the various GEF and other projects that are supporting monitoring and assessment in the countries.

V. Other efforts in the Region

Marine plastics – the Secretariat is working with GCFI to develop community-based projects building on the experience of the Trash Free partnership with the US EPA

CLME+ - they are creating a Knowledge Management Hub/MS.database of projects in the Region on the website www.clmeplus.org to ensure linkages.

VI. Implications for future to intergovernmental meetings

- The next LBS and SPAW STAC meetings are currently planned for November/December 2020 and the COP/IGM for the first quarter of 2021. No changes yet to the dates due to Covid-19 although this will need to be carefully evaluated in the coming months.

3rd Meeting of the LBS Open-Ended Working Group

Summary Notes

January 12, 2021

10:00 am Jamaica

I. Participants

Chris Corbin:	UNEP Cartagena Convention Secretariat
Georgina Singh:	UNEP Cartagena Convention Secretariat
Richard Nelson:	Jamaica
Lisa Kirkland:	Jamaica
Felicia Adams-Kellman	Guyana
Darryl Banjoo:	RAC-IMA
Marlen Hernandez:	RAC CIMAB
Marko Tomic:	EAFIT University - Colombia
Karen Ibarra Gutierrez	INVEMAR, Colombia
Luisa Espinosa Diaz	INVEMAR, Colombia
Stephanie Adrian:	US EPA
Troy Pierce:	US EPA
Hugh Sullivan:	US EPA

II. Welcome - Stephanie Adrian, current chair of the OEWG, opened up the call, via Teams, which was the first meeting of 2021. This was considered a pre-STAC meeting with the upcoming LBS STAC meeting planned for March 15-17.

III. Update from Secretariat on SOCAR

- CATHALAC is finalizing the SOCAR with an enhanced look and plans to include country summaries. The aim is to have it fine-tuned by the end of January in time to present it at the meeting of Ministers of Environment of Latin America and the Caribbean at the beginning of February 2021.
- The final SOCAR report will be ready for the upcoming STAC meetings in March.
- The Secretariat is developing a PowerPoint presentation for the meeting which will be chaired by Barbados. Additionally, CLME+, working with CATHALAC will help harmonize the maps, assist with formatting, review and help to provide consistency throughout the document. The Secretariat's comments are being incorporated and pictures are being added.
- In terms of financial support: the Africa, Caribbean, Pacific MEA (ACP) Project is supporting the development of additional graphics and factsheets;

savings from CLME+ funds, in addition to support from the Caribbean Natural Resources Institute in Trinidad & Tobago for the development of a 2-3 page brief to be presented at the Conference of Parties meeting in June 2021.

Other updates from the Secretariat

- A link to the STAC web portal will be shared shortly along with invitations to the meeting. Documents are being translated.
- Microsoft Teams will be the platform used for the STAC.
- Interactio is the software app that will be used for interpretation services.
- The Secretariat is considering setting up a WhatsApp group chat parallel to the Teams platform to stay connected to participants, particularly if there are technical difficulties.
- Sancha Foreman left UNEP recently and will be sorely missed by all for her hard work and dedication to LBS.

IV. Preparation for the STAC Meeting

- a. The report from the OEWG will aim to garner feedback on the overall view of the monitoring and assessment needs. The Chair of the OEWG will develop a PowerPoint presentation to deliver at the STAC.
- b. Focus going forward will include how to support Secretariat with particular emphasis on:
 - i. Review of Regional Nutrient Strategy;
 - ii. Capacity-Building issues related to monitoring and assessment;
 - iii. Role of OEWG as advisors for technical support and information sharing e.g.:
 1. Input to technical Terms of References;
 2. GEF CReW+ funding in support of nutrients work;
 3. Secretariat's recruitment of consultants to do information papers on nutrients and fresh water (IWRM).

Discussion:

- Marlen Hernandez (RAC-CIMAB) agreed that the OEWG should take on an advisory role, particularly in terms of the nutrient standards and water quality issues and provide input on the Regional Nutrient Strategy. They are also in support of including the RNS into the LBS Protocol.
- Darryl Banjoo (RAC-IMA) is in agreement and highlighted a few additional points for the OEWG to engage further on, including: assessment ranges, the definition of pollution sources e.g. domestic wastewater, farming. There are lessons learned from the CLME+ project in Trinidad and Tobago that might be helpful.
- Chris Corbin (Secretariat) provided insight that the GEF IWeco project will develop a report on an assessment of laboratory capacity in the region led by RAC-IMA and RAC-CIMAB for monitoring SOCAR parameters.
- The Secretariat indicated there are projects underway to address nutrients:
 - Pilot study on non-point discharge;

- Global nutrient project on hotspot testing;
- Additional needs exist for technology vetting and oversight.
- Troy Pierce (US EPA) shared information on a study by University of Pittsburgh that is doing remote sensing of river color for nutrients and sediment. They suggested a future presentation of the study to the OEWG which US EPA can help set up.
- The Secretariat finalized MOUs with INVEMAR, CATHALAC, Ocean Foundation and GCFI. GCFI will engage in research related to the SOCAR recommendations.
- Marko Tomic (EAFIT) shared information on research his institution is involved with in Colombia. There is research underway on hydrodynamic modelling to determine discharge limits with methods which has been published in the journal of Marine Policy. Additionally, they are developing a real-time operational model to forecast real-time hydrodynamic conditions as part of an early warning system e.g. for oil spill dispersion or determining where oil is coming from. They are also looking at future work on forecasting conditions in beaches and nutrients.
- Karen Ibarra (INVEMAR) wrote that INVEMAR still very interested to share experiences and learned lessons about the monitoring of water and sediment quality, as well as others related to pollution, especially in the marine matrix. INVEMAR has the Marine Environmental Quality Laboratories Unit - LABCAM, accredited under the NTC-ISO / IEC 17025: 2005 standard in marine and continental water and sediment matrices, so INVEMAR can provide technical advice to enhance laboratory capacity to assist in long term monitoring and assessment of SOCAR parameters with the necessary rigor to analyse and report results of environmental variables. Also, INVEMAR is part of REMARCO "Research Network on Marine - Coastal Stressors in Latin America and the Caribbean", a non-profit interdisciplinary research network that uses nuclear and isotopic techniques for peaceful use, to address environmental problems of marine-coastal ecosystems areas of Latin America and the Caribbean. At REMARCO, the work between scientists and communicators is integrated to achieve the effective transfer of scientific research results to decision-makers and communities affected by chemical and microplastic pollution, harmful algal blooms, and accelerated changes in ocean acidification.

V. Expectations of the Secretariat for the STAC

- Input to technical papers, including:
 - Nutrient analysis;
 - Final Regional Nutrient Strategy;
 - Revised Cartagena Convention Report Template that includes questions related to SOCAR reporting;
- OEWG given mandate to look at the nutrients problem more closely, including weighing in on the possibility of an amendment to the Protocol to further address the challenges.

VI. Looking ahead post-STAC

- May consider OEWG setting up sub-groups e.g. marine litter/plastics and improving data.
- How to increase LBS/SPAW interactions e.g. sargassum, impact of plastics on marine mammals.

4th Meeting of the LBS Open-Ended Working Group

Summary Notes

July 12, 2021

9:00 am Jamaica

I. Participants

Chris Corbin:	UNEP Cartagena Convention Secretariat
Georgina Singh:	UNEP Cartagena Convention Secretariat
Stephanie Adrian:	US EPA
Hugh Sullivan:	US EPA
Richard Nelson:	Jamaica
Lisa Kirkland:	Jamaica
Linroy Christian:	Antigua and Barbuda
Anthony Headley:	Barbados
Marnie Portillo:	Honduras
Darryl Banjoo:	RAC-IMA
Valeria Cruz:	Mexico
Ignacio Vasquez:	Mexico
Luisa Espinosa Diaz	INVEMAR, Colombia

II. **Welcome** - Stephanie Adrian, current chair of the OEWG, opened up the call, via Teams. This was considered a pre-Conference of the Parties meeting with the upcoming LBS COP meeting planned for July 26th.

III. Formation of Sub-groups

- The Secretariat reminded everyone that the OEWG was officially formed after the last COP in Roatan. Additionally, support for the formation of sub-groups was given with the expectation that the OEWG would give initial recommendations.
- The sub-groups can welcome technical experts for any of the issues and do not need to be Contracting Parties.
- Initial ideas shared by Barbados, Trinidad and Tobago and the US included sub-groups on nutrients, the freshwater nexus and remote sensing to improve data.
- The Secretariat suggested that the OEWG address broader, strategic issues such as data and information management, SOCAR reporting and Protocol issues, such as ratification, whereas the sub-groups would have a more technical focus.
- By the end of the meeting, the OEWG coalesced around the idea of recommending three sub-groups that could address certain topics and have different experts join the sub-groups as needed:

- Standards and criteria. This sub-group could discuss standards and methodologies for comparable data, nutrients, wastewater and defining Class I & II waters.
- Information management
- Future planning. This sub-group could discuss emerging issues in the region.
- A concern for what Secretariat resources would be needed to support any new sub-group was raised. The Secretariat clarified that they would stay engaged with the OEWG but would not need to be present at all the sub-group meetings and that there could be a reporting out from those meetings to the larger OEWG.
- RAC-IMA reminded the OEWG of its ability to assist with capacity building in a variety of areas, such as classification of waters, defining standards, targets and indicators and linking them to monitoring. Additionally, they are able to offer technical expertise in developing criteria values for wastewater, moving toward a Total Maximum Daily Load (TMDL) approach.
- Antigua and Barbuda emphasized the importance of involving the University of West Indies as much as possible in the technical discussions.

IV. Preparation for COP5

- Most of the meeting focused on the formation of sub-groups which left little time to discuss preparations for the COP.
- The Chair will prepare a presentation based off of the presentation given at the STAC meeting.

V. Shift in Leadership of OEWG Chair

- The current US Chair indicated she would like to step down from the position due to a shift in her duties and offer another Contracting Party the opportunity to chair the group.
- Volunteers for the position will be warmly welcomed to take over this esteemed working group.

VI. Other Business

- The Secretariat shared information on resources that will be available for LBS priorities including:
 - GEF and IDB/UNEP funds to help develop nutrient criteria and to Regional Activity Centers for training
 - Africa Caribbean Pacific (ACP) funding to help develop national action plans on plastics
- The Secretariat is in discussions with UNDP for PROCARIBE funding to support the development of the next SOCAR
- Antigua and Barbuda developed a paper on distinguishing classes of waters that needs review.