









# **Workshop Summary Report**

# LME:LEARN Data and Information Management: Working Group Meeting and Training Paris, France 2 – 4 July 2019

UNESCO Annex building, 1, Rue Miollis 75015 PARIS - Room 15 (XV)



The LME:LEARN Data and Information Management: Working Group Meeting and Training was jointly organized by the Large Marine Ecosystem Learning Exchange and Resource Network (LME-LEARN), in partnership with the United Nations Development Programme (UNDP) and the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO).

The agenda, working documents and presentations are available at <a href="https://iwlearn.net/events/workshops/lmelearn-data-and-information-management-working-group-meeting-and-training">https://iwlearn.net/events/workshops/lmelearn-data-and-information-management-working-group-meeting-and-training</a>

# Background

Data and information play a crucial role in all phases of the policy cycle in international waters—from decision-making via implementation and monitoring, to analysis and recommendations. Data and information support an understanding and greater awareness of environmental issues, causes, sources and impacts; they function as an on-going component of the development and assessment of management policies, strategies and interventions; and they facilitate improved enforcement, decision-making and individual actions.

In order to guide and support the data and information sharing on Large Marine Ecosystems – LMEs (as well as associated integrated coastal management, marine protected areas and Marine Spatial Planning projects), for use by LME:LEARN stakeholders and the wider public, the LME:LEARN project supports the Data and Information Management Working Group (DIM WG). The DIM WG was established as an informal body to guide the process with a clear mandate to create learning exchanges on data and information management tools to be used by the LME community of practitioners. Several meetings of the DIM WG have taken place since the start of the LME:LEARN project. The expected outcome of the DIM WG includes more harmonious data and information management across LMEs, as well as improved capacity of projects to report progress and results across for example, Strategic Action Program implementation as well as SDG targets.

The LME:LEARN project has developed a training curriculum and guidance document for Data and Information Management (DIM) to be applied amongst GEF LME, ICM, MPA and MSP projects. The following documents are in preparation in support of this work:

- I. Data and Information from The GEF Large Marine Ecosystem Portfolio Metadata catalogue of available GEF marine project data and information. This is a review and compilation of GEF LME project web-sites, tools and reports in relation to data and information management, as well as other key LME partners data and information web-sites.
- II. Data and Information Management Guidelines for GEF LME Projects -To ensure sustainability of spatial and other project data and information in GEF LME projects. These guidelines present overall recommendations for GEF LME projects to consider to ensure a more integrated and comparable approach to data and information management across the IW LME portfolio. It also will include tools and best practices from GEF LME projects and other international and regional organizations that can be applied and adapted within LME projects, and supports the implementation of the recommendations presented in the Data and Information Management Guidelines for GEF LME projects
- III. Identifying Common LME Indicators Towards common reporting and comparability between LMEs. Given the common issues that the majority of the LME projects address and also the increasing need to align reporting between regions and the Sustainable Development Goals (SDGs), this presents an overview of current indicator systems and proposes a series of common indicators that can be considered by LME's for future reporting of key targets and Strategic Action Programs (SAPs).

### **Workshop Objectives**

The meeting discussed the longer term strategy for DIM and to look beyond the scope of the current LME:LEARN projects. The final part of the meeting centered on a training provided by LME:LEARN partners on actual spatial data and information management tools. The DIM meeting consisted of both a workshop and training sessions. Its objectives were threefold, namely:

- 1. To discuss the Data and Information Guidelines and to agree on next steps towards its implementation;
- 2. To discuss the draft paper on common LME indicators that will allow comparison of progress in implementation of SAPs between the LMEs.
- 3. The final part of the meeting will center on an exchange of best practices and training provided by LME:LEARN partners on actual spatial data and information management tools.

## Summary of key actions to follow up to the DIM meeting

Each LME to establish a coordination mechanism with relevant partners and regional organizations (based on existing partnerships) in order to ensure a more integrated regional approach to data and information management at the regional level, including:

- ✓ To agree on the key actions to implement the recommendations of the "Data and Information Guidelines for GEF LME projects", as well as gaps and needs for additional strengthening of data and information management in the future;
- ✓ To include data and information management in the agenda of relevant regional meetings, with regards to data sharing and coordination, in alignment with global commitments including the SDGs, and to include the identification and training on best practices and tools (both regional and global) on data management;
- ✓ To establish partnerships with other LMEs for the exchange of best practices in data and information management, especially in relation to methodologies for the development of state of environment and other assessment reports;
- ✓ To review the "Identifying Common LME Indicators" and based on their current indicator frameworks in the region, and undertake a mapping for each of the 24 Core Indicators, the status of data available, the steps to ensure regular reporting in partnerships with other relevant organizations as appropriate, and the actions to align indicators and reporting between SAPs and other regional key strategies (as appropriate) towards a more systematic and integrated reporting (including state of environment reporting) in line with global obligations and the SDGs;

LME:LEARN and IW:LEARN to follow up with LME's on the implementation of the "Data and Information Guidelines for GEF LME projects" and "Identifying Common LME Indicators", including:

- ✓ To coordinate with LMEs on the status of actions implemented on data and information management, and provide regular updates;
- ✓ Coordinate future DIM meetings and trainings between LMEs with the view to move towards more comparable approaches to data and information management and reporting across LME's and common approaches to state of environment reporting, which could lead to more quantifiable global assessments of LMEs.
- ✓ Based on identified common issues and gaps, develop targeted activities to further support LME's in data and information management. Possible activities may to be considered include:
  - Support to LMEs to undertake regional coordination and training on data and information management;
  - Support twinning activities and exchanges between LMEs on various aspects of data and information management (such as state of environment reporting and the development of monitoring and reporting mechanisms);
  - o Report on the status of indicator monitoring and reporting within LME's;
  - Development of an online indicator toolbox based on the "Identifying Common LME Indicators" including methodologies and sources of data;
  - Updated report on best practices and tools on data and information management, building upon the experiences of regional and international organizations and make available to all LMEs;
  - Initiate possible cooperation with key regional and global organizations to support LME's in data and data-base management, reporting and assessments (i.e. UNEP GRID, UNEP-WCMC, FAO, IOC-UNESCO etc.);
  - Update contents of "Data and Information from The GEF Large Marine Ecosystem Portfolio - Metadata catalogue of available GEF marine project data and information" report on a regular basis (such as every 2 years);











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# **Workshop Summary Report**

### Day One – Tuesday 2 July

### **WELCOME & INTRODUCTIONS**

The meeting was opened by Mish Hamid and Vladimir Mamaev and was followed by a tour de table and brief exchange on participants expectations.

### **SESSION 1. LME Data and Information Management**

**Objective:** To present and discuss the core DIM documents, provide suggestions for finalization and next steps in implementation.

### 1. Data and Information from The GEF Large Marine Ecosystem Portfolio

The main findings from the report "Data and Information from The GEF Large Marine Ecosystem Portfolio - Metadata catalogue of available GEF marine project data and information" was presented by Virginie Hart (LME:LEARN Consultant), followed by discussion with participants. The report was accepted pending some minor additions and corrections from participants and a useful reference and resource on past and present LME projects actions on data and information management. It was also recommended that this report is updated as new project's and DIM related websites and documents are developed in the future (ideally every 2 years).

### 2. LME experiences in data and information management

The following participating LME's presented their current experiences, successes and challenges in data and information management and reporting on indicators within their LME:

• Aimee Gonzales, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) presented current implementation of the Sustainable Development Strategy for Seas of East Asia (SDS-SEA), State of Environment reports and the Integrated Information Management System (IIMS) decision-support system, and stressed that there is a need to have data protocols and strengthened partnerships with relevant institutions for the sharing of data.

- Zukile Hutu, the Benguela Current Commission (BCC), presented the current status of the project Improving Ocean Governance and Integrated Management in the Benguela Current LME (GEF ID 5753) which will update the TDA and SAP, and further develop the data management policy adopted in 2013 and the geonode, and conduct an online state of environment report, also considering immerging priorities such as marine spatial planning and blue economy. The major challenges include the need to establish data flows from countries and build their capacity to monitor and report to the BCC.
- Lorenzo Galbiati, UNEP Mediterranean Action Plan (UNEP/MAP), presented the lessons learned from MedPartnership (GEF ID 2600) and Climate Variability and ICZM (GEF ID 3990) projects and the planned activities regarding information and data management as part of the MedProgramme (GEF ID 9607) to be implemented from 2019, which will in particular compliment and support implementation of the UNEP/MAP Integrated Monitoring and Assessment Programme.
- Patrick Debels, UNOPS Project Manager of the Caribbean and North Brazil Shelf Large
  Marine Ecosystems (CMLE+) project (GEF ID 5542) presented some of its key activities in
  relation to information and data management including the State of the Marine
  Environment and associated Economies report (SOMEE), the CLME+ Hub, and the
  current status of adopted indicators.
- Muhammad Lukman and Bernadete Da Fonseca, FAO, national coordinators for the Indonesian Seas (ISLME) project (GEF ID 5768) presented main activities to be implemented and challenges in order to in support and align data management within Indonesia and Timor-Leste. A communication and data management workshop is planned for August 2019 that will further define agreed data management and sharing policies and agreement on indicators to be monitored.

### 3. LME:LEARN Data and Information management plan

**Virginie Hart, LME:LEARN Consultant** presented the report "Data and Information Management Guidelines for GEF LME Projects" including good practices and tools and future implementation. In the discussion that followed some of the main points raised include:

- There was overall agreement that LME projects agreed need to have a strengthened and more coordinated approach to data and information management, including the development and implementation of a project level data and information plan/strategy, and requests that LME:LEARN continues to support LME projects in the exchange of good practices and examples of such plans with projects;
- Activities for data and information management need to be strengthened in the project design, results framework and corresponding work-plan and budget as they require time, finds and capacity to implement;
- Some LME projects have limited capacity to make available all reports on web-sites and send to IW:LEARN (Output 3) and this should be considered as a priority to be integrated into the project design in the future;

- Coordination with other regional organizations and joint scientific working groups (Outputs 5 and 8) as well as ensuring the long-term availability of data and integration into appropriate national and regional databases (Output 9) were considered key to strengthening data management, where projects need to identify data to be generated by the project and plan its integration into appropriate regional databases, in close coordination with relevant organizations, to be included in log-frame of project from the beginning; and
- Suggested that the core mandatory recommendations of the guidelines are summarized at the beginning of the document and then complimented by the core document.

## Day Two- Wednesday 3 July

## 4. Identifying Common LME Indicators.

**Virginie Hart, LME:LEARN Consultant** presented the report "Identifying Common LME Indicators - Towards common reporting and comparability between LMEs". Followed by discussion regarding the feasibility of LME reporting on a core set of indicators and recommendations for the future. Some of the main points raised include:

- LME projects and participants agreed that a more systematic and coordinated approach
  to the development and reporting of indicators is required to strengthen LME reporting
  (such as for SAP implementation and State of Environment reporting), and that by
  incorporating common indicators, there is the potential to ensure greater comparability
  between LME's in the future as well as alignment with global indicator sets such as the
  Sustainable Development Goals (SDGs);
- It was noted that for each indicator, common methodologies and spatial and temporal considerations should be further elaborated to support projects in the common reporting of indicators (such as in a next phase of the IW:LEARN DIM work);
- It was suggested that an additional column elaborating the logic and purpose for each indicator is included in the revision of the report;
- It was agreed that indicator 31 regarding oil spills should be included as a core indicator as it is relevant to all LMEs and data is available in the majority of regions;
- Indicator 88 on the number of LMEs with reduced pollution and hypoxia (GEF7 Core indicator) needs to be reconsidered as it is measured at the LME level only.

# SESSION 2. LME:LEARN, IW:LEARN and partners training on data and information management

**Objective:** LMEs provided training and tools for data and information management from IW:LEARN partners.

#### 5. LME Scorecard

**Shannon Murphy, Conservation International** presented the <u>LME Scorecard</u> as a tool to evaluate LME management effectiveness. This was followed by a working session and general discussion on the indicators and criteria:

- LME projects agreed that the LME Scorecard is a useful tool to quickly evaluate management effectiveness to help improve decision making in LME implementation. It was noted that completion of the scorecard should involve appropriate stakeholders and Regional Seas Activity Centers (if appropriate) ideally as part of LME strategic meetings;
- The Indonesian Seas project (ISLME) and Benguela Current (BCLME) committed to complete the scorecard as part of their next regional meetings; and
- LME:LEARN will follow up with other LMEs (including those not present at the meeting) to encourage completion of the Scorecard during relevant strategic meetings with key stakeholders.

# 6. Next steps in populating the LME Hub

Andy Jeffrey and Isabel Jimenez, International Union for Conservation of Nature (IUCN) presented the current version of the <u>LME Hub portal website</u> and overview of planned enhancements and data/content to be added during final phase. An open discussion on how to fully populate the hub included the following:

- It was clarified that the LME hub was developed to raise awareness among the general public rather than the LME community only, and this should be a central consideration in its further development;
- In terms of the layers currently available on the LME Hub, consideration should be given
  to provide information on the source of data for each layer and focus on data in
  alignment with the Core Indicators agreed between LMEs. The data from TWAP is from
  2012, and unless this data is to be updated, may be considered a little old for inclusion.
  Consideration should also be given to ensure layers are dynamically updated;
- Regarding the content for each LME it was suggested that a simple summary of the main issues and problems in each LME could be included; project web-sites should be carefully checked that they are still valid (i.e. the Mediterranean link should link to the IW:LEARN archive and relevant UNEP/MAP site). Consideration should be given to merge the "news" and "stories" section, and in addition it would be useful to include

links to some of the video's produced by the projects (such as those presented at the International Waters Conferences) and recent State of Environment Reports;

 It was agreed that the LME Hub would dynamically harvest information from the project web-sites and IW:LEARN and would therefore would not require significant reporting from the LME projects.

### 7. IW:LEARN and LME:LEARN planned activities and updates

Mish Hamid, IW:LEARN and Ivica Trumbic, LME:LEARN updated participants on next phase of IW:LEARN, with the Project Identification Form (PIF) to be completed and submitted by the end of 2019. Activities are still under development but will most likely included support to projects in reporting and further implementation of the DIM management plan and indicators.

### 8. IOC UNESCO tools for data management

**Peter Pissierssens, Head, IOC project office for IODE at IOC-UNESCO** presented the main IODE data and information resources including:

- Database of main ocean related experts and institutions globally at OceanExpert;
- 2. A repository of publications in Marine Science at OceanDocs;
- 3. A catalogue of Ocean related best Practices at OceanBestPractices;
- 4. An online catalogue of existing ocean related web-based sources/systems of data and information as well as products and services at Catalogue of Sources ODISCat;
- 5. Clearing-House at <a href="CHM/TMT">CHM/TMT</a>

### 9. Learn how to tell your stories with data and visuals - an introduction to MapX

Pascal Peduzzi, UNEP GRID-Geneva presented UNEP'S World Environment Situation Room under finalization and the geospatial portal MapX. Antonio Benvenuti, UNEP GRID-Geneva then provided a training to participants on the creation of storymaps using existing data. Story maps are an effective way to harness the power of maps and geo-spatial visualization, bring data to life and make stories often hidden in data accessible to both the wider public or to a targeted audience including policy makers. A story map is a web application that combines a narrative, photos, and videos with interactive maps. The MapX story map engine allows users and visitors of the platform to independently build story maps without any GIS or programming skills. Following the training it was agreed that:

- UNEP GRID-Geneva would ensure the exercise links would remain active until 31 October 2019;
- UNEP GRID-Geneva will create a video of the training for further sharing by IW:LEARN to all participants and LMEs (now available at <a href="https://youtu.be/">https://youtu.be/</a> psHzsXzYWU); and
- GRID-Geneva to follow up on the possible creation of an LME geonode in MapX, initially starting with one LME (such as the Mediterranean), in cooperation with UNEP WCMC.

### 10. IOC UNESCO tools for data management (continued)

Albert Fischer, GOOS Office Director, IOC/UNESCO presented available tools on data management. The Global Ocean Observing System (GOOS) is a sustained collaborative system of ocean observations, encompassing in situ networks, satellite systems, governments, UN agencies and individual scientists. The IOC Assembly has adopted a new 2030 strategy for GOOS with a vision for a truly integrated global ocean observing system that delivers the essential information needed for our sustainable development, safety, wellbeing and prosperity. It was stressed that priority should be given to strengthen the cooperation between GOOS and LMEs in the future.

### 11. IW:LEARN Spatial Lab for sharing geospatial data and maps

**Debhasish Bhakta, GRID-Arendal** provided a training session on the IW:LEARN Spatial Lab, including the use and uploading of data. The IW:LEARN Spatial Lab is a multi-purpose platform to support IW project data storage and visualization needs. The platform supports the storage and discovery of spatial data for transboundary water management and the creation of interactive, shareable maps. The platform allows IW projects to: Store spatial data collected through the project; Create metadata to help categorize the data; Access relevant regional and global data to support transboundary water management in their basin; and Communicate science to a range of stakeholders, including policy and decision makers, using interactive maps. The objective of this training session was to familiarize GEF IW project managers and technical staff with the features of the IW:LEARN Spatial Lab. On successful completion of this training session participants will: Be familiar with the IW:LEARN Spatial Lab and the benefits it provides to their projects; Upload their own project data to the IW:LEARN Spatial Lab and create relevant metadata; Visualize their project data in attractive interactive maps, by combining with relevant regional and global data and share these interactive maps with non-technical users including policy and decision makers. The IW:LEARN team members will be available during the workshop to assist your project with its data visualization and mapping needs.

### Day Three Thursday 4 July

### SESSION 3. Training on data and information management

**Objective:** Presentations and training on global data management resources and tools relevant to LME's and discussion on best practices for future application in LMEs.

# 12. Ocean Plus data, resources and cooperation with LMEs

Lauren Weatherdon, UNEP World Conservation Monitoring Centre (WCMC) presented WCMC's Ocean+ data and information platform with a focus on introducing data, capacity building and information available through the evolving Ocean+ initiative and existing and potential links to other initiatives and activities that can collectively support the LME community. The consisted of two parts: one focused on available data and needs, including consultation and discussion; and the next centered on linking these data and information to the proposed set of LME indicators, with an introduction to the Biodiversity Indicators Partnership.

WCMC is focusing more on oceans in light of the UN Decade of Ocean Science for Sustainable Development (2021-2030), building upon existing databases such as the World Database on Protected areas (WDPA). The discussion focused on strengthening cooperation between WCMC and the LMEs, including the exchange of data and information.

### 13. FAO tools for data management

Anton Ellenbroek, Food and Agriculture Organization (FAO) presented FAO Fisheries Department's comprehensive toolset to view and review spatial data. With support from H2020 projects, any region can now use services to access geospatial data from a region, and add, harmonize and analyse statistical data from e.g. fisheries. The Open Source tools can manage confidential data, and can be a cost-effective solution for local, regional, and global levels. Examples include FAO's global tuna atlas, the Global Record of Stocks and Fisheries, the SDG14.4.1 Training VRE, and Grid-Arendal's Protected Areas Impact Maps VRE (in validation stage). The training used the iMarine e-Infrastructure, based on D4Science. In the discussion that followed the training, participants questioned how to assess fisheries data within the LME and MPA boundaries (for example when neighbouring countries report the same species that may belong to the same stock).

### 14. Conclusions and next steps

Mish Hamid, IW:LEARN, Ivica Trumbic and Virginie Hart, LME:LEARN presented a summary of agreed next steps presented below, followed by a tour de table feedback from all LMEs, stressing how useful the meeting and training had been for strengthening data and information management in their LME's and requesting that the work of DIM and support from IW:LEARN be continued in the future.

| Issue/Agenda Item  | Action/Next Step  |
|--|---|
| Several LME's are planning the development of online and possibly interactive State of Environment type reports in the coming 1-2 years, and therefore expressed interest to coordinate in terms of structure and approach | ✓ LME:LEARN to coordinate a working group on future State of Environment reports between Benguela, Caribbean, Mediterranean and PEMSEA towards identification and exchange of common approaches in their development (including technology to present reports online in interactive format); and ✓ LME:LEARN to follow up with other LME's that may be also planning relevant reports to be included. |
| Review and finalization of report "Data<br>and Information from The GEF Large<br>Marine Ecosystem Portfolio - Metadata<br>catalogue of available GEF marine<br>project data and information" to be<br>finalized            | ✓ LME:LEARN to request that LMEs submit final comments, edits and good practices by 15 August (PEMSEA & Caribbean already submitted).   |
| Review and finalization of report "Data<br>and Information Management<br>Guidelines for GEF LME Projects"  | <ul> <li>✓ LME:LEARN to request that LMEs submit final comments, edits and good practices by 15 August;</li> <li>✓ DIM Guidelines to include summary of core actions to be implemented by all LMEs;</li> <li>✓ LMESs to ensure project teams consider the guidelines and how to implement them during project execution as appropriate;</li> </ul>  |
| Review and finalization of report  | ✓ Add column with relevance for each indicator;   |

| Issue/Agenda Item                     | Action/Next Step  |
|---------------------------------------|---|
| "Identifying Common LME Indicators -  | ✓ Add acidification & oil spills indicators;  |
| Towards common reporting and          | ✓ Clarify if marine trophic index (CBD/Sea Around us) can be                              |
| comparability between LMEs"           | accepted by LME's;  |
|                                       | ✓ Clarify for SDG Indicators (Tier II and III) that still in process                      |
|                                       | of defining indicators, and give alternative options;                                     |
|                                       | ✓ LME:LEARN to send matrix of indicators for LME's to                                     |
|                                       | indicate to what extend data is available, and whether the                                |
|                                       | indicator is already integrated into key strategic documents                              |
|                                       | and monitoring and evaluation plans; and  |
|                                       | ✓ Next stage of DIM work on indicators to consider further                                |
|                                       | development of common methodologies and reporting   |
|                                       | templates for each agreed indicator.  |
|                                       | ✓ The Indonesian Seas project (ISLME) and Benguela Current                                |
|                                       | (BCLME) committed to complete the scorecard as part of                                    |
| Application of the LME Scorecard      | their next regional meetings;   |
| Application of the Livie Scorecard    | ✓ LME:LEARN to notify all LMEs not present at the DIM                                     |
|                                       | meeting and encourage completion of the ScoreCard to be                                   |
|                                       | included as part of strategic meetings as appropriate                                     |
| Further development of the LME Hub    | ✓ LME Hub – to consider main recommendations from DIM                                     |
| rather development of the 2002 flag   | meeting in the further population of LME-Hub (see report).                                |
|                                       | ✓ Story map links and files to remain available until 30                                  |
|                                       | October for participants to continue training and practice                                |
| LME training on the creation of story | for the creation of a Story MAP;  |
| maps (UNEP GRID-Geneva)               | ✓ LME:LEARN to share video training with all LMEs;  |
|                                       | ✓ IW:LEARN and UNEP Grid Geneva to coordinate further                                     |
|                                       | collaboration for next phase of DIM;  |
|                                       | ✓ LMEs to follow up with UNEP WCMC on specific data need                                  |
|                                       | and possible pilots for cooperation;  |
| LME training on Ocean Plus (UNEP      | ✓ IW:LEARN and WCMC to coordinate further collaboration                                   |
| WCMC)                                 | for next phase of DIM;  |
| ,                                     | ✓ GRID-Geneva to follow up on the possible creation of an                                 |
|                                       | LME geonode in map-x, initially starting with one LME (such                               |
|                                       | as the Mediterranean), in cooperation with UNEP WCMC.                                     |
|                                       | ✓ LMEs to follow up with FAO on specific data need and                                    |
| LME training on FAO tools and data    | possible pilots for cooperation;  ✓ IW:LEARN and WCMC to coordinate further collaboration |
|                                       |   |
|                                       | for next phase of DIM;  |

# **ANNEX 1. LIST OF PARTICIPANTS**

| GEF IW Project<br>Short Name/[Other<br>Activity]  | GEF<br>ID     | Organization  | First<br>Name | Last<br>Name | Job Title  | E:Mail                        | Street Address  | Postal<br>Code | City           | Country     |
|---|---------------|---|---------------|--------------|--|-------------------------------|---|----------------|----------------|-------------|
| Benguela Current<br>Convention<br>Implementation  | 5753          | Benguela Current<br>Commission (BCC)  | Zukile        | Hutu         |  | zukile@benguelacc.org         | 1 Strand Street   |                | Swakopmu<br>nd | Namibia     |
| Caribbean LME SAP<br>Implementation   | 5542          | United Nations Office<br>for Project Services<br>(UNOPS)                                | Patrick       | Debels       | Regional<br>Project<br>Coordinator                       | patrickD@unops.org            | Edificio Chambacú - Oficina 405, Cra 3B# 26-78, Sector Torices, | 130002         | Cartagena      | Colombia    |
| East Asian Seas<br>Sustainable, East<br>Asian Seas<br>Knowledge<br>Management, East<br>Asia Transboundary<br>Rivers | 5405,<br>5110 | Partnerships in<br>Environmental<br>Management for the<br>Seas of East Asia<br>(PEMSEA) | Aimee         | Gonzales     |  | agonzales@pemsea.org          | PEMSEA Office<br>Building, DENR<br>Compound, Visayas<br>Avenue  | 1165           | Quezon<br>City | Philippines |
| GEF IW:LEARN  | 5729          | UNESCO<br>Intergovernmental<br>Oceanographic<br>Commission<br>(UNESCO-IOC)              | Mish          | Hamid        | Project<br>Manager                                       | mish@iwlearn.org              | 7, Place du<br>Fontenoy   | 75732          | Paris          | France      |
| GEF IW:LEARN  | 5729          | UNESCO<br>Intergovernmental<br>Oceanographic<br>Commission<br>(UNESCO-IOC)              | Natalie       | Degger       | Deputy<br>Project<br>Manager &<br>Training<br>Specialist | natalie@iwlearn.org           | 7, Place du<br>Fontenoy   | 75732          | Paris          | France      |
| GEF IW:LEARN  | 5729          | GRID-Arendal  | Debhasish     | Bhakta       |  | debhasish.bhakta@grid<br>a.no | Teaterplassen 3   | 4836           | Arendal        | Norway      |
| GEF LME:LEARN   | 5278          | UNESCO<br>Intergovernmental<br>Oceanographic<br>Commission<br>(UNESCO-IOC)              | lvica         | Trumbic      | Chief<br>Technical<br>Advisor                            | i.trumbic@unesco.org          | 36 rue Liancourt  | 75014          | Paris          | France      |

| GEF IW Project<br>Short Name/[Other<br>Activity]   | GEF<br>ID   | Organization   | First<br>Name | Last<br>Name   | Job Title   | E:Mail                           | Street Address  | Postal<br>Code | City               | Country          |
|--|---|--|---------------|----------------|---|----------------------------------|---|----------------|--------------------|------------------|
| GEF LME:LEARN  | 5278  | UNESCO<br>Intergovernmental<br>Oceanographic<br>Commission<br>(UNESCO-IOC) | Virginie      | Hart           | Consultant,<br>Marine and<br>Coastal<br>Senior Expert | virginie.hart@gmail.co<br>m      |   |                | Kifisia            | Greece           |
| GEF LME:LEARN  | 5278  | UNESCO<br>Intergovernmental<br>Oceanographic<br>Commission<br>(UNESCO-IOC) | Khristine     | Gudczins<br>ki |   | khristine@iwlearn.org            |   |                | Cologne            | Germany          |
| Indonesian Seas<br>LME   | 5768  | Food and Agricultural<br>Organization of the<br>United Nations (FAO)       | Bernadete     | Da<br>Fonseca  | Regional<br>Coordinator                               | Bernardete.DaFonseca<br>@fao.org |   |                |                    |                  |
| Indonesian Seas<br>LME   | 5768  | FAO  | Muhamm<br>ad  | Lukman         | National<br>Project<br>Advisor                        | Muhammad.Lukman@f<br>ao.org      |   |                |                    |                  |
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